

## Book

# Economic indicators for Eastern Asia : input-output tables

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# ECONOMIC INDICATORS FOR EASTERN ASIA INPUT-OUTPUT TABLES

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DECEMBER 2018



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DECEMBER 2018



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# FOREWORD

Catalyzed by advancements in production, transportation, and information and communication technologies, as well as diminishing physical and policy barriers to trade, the global economy has been evolving rapidly in recent decades. The resulting need to understand the ever-changing dynamics of trade and production structures has increased the demand for better and more timely statistics. In this context, supply and use tables and input-output tables have received much attention as a response to the emerging need for more systematic and comprehensive approaches to data management, economic analysis, and policy research. The input-output analysis framework is designed to illustrate a system of trading activities and production-sharing arrangements at the local, regional, and global levels.

To facilitate research and to inform policy, the Asian Development Bank (ADB) produces an ongoing compilation of a multiregional input-output (MRIO) database by augmenting the World Input-Output Database with economies from across Asia and the Pacific. The MRIO database depicts input-output details for 62 economies, 43 of which are based on the 2016 release of the World Input-Output Database, with the remaining 19 compiled from supply and use tables resulting from ADB's statistical capacity-building initiatives in the Asia and Pacific region since 2008. The MRIO database aptly serves the increasing demand for structured, relevant, timely, and accurate data, especially with the onset of various economic research projects on global value chains (GVCs).

This publication is one of three that focus on particular regions: (i) *South and Central Asia*, covering Bangladesh, Bhutan, India, Kazakhstan, the Kyrgyz Republic, Maldives, Nepal, Pakistan, and Sri Lanka; (ii) *Southeastern Asia and the Pacific*, encompassing Brunei Darussalam, Cambodia, Fiji, Indonesia, the Lao People's Democratic Republic, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam; and (iii) *Eastern Asia*, including the People's Republic of China; Hong Kong, China; Japan; the Republic of Korea; Mongolia; and Taipei, China. Economy-specific time series of input-output tables, aggregated into 35 industrial sectors and 5 final demand sectors, are provided for 2010 and 2017. The publications also present data visualization of statistics relevant to the analysis of cross-border production arrangements such as value-added exports, revealed comparative advantages, trade in value-added, GVC income, and GVC participation computed from the MRIO.

I would like to thank all those who contributed to the production of these three publications—the consultants; the industry experts; ADB staff; and the national implementing agencies and other government organizations in the economies participating in ADB’s statistical and analytical capacity-building initiatives—for their dedication, cooperation, and hard work. The funding for the data development and analysis activities that led to this publication was provided under RCDTA-8838: *Updating and Constructing the Supply and Use Tables for Selected Developing Member Economies*, and RETA-9244: *Key Indicators for Asia and the Pacific 2018*. We hope that this report will be a valuable resource for economic research and policy analysis.



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The successful integration of the supply and use framework into the national accounts systems in 19 participating economies in Asia and the Pacific through the regional capacity development technical assistance (RCDTA) 8838: *Updating and Constructing Supply and Use Tables for Selected Developing Member Economies*, was made possible by the strong cooperation and active participation of the respective governments and national statistical offices. Building on the successful implementation of RCDTA 8838, the Asian Development Bank (ADB) expanded the initiative on data development to compile input-output tables and multiregional input-output tables. The project was financially supported by ADB through RCDTA 8838 and RETA 9244: *Key Indicators for Asia and the Pacific 2018*.

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This set of three publications cover South and Central Asia, Eastern Asia, and Southeastern Asia and the Pacific. It was produced by the Development Economics and Indicators Division of the Economic Research and Regional Cooperation Department of ADB, under the overall coordination of Mahinthan Joseph Mariasingham; with technical assistance from Kristina Baris, John Arvin Bernabe, Donald Jay Bertulfo, Nina Ashley Dela Cruz, Paul Neilmer Feliciano, Dianne Lara Monis, Julieta Magallanes, Sarah Mae Manuel, Irene Talam, Jonarie Vergara, and Resi Olivares. Eric Suan provided overall administrative support. Paul Dent edited the publications. Joe Mark Ganaban led the typesetting process while Maria Denise Pena designed the covers. These volumes were published with the support of ADB's Department of Communications and Printing Unit.



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# ABBREVIATIONS

ERDI	Development Economics and Indicators Division
GDP	gross domestic product
GFCF	gross fixed capital formation
GVA	gross value added
GVC	global value chains
ICT	information and communication technology
IOT	input-output tables
MRIO	multiregional input-output
NBL	normalized backward linkages
NFL	normalized forward linkages
NPISH	nonprofit organizations and institutions serving households
NRCA	new revealed comparative advantage
RoW	rest of the world
SUT	supply and use tables
TiVA	trade in value added
TRCA	traditional revealed comparative advantage
WIOD	World Input-Output Database

# Technical Note

## Part 1: Overview of Production and Demand Structures

Input-output tables (IOTs) provide a detailed picture of an economy through which mutual interrelationships among the producers and consumers in that economy can be systematically quantified. IOTs have become a widely used tool for national accounting, economic planning, and policy analysis.

This section describes the basic framework of an IOT, consisting of the transaction flows across industries that both produce goods and services (outputs) and consume goods and services (inputs), as well as outlining the value-added by industry and final demand. This also includes a description of different baseline multipliers, which are central indicators of IOTs for impact analysis.

A two-region (home and foreign) IOT is used throughout the analysis, spanning 2010–2017.<sup>1</sup> All values are expressed either in millions of United States (US) dollars or as percentage shares. The data presented here are not official statistics and could differ from relevant official statistics.

### Input-Output Tables

Consider an economy with a given number ( $n$ ) of sectors. An IOT depicting transactions between industries within that economy, and with the rest of the world (RoW), is summarized in the table below.

The Intermediate Uses section of Table 1 depicts consumption ( $Z_{ij}$ ) of goods and services by the  $j$  produced by industry  $i$ . Imported inputs of industry  $j$  are denoted as  $Zm_j$ . Adding intermediate consumption to value-added ( $v_j$ ) is equal to the total inputs  $x_j$ .

**Table 1: Example of an Input-Output Table**

		Intermediate Uses				Final Uses					Export	Gross Output
		Industry 1	Industry 2	...	Industry n	Households	NPISHs	Government	GFCF	CIIs		
Domestic	1	$Z_{11}$	$Z_{12}$	...	$Z_{1n}$	$f_{11}$	$f_{11}$	$f_{11}$	$f_{11}$	$f_{11}$	$e_1$	$x_1$
	2	$Z_{21}$	$Z_{22}$	...	$Z_{2n}$	$f_{21}$	$f_{21}$	$f_{21}$	$f_{21}$	$f_{21}$	$e_2$	$x_2$
	...	...	...	...	...	...	...	...	...	...	...	...
	n	$Z_{n1}$	$Z_{n2}$	...	$Z_{nn}$	$f_{n1}$	$f_{n2}$	$f_{n3}$	$f_{n4}$	$f_{n5}$	$e_n$	$x_n$
Imports		$Zm_1$	$Zm_2$	...	$Zm_n$	$fm_1$	$fm_2$	$fm_3$	$fm_4$	$fm_5$		
Value-Added		$v_1$	$v_2$	...	$v_n$							
Total Inputs		$x_1$	$x_2$	...	$x_n$							

CIIs = changes in inventories, GFCF = gross fixed capital formation, NPISHs = nonprofit organizations and institutions serving households.  
Source: Adapted from Miller and Blair (2009).

<sup>1</sup> The data presented in this publication are not official statistics. Production and trade data from various sources are integrated into the input-output economic analysis framework and adjusted as required to conform to specific macroeconomic concepts. As such, data and statistics presented herein could differ from relevant official statistics.

The Final Uses section of Table 1 depicts the consumption of households ( $f_{i1}$ ), nonprofit organizations and institutions serving households ( $f_{i2}$ ), government ( $f_{i3}$ ), gross fixed capital formation ( $f_{i4}$ ), changes in inventories ( $f_{i5}$ ), and exports ( $e_i$ ). Imported goods and services, denoted by ( $fm_j$ ), are products consumed ultimately as final products.

The sectors in the columns on the left of Table 1 are the ‘selling’ sectors, while the sectors shown across the top are the ‘buyers’. Thus, each row adds up to the gross output that is equal to its corresponding total input, demonstrating the absorption of the output of each industry, while each column shows the input sources of each industry.

In this publication, the IOTs utilize three sector aggregation schemes.

**Table 2: Sector Aggregation Used in Input-Output Tables**

Sectors at the Level Used by World Input-Output Database	ERDI Aggregation Level 1 (13 sectors)	ERDI Aggregation Level 2 (5 sectors)
Agriculture, hunting, forestry, and fishing	Primary	Primary
Mining and quarrying	Primary	Primary
Food, beverages, and tobacco	Low tech	Low tech
Textiles and textile products	Low tech	Low tech
Leather, leather products, and footwear	Low tech	Low tech
Wood and products of wood and cork	Low tech	Low tech
Pulp, paper, paper products, printing, and publishing	Low tech	Low tech
Coke, refined petroleum, and nuclear fuel	High and medium tech	High and medium tech
Chemicals and chemical products	High and medium tech	High and medium tech
Rubber and plastics	Low tech	Low tech
Other nonmetallic minerals	High and medium tech	High and medium tech
Basic metals and fabricated metal	High and medium tech	High and medium tech
Machinery, nec	High and medium tech	High and medium tech
Electrical and optical equipment	High and medium tech	High and medium tech
Transport equipment	High and medium tech	High and medium tech
Manufacturing, nec; recycling	Low tech	Low tech
Electricity, gas, and water supply	Utilities	Low tech
Construction	Construction	Low tech
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	Trade and repair services	Business services
Wholesale trade and commission trade, except of motor vehicles and motorcycles	Trade and repair services	Business services
Retail trade, except of motor vehicles and motorcycles; repair of household goods	Trade and repair services	Business services
Hotels and restaurants	Tourism	Business services
Inland transport	Transport services	Business services
Water transport	Transport services	Business services
Air transport	Transport services	Business services
Other supporting and auxiliary transport activities; activities of travel agencies	Transport services	Business services
Post and telecommunications	ICT services	Business services
Financial intermediation	Finance and insurance services	Business services
Real estate activities	Property services	Business services
Renting of machinery and equipment; other business activities	Property services	Business services
Public administration and defense; compulsory social security	Public and welfare services	Public and welfare services
Education	Public and welfare services	Public and welfare services
Health and social work	Public and welfare services	Public and welfare services
Other community, social, and personal services	Public and welfare services	Public and welfare services
Private households with employed persons	Services provided by private households	Public and welfare services

ERDI = Development Economics and Indicators Division, ICT = information and communication technology, nec = not elsewhere classified.

Source: Asian Development Bank. 2015. *Key Indicators for Asia and the Pacific 2015*. <https://www.adb.org/publications/key-indicators-asia-and-pacific-2015>.

**Gross domestic product (GDP)** measures the values of final goods and services produced within an economy over a given period. The charts on GDP show a growth trend, scaled to 2010 levels, for a particular economy in Asia as compared to the RoW and shares by five-sector aggregation (Table 1). Scaling to 2010 levels is the result of dividing the actual GDP by the 2010 GDP values of the economy and the RoW.

**Final consumption expenditure** comprises the major components of domestic demand together with net exports, which is the difference between exports and imports. The components of domestic demand are private consumption, which includes household consumption expenditure and expenditure by nonprofit institutions serving households, and gross capital formation, which is the investment, for instance, in the purchase of machinery and buildings as well as the constitution of stocks (inventories). When stock building, also known as changes in inventories, is excluded, the result is known as gross fixed capital formation. The charts on final consumption expenditure present the total trend and shares by five-sector aggregation over time.

**Intermediate consumption** represents the value of the raw materials, components, and partly manufactured goods going into a given product, as well as other services used in the production of a good or a service (Lequiller and Blades, 2014). When intermediate consumption is deducted from output, one eliminates double counting, and considers gross value added (GVA) as an indicator of output. GVA can also be disaggregated into domestic and imported goods and services. The charts on intermediate consumption present total trend, shares by five-sector aggregation, and ratio to output over time.

**GVA** is the value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry, or sector (Lequiller and Blades, 2014). It can also be referred to as two factors, labor and capital, which are compensated respectively by salaries and profits generated through production. The charts on GVA present total trend, shares by five-sector aggregation, and content in final consumption use.

**Gross output** is the sum of the GVA and the intermediate consumption of an economy **attributed to final demand**. The direct linkage between gross output and final demand refers to the finished deliveries of goods and services to different components of final consumption use. Conversely, the indirect linkage between output and final demand refers to the intermediate outputs used to produce the finished goods and services. These are calculated through matrix multiplication of the *Leontief Inverse* of the production matrix and the final demand vectors comprised of foreign demand (the RoW's final demand vector) and domestic demand (the national economy's final demand vector). The results show the different output levels necessary to satisfy the final demand requirements.

Leontief Inverse is also known as the *total requirements matrix*, and is calculated through the classic input-output model equation:

$$x = (I - A)^{-1}f = Lf \quad (1)$$

Where,

$$(I - A)^{-1} = L = [l_{ij}]$$

A is the matrix of technical coefficients that can be shown as  $A = Z\hat{x}^{-1}$  or  $A_{ij} = \frac{Z_{ij}}{X_j}$



*Technical coefficients* or input coefficients are the shares of costs for goods, services, and primary inputs in total input, which is equal to total output; usually calculated by dividing each entry of the IOT by the column total.

The **GVA attributed to final demand** is calculated by applying the GVA multipliers and the final demand vectors comprised of foreign demand (the RoW's final demand vector) and domestic demand (the national economy's final demand vector).

The decomposition exercise follows that  $\mathbf{f} = \mathbf{f}_d + \mathbf{f}_e$ , where subscripts  $d$  and  $e$  stand for domestic final demand and exports, respectively. From equation (1), it follows that  $\mathbf{x} = (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f}_d + (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f}_e$ , where  $\mathbf{x}$  is a vector of gross output generated to satisfy both domestic and foreign final demand. Therefore, we can distinguish between

$$\mathbf{x}_d = (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f}_d$$

and

$$\mathbf{x}_e = (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f}_e$$

$\mathbf{x}_d$  is the vector of gross output generated to satisfy domestic final demand, and  $\mathbf{x}_e$  is the vector of gross output generated to satisfy foreign (export) demand.

Since  $v_{c,j} = v_j / x_j$

GVA attributed to domestic and foreign demand may be decomposed by pre-multiplying both equations 2 and 3 with the diagonalized vector of GVA coefficients,  $\hat{v}_c$ . Formulaically,

$$\mathbf{v}_d = \hat{v}_c (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f}_d \quad (2)$$

$$\mathbf{v}_e = \hat{v}_c (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f}_e \quad (3)$$

Multipliers are values used to estimate the effects of exogenous changes on (i) outputs of the sectors in the economy; (ii) income earned by households in each sector, due to new outputs; (iii) employment (jobs, in physical terms) that is generated by each sector due to new outputs; and (iv) the value-added, which is created by each sector in the economy due to new outputs (Miller and Blair, 2009).

**Output multipliers** refer to the total value of production in all sectors of the economy necessary for all stages of production to produce one unit of product for final demand. An output multiplier for a given sector, for instance, sector  $j$ , is

$$m = (o)j = \sum_{i=1}^n l_{ij} \quad (4)$$

As previously mentioned,  $\mathbf{L}$  or Leontief Inverse is a matrix of sector-to-sector multipliers,  $l_{ij}$ , and output multipliers are the column sums of this matrix. These multipliers represent sector-to-economy multipliers, relating final demand in sector  $j$  to economy-wide output (Miller and Blair, 2009).

**GVA multipliers** quantify the total value-added generated in the economy due to a unit value change of final demand for each sector. To calculate GVA multipliers in matrix form, pre-multiply diagonalized value-added coefficients with the Leontief Inverse,  $\mathbf{L}$ . Value-added coefficients are derived by dividing the GVA of sector  $j$  to the gross output of the same sector  $j$ , or in matrix form:  $\hat{v}'_j = \hat{v}'\hat{x}^{-1}$ .

**Import multipliers** refer to the total intermediate imports that are required to satisfy one unit change in final demand for each sector. The same approach to GVA multipliers applies, but the share of imported inputs of sector  $j$  to the total output of sector  $j$  should be used in lieu of value-added coefficients.

## Part 2: Domestic Interindustry Linkages

### Patterns of Interindustry Transactions

An IOT is a widely used tool to study the pattern of production and consumption of the various industries operating in an economy. The flow of goods and services from one industry to another within the domestic market are visualized using chord diagrams. These interindustry flows refer to intermediate inputs produced in one industry to be absorbed by another as part of its production processes. The diagram rearranges the domestic economy into 13 differentiated tradable industries and makes explicit their direct mutual dependence based on the intermediate transactions.

The chord diagram has two main features: arcs and connections. Lengths of arcs, which determine sector sizes, are proportional to the output of the industry consumed for the domestic intermediate use to the total output consumed for domestic intermediate use of all industries, plus the proportion of its total consumption of outputs of other industries within the economy. The thickness of a connection shows the relative value of the output of the industry used by another industry. The colors of the connections follow the color of the industry of origin.

### Backward and Forward Linkages by Industry

**Backward linkage** refers to the impact of any change in the output of a sector to the sectors producing its input requirements. This indicates the interdependence of a sector with its suppliers. This term focuses on the causation in the demand-side model. Backward linkage measures the sector's dependence to sectors supplying their input requirements.

For the input-output model  $\mathbf{x} = (\mathbf{I} - \mathbf{A})^{-1}\mathbf{f} = \mathbf{L}\mathbf{f}$ , the backward linkage of the  $j^{\text{th}}$  sector is derived as the sum of the elements of the  $j^{\text{th}}$  column of the Leontief Inverse,  $\mathbf{L}$ . In an  $n$ -sector economy, the total backward linkage of the  $j^{\text{th}}$  sector is computed as:

$$BL_j = \sum_{i=1}^n l_{ij}, \quad (5)$$

where  $\mathbf{L} = [l_{ij}]$ . In this context, backward linkage is similar to the output multiplier.

Conversely, **forward linkage** refers to the impact of any change in the output of a sector to the sectors consuming its output as an input in their own production. This indicates the interconnection of a sector with sectors buying its output. This term focuses on the causation in the supply-side model. Forward linkage measures the sector's dependence to sectors using their output for production.

Forward linkages can be derived using Ghosh's model:

$$\mathbf{x}' = \mathbf{v}'(\mathbf{I} - \mathbf{B})^{-1} = \mathbf{v}'\mathbf{G}, \quad (6)$$

where forward linkage of the  $i^{\text{th}}$  sector is derived as the sum of the elements of the  $i^{\text{th}}$  row of the Ghosh matrix  $\mathbf{G}$ . The total forward linkage of the  $i^{\text{th}}$  sector is computed as:

$$FL_i = \sum_{j=1}^n g_{ij}, \quad (7)$$

where  $\mathbf{G} = [g_{ij}]$ .

Using normalized values helps gauge relative strength of interindustry linkage. This allows the classification of industries as more dependent or less dependent on suppliers of inputs (backward linkage perspective) or users of their output (forward linkage perspective). Both forward and backward linkages were normalized by dividing the sector linkage to the mean linkage of all sectors. Normalized backward linkage (NBL) for sector  $j$  is computed as:

$$\overline{BL}_j = \frac{BL_j}{\frac{1}{n} \sum_{j=1}^n BL_j} \quad (8)$$

and normalized forward linkage (NFL) for sector  $i$  is computed as:

$$\overline{FL}_i = \frac{FL_i}{\frac{1}{n} \sum_{i=1}^n FL_i}. \quad (9)$$

This method gives us unity as the bar between industries considered to be independent of other industries (below average or weaker linkage) with industries that are more dependent on other industries (above average or stronger linkage).

### Scatterplot of Backward and Forward Linkages

In normalized form, sectors considered to have “high” forward and backward linkages are those that score greater than 1 for either NBL or NFL. For 2010 and 2017, sectors may be distributed over a four-way classification based on their relative backward and forward linkages. Following Miller & Blair (2009), sectors in the first quadrant have high forward and backward linkages ( $NFL > 1$ ,  $NBL > 1$ ) indicating high dependence on both their suppliers and consumers in other sectors. Sectors in the second quadrant are more dependent on sectors using their output ( $NFL > 1$ ) and less dependent on sectors producing their inputs ( $NBL < 1$ ). Sectors in the third quadrant are those that have relatively lower dependence on other sectors ( $NFL < 1$ ,  $NBL < 1$ ). Sectors in the fourth quadrant have high dependence on their suppliers ( $NBL > 1$ ) and less dependence on sectors using their output ( $NFL < 1$ ).

Accompanying tables on normalized backward and forward linkages show results for every sector in the selected domestic economy for 2010–2017.

## Hypothetical Extraction of Select Industries from the Domestic Economy

Hypothetical extraction aims to quantify how much the total output of an economy would change (decrease) if a particular sector were removed from that economy. This is an alternative approach to determining relative importance of an industry by its direct and indirect contributions to the economy. The GVA of a sector may be interpreted as the direct economic contribution, while its production linkages with the rest of the economy underscore its indirect contribution.

### Hypothetical Extraction Results

Hypothetical extraction is modeled in the context of input-output by deleting row and column elements of sector  $j$  in the direct requirements matrix  $\mathbf{A}$  by replacing them with zeros to generate a new matrix  $\bar{\mathbf{A}}_j$ . This effectively cancels out any mutual interdependence of sector  $j$  with the rest of the sectors in the economy. It also follows that there is no final demand,  $\mathbf{f}_{(j)} = \mathbf{0}$ , and no primary inputs,  $\mathbf{v}_{(j)} = \mathbf{0}$ , from sector  $j$ . Utilizing the standard Leontief model with  $\bar{\mathbf{A}}_j$  and  $\bar{\mathbf{f}}$  generates a new vector of gross output,  $\bar{\mathbf{x}}$ . The difference between the output of the hypothetical and baseline scenarios is known to be an aggregate measure of the economy's loss (decrease in value of gross output) if sector  $j$  disappears. As such, it is a measure of the importance or total linkage of sector  $j$ . It is possible to calculate the economy's loss in terms of GVA by pre-multiplying the vector of gross value added coefficients with sector  $j$  set to null,  $\mathbf{v}_{(j)} = \mathbf{0}$ . The resulting vector shows total GVA generated in a hypothetical scenario where there is no sector  $j$ .

### Comparison of Production Gaps between Actual and Hypothetical Scenarios

Production gaps refer to the difference between the baseline scenario and hypothetical scenario with the extraction of sector  $j$ . Results are presented by decomposing economic loss attributed to two broad categories of final demand: domestic and foreign (exports). Given new direct requirements, matrix  $\bar{\mathbf{A}}_j$ , hypothetical gross output and GVA levels may be decomposed according to (i) production attributed to domestic final demand given the known vector of domestic final demand,  $\bar{\mathbf{f}}_d$ , and (ii) production attributed to foreign demand given the vector of exports  $\bar{\mathbf{f}}_e$ . The gap between the two scenarios in either variant (i.e., production for domestic and foreign demand) may be interpreted as the potential economic loss, accounting for the removal of direct and indirect production linkages of sector  $j$ .

## Part 3: International Trade and Production Linkages

### Exports and Imports as a Percentage of Gross Domestic Product

Exports and imports as a percentage share of GDP, or simply the trade-to-GDP ratio, is an indicator of the relative importance of international trade to a national economy. It is derived by dividing the gross value of exports and imports over a period by the GDP for the same period.

### Total Foreign Trade by Sector

Total foreign trade shows the gross imports and exports by sector measured in millions of US dollars.

### Export Activity by End-Use Category

Trends of export levels from 2010 to 2017 are presented by types of end-use: intermediate use and final use. Complementing this graph are the shares of each aggregate sector in the exports of each end-use category.

## Import Activity by End-Use Category

Trends of import levels from 2010 to 2017 are presented by types of end-use: intermediate use and final use. Complementing this graph are the shares of each aggregate sector in the exports of each end-use category.

## International Buying and Selling Patterns of Domestic Industries

This section shows international sourcing and selling patterns in the domestic industries by calculating the shares of internationally traded inputs (the amount of inputs sourced from the RoW) and internationally traded outputs (the amount of output that was exported to the RoW) in the gross output of each sectoral aggregation.

## Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios

**Imported inputs** are noncompetitive imports used by domestic industries in their respective production processes. In other words, they exclude any imports used by final consumers. Each industry's imported inputs are divided by the total output to derive the imported input-to-output ratio. Conversely, exported output is simply the amount of domestic production that was consumed by nonresidents either for further production processes or for final consumption. Exported output is divided by the total (gross) output of each industry to derive the exported output-to-output ratio.

These ratios are used to rank each sector of the economy and highlight how much internationally traded input and output is involved in the production processes of each sector.

## Total Foreign-Traded Input

Analogous to imported inputs.

## Total Foreign-Traded Output

Analogous to exports, or the amount of goods and services produced by residents in the economy  $r$  and consumed by nonresidents either for intermediate or final use. Measured in gross terms, this statistic is often cited as having limitations for isolating double-counted terms from multiple border crossings.

## Domestic Production and International Linkages

For this indicator, the computational exercise takes place in the context of a two-region interregional model, where we assume region  $r$  to refer to the domestic economy, and  $s$  as being the RoW. A salient feature of a two-region IOT is that it provides the mechanism for detailing the direct and indirect linkages between production and trade in a systematic manner. The total requirements matrix,  $\mathbf{L}$ , can therefore be decomposed into three components based on the intrinsic cause (demand) driving the production of the output: intraregional effect ( $M_1$ ), interregional spillover effect ( $M_2$ ), and interregional feedback effect ( $M_3$ ), where:

$$\mathbf{L} = \mathbf{M}_3 * \mathbf{M}_2 * \mathbf{M}_1$$

Formulaically, in a two-economy model, it is expressed as:

$$\mathbf{M}_1 = \begin{bmatrix} (\mathbf{I} - \mathbf{A}^{rr})^{-1} & \mathbf{0} \\ \mathbf{0} & (\mathbf{I} - \mathbf{A}^{ss})^{-1} \end{bmatrix} \quad (10)$$

$$\mathbf{M}_2 = \begin{bmatrix} \mathbf{I} & (\mathbf{I} - \mathbf{A}^{rr})^{-1} \mathbf{A}^{rs} \\ (\mathbf{I} - \mathbf{A}^{ss})^{-1} \mathbf{A}^{sr} & \mathbf{I} \end{bmatrix} \quad (11)$$

$$\mathbf{M}_3 = \begin{bmatrix} [\mathbf{I} - (\mathbf{I} - \mathbf{A}^{rr})^{-1} \mathbf{A}^{rs} (\mathbf{I} - \mathbf{A}^{ss})^{-1} \mathbf{A}^{rs}]^{-1} & \mathbf{0} \\ \mathbf{0} & [\mathbf{I} - (\mathbf{I} - \mathbf{A}^{ss})^{-1} \mathbf{A}^{sr} (\mathbf{I} - \mathbf{A}^{rr})^{-1} \mathbf{A}^{sr}]^{-1} \end{bmatrix} \quad (12)$$

Where  $\mathbf{I}$  is the identity matrix and  $\mathbf{0}$  is the zero matrix, both with the same dimension as the relevant technical coefficient matrix  $\mathbf{A}$ .  $\mathbf{A}_{rr}$  and  $\mathbf{A}_{ss}$  are the technical coefficient matrices of transactions within economies  $r$  and  $s$ , respectively. The coefficients related to interregional transactions are captured in matrixes  $\mathbf{A}_{rs}$  and  $\mathbf{A}_{sr}$ .

$\mathbf{M}_1$ , or intraregional effect, captures the total output that a sector must produce to meet the total domestic (intraregional) requirement arising from a unit value increase in final demand for any given commodity in any given location.

$\mathbf{M}_2$ , or interregional spillover effect, measures the pure interregional direct and indirect demand for the sector's product.

$\mathbf{M}_3$ , or interregional feedback effect, shows the demand of a sector or an economy for its own product(s), resulting from its product(s) being used in the production of commodities that are themselves demanded by the sector or economy in question for its production process.

### Decomposition of Total Production Attributable to Domestic and Interregional Demand

In terms of additive decomposition,  $\mathbf{L}$  can also be expressed as follows:

$$\mathbf{L} = \mathbf{I} + (\mathbf{M}_1 - \mathbf{I}) + (\mathbf{M}_2 * \mathbf{M}_1 - \mathbf{M}_1) + (\mathbf{M}_3 * \mathbf{M}_2 * \mathbf{M}_1 - \mathbf{M}_2 * \mathbf{M}_1) \quad (13)$$

Therefore, gross output,  $\mathbf{x}$ , can be expressed as:

$$\mathbf{x} = \underbrace{\mathbf{L}\mathbf{f}}_{\text{Gross output}} = \underbrace{\mathbf{I}\mathbf{f}}_{\text{Direct intra-regional}} + \underbrace{(\mathbf{M}_1 - \mathbf{I})\mathbf{f}}_{\text{Indirect intra-regional}} + \underbrace{(\mathbf{M}_2 - \mathbf{I})\mathbf{M}_1\mathbf{f}}_{\text{Net inter-regional}} + \underbrace{(\mathbf{M}_3 - \mathbf{I})\mathbf{M}_2\mathbf{M}_1\mathbf{f}}_{\text{Net feedback}} \quad (14)$$

The decomposition isolates the initial, intraregional, interregional, and feedback effects. The last two terms of the above equation capture the effects of interregional trade linkages on an economy's sector-specific production activities. They could also be used as a measure of the level and evolution of integration between two or more economies. The last term could serve as an indicator of an economy's (or one of its sector's) intensity of participation in globally distributed production processes. A high value indicates that the sector under consideration is connected to the relevant international production processes at more than one level.

## Growth Rates of Production Components Based on Interregional Input-Output Tables

This graph depicts year-on-year growth rates of each of the four production components based on the multiplier decomposition described.

### Production Attributable to Domestic Linkages by Sector

Based on the multiplier decomposition method described, this table shows two components of production that are directly related to production linkages within the domestic region,  $\mathbf{M}_1$ . Each gross output component is shown by 5-sector aggregation in terms of millions of US dollars. The first subsection (top) presents the total final demand by sector (direct  $\mathbf{M}_1$ ), while the second subsection (bottom) shows the indirect production by sector.

### Production Attributable to Linkages with the Rest of the World by Sector

Based on the multiplier decomposition method described, this table shows two components of production that are directly related to production linkages with the RoW,  $\mathbf{M}_2$  and  $\mathbf{M}_3$ . Each gross output component is shown by 5-sector aggregation in terms of millions of US dollars.

**Net intraregional (domestic) multipliers** capture the total output that a sector must produce to meet the indirect intraregional requirement for its output arising from a unit value increase in final demand for any given commodity in any given location. Each value shows the additional million US dollars' worth of domestic production required to satisfy a corresponding million US dollars' worth of final demand for sector  $i$ .

**Net interregional multipliers** measure the pure interregional direct and indirect demand for a sector's product. Each value shows the additional million US dollars' worth of interregional production requirements to satisfy one million US dollars' demand for sector  $j$ .

**Net feedback multipliers** show the demand of a sector or an economy for its own product(s), resulting from its product(s) being used in the production of commodities that are themselves demanded by the sector or economy in question for its production process.

## Gross Trade Decomposition

### Comparison of Exports in Gross versus Value-Added Terms

Exports in gross trade and trade in value-added terms are explored in this set of indicators.

Traditional measures of trade record gross flows of goods and services each time they cross borders. This double counting in trade statistics can, to some extent, overstate the importance of exports to GDP and ignore the relative importance of cross-border production-sharing arrangements. Gross trade value aggregates all three broad components: domestic value-added, foreign value-added, and pure double counted terms. In attempt to disentangle domestic value-added from gross trade statistics, Wang, Wei, and Zhu (2013) advocated the use of domestic value-added absorbed abroad (VAX\_G). VAX\_G includes three components: (i) domestic value-added embodied in economy  $s$ ' (the domestic economy in focus) final exports to economy  $r$  (RoW); (ii) domestic value-added



embodied in economy  $s$ ' intermediate exports used by direct importer  $r$  to produce final goods and consumed in  $r$ ; and (iii) domestic value-added in intermediate exports by economy  $s$ , used by direct importer  $r$ , to produce exports ultimately absorbed by all other economies except  $s$ .

As a measure of domestic value-added embodied in exports (excluding domestic value-added first exported then returned home), VAX\_G explicitly excludes foreign-originated value-added and pure double-counted terms. These exclusions account for the difference between traditional gross exports and VAX\_G measures.

### Revealed Comparative Advantage: Traditional versus Value-Added Measures

Revealed comparative advantage (RCA) measures the intensity of trade specialization of a national economy in the context of the RoW. The RCA of a particular sector can be measured in a more traditional way by looking at how an exported product compares with other products using gross terms. It can also be measured by the actual value-added created by an economy and embodied in an export.

Following Bela Balassa (1965), traditional revealed comparative advantage (TRCA) of economy  $r$  is defined as:

$$TRCA_i^r = \frac{\frac{e_i^{r*}}{\sum_i^n e_i^{r*}}}{\frac{\sum_t^G e_i^{t*}}{\sum_i^n \sum_t^G e_i^{t*}}} \quad (15)$$

That is, the TRCA is equal to the export share of an industry to the total exports of an economy,  $\frac{e_i^{r*}}{\sum_i^n e_i^{r*}}$ , divided by the export share of this industry in the world,  $\frac{\sum_t^G e_i^{t*}}{\sum_i^n \sum_t^G e_i^{t*}}$ .

An RCA value of less than 1 implies that the economy is not specialized in exports of this industry. Similarly, an RCA value exceeding 1 implies that the economy is specialized in this industry's exports.

Wang, Wei, and Zhu (2013) proposed a new measure of revealed comparative advantage (NRCA) that excludes foreign value-added and pure double-counted terms in gross exports, but includes indirect exports of an economy-sector's value-added through other sectors of the exporting economy. The authors defined NRCA as the share of an economy-sector's forward-linkage-based measure of domestic value-added in exports,  $dvix\_f$ , in the economy's total domestic value-added in exports relative to the sector's total forward-linkage-based domestic value-added in exports from all economies as a share of global value-added in exports. The NRCA is defined as:

$$NRCA_i^r = \frac{\frac{dvix\_f_i^{r*}}{\sum_{i=1}^n dvix\_f_i^{r*}}}{\frac{\sum_t^G dvix\_f_i^{t*}}{\sum_i^n \sum_t^G dvix\_f_i^{t*}}} \quad (16)$$

NRCA uses the same interpretation as TRCA, except that, instead of using gross exports,  $e$ , NRCA only includes the domestic value-added component of export in each sector.



## Part 4: Global Value Chain Indicators

This section focuses on different indicators for global value chains (GVCs), namely trade in value-added, GVC income, and GVC participation. GVCs refer to how international trade, production, and investments are organized and analyzed through the different stages of production processes, traced across different national economies.

**Trade in value-added** refers to the export, import, and net trade in value-added between one economy and another. The network graph shows the trade in value-added of the economy in focus with its top trading partner economies in 2010 and 2017. The diameter of the nodes or circles represent the GDP of the economy and the width or magnitude of the arrows represent how much trade in value-added comes in and goes out from the economy in focus and its trading partners. In addition, the green shade of the nodes and arrows represents the importing partner economy and import of value-added, respectively, while the blue shade of the nodes and arrows represents the exporting partner economy and export of value-added, respectively. Note that the curved arrows do not have any implication regarding the indicator presented.

Using the notations of Johnson and Noguera (2012) for trade in value-added, consider the following multi-region IOT of  $G$  economies with  $N$  sectors.

**Table 3: Multiregional Input-Output Table**

		Intermediate Uses				Final Uses				Gross Outputs
		Economy 1	Economy 2	...	Economy G	1	2	...	G	
Intermediate Inputs	1	$Z_{11}$	$Z_{12}$	...	$Z_{1G}$	$f_{11}$	$f_{12}$	...	$f_{1G}$	$x_1$
	2	$Z_{21}$	$Z_{22}$	...	$Z_{2G}$	$f_{21}$	$f_{22}$	...	$f_{2G}$	$x_2$
	...	...	...	...	...	...	...	...	...	...
	G	$Z_{G1}$	$Z_{G2}$	...	$Z_{GG}$	$F_{G1}$	$F_{G2}$	...	$F_{GG}$	$x_G$
Value-Added		$v_1'$	$v_2'$	...	$v_G'$					
Total Inputs		$x_1$	$x_2$	...	$x_G$					

Source: Adapted from Miller and Blair (2009).

The vector  $\mathbf{f}_{st} = [f_{st}(i)]$  contains values of goods or services consumed for final use in economy  $t$ , produced in sector  $i$  in economy  $s$ . Matrix  $\mathbf{Z}_{st} = [z_{st}(i, j)]$  is composed of values of goods or services consumed by sector  $j$  in economy  $s$ , produced in sector  $i$  in economy  $s$ . The vector of outputs of each sector in economy  $s$  is:

$$\mathbf{x}_s = [x_s(i) = \sum_t \mathbf{f}_{st}(i) + \sum_t \sum_j \mathbf{f}_{st}(i, j)]. \quad (17)$$

Then for  $N \times N$  matrix  $\mathbf{A} = [a_{st}(i, j) = f_{st}(i, j)/x_s(j)]$  we express the multi-region output as:

$$\mathbf{x} = \mathbf{Ax} + \sum_t \mathbf{f}_t \rightarrow \mathbf{x} = \sum_t (\mathbf{I} - \mathbf{A})^{-1} \mathbf{f}_t. \quad (18)$$

This parallels the classic input-output model for one region such that  $(\mathbf{I} - \mathbf{A})^{-1}$  is interpreted similarly with the Leontief Inverse.

Exports of value-added produced in sector  $i$  in economy  $s$  and absorbed in economy  $t$  are then computed as:

$$v_{st}(i) = r_s(i) x_{st}(i), \quad (19)$$

where,

$$r_s(i) = 1 - \sum_t \sum_j a_{ts}(j, i) \quad (20)$$

is the ratio of value-added to output for each sector in economy  $s$ . Then the total export of value-added from economy  $s$  to  $t$  is:

$$v_{st} = \sum_i r_s(i) x_{st}(i). \quad (21)$$

The total export of value-added of economy  $s$  to all trading-partner economies is:

$$v_s = \sum_i \sum_t r_s(i) x_{st}(i). \quad (22)$$

and the total import of value-added of economy  $t$  from all trading-partner economies is:

$$v_t = \sum_j \sum_s r_s(i) x_{st}(i). \quad (23)$$

Timmer et al. (2013) used the term GVC income for import of value-added. The difference  $va_s - va_t$ , is the **value-added trade balance** or the net trade in value-added that gives a better picture of the exchange of goods and services from national economy to national economy.

## Global Value Chain Participation Index

This part examines each economy's movements in GVC participation. Following Wang et al. (2017), we can decompose total production activities at the economy- and sector-levels, depending on whether production activities are for pure domestic demand, traditional trade, simple GVC activities, and/or complex GVC activities.

### Decomposing Value-Added and Final Goods Production Activities

GVCs depend on goods that are used as inputs and which cross national borders for production. Therefore, the first steps in measuring GVC participation are to separate final and intermediate use, distinguish between domestic and foreign value-added, and identify which types of production are GVC activities and which are not. To distinguish between domestic and foreign value-added, the domestic and the import input-output coefficient matrix in the MRIO may be used in the national IOT,

$$X = AX + Y \quad (24)$$

Where  $X$  is the gross output vector,  $Y$  is the final demand vector, and  $A$  is the input-output technical coefficient matrix. Using this gross output equation, which splits intermediate and final goods, the production and use balance of production may be written as:

$$X = A^D X + Y^D + A^F X + Y^F = A^D X + Y^D + E \quad (25)$$

which can be rearranged to get:

$$\begin{aligned} X &= (A - A^D)^{-1} Y^D + (I - A^D)^{-1} E = LY^D + LE \\ X &= LY^D + LY^F + LA^F X \end{aligned} \quad (26)$$

where  $A^D$  is the diagonal block matrix of domestic input coefficients,  $A^F$  is the off-diagonal block matrix of imported input coefficients,  $Y^D$  is the vector of final goods production for domestic consumption, and  $Y^F$  is the vector of final goods exports.

Replacing  $L$  with  $B$  as the global Leontief Inverse matrix and replacing  $X$  as  $BY$  obtains the decomposition of value-added and final goods production may be written as follows:

$$\hat{V}B\hat{Y} = \hat{V}L\hat{Y}^D + \hat{V}L\hat{Y}^F + \hat{V}L\hat{A}^F\hat{B}^Y \quad (27)$$

$$\hat{V}B\hat{Y} = \hat{V}L\hat{Y}^D + \hat{V}L\hat{Y}^F + (\hat{V}L\hat{A}^F\hat{L}\hat{Y}^D) + \hat{V}L\hat{A}^F(\hat{B}\hat{Y} - \hat{L}\hat{Y}^D) \quad (28)$$

The first term refers to pure domestic production or domestic production absorbed by domestic final demand without cross-border trade. The second term refers to traditional trade or the production of final goods or exports absorbed by foreign final demand. In this type of production activity, value-added crosses national borders only once and only for consumption. Both pure domestic production and traditional trade are non-GVC production activities because there is no domestic value-added that crosses national borders for production purposes. The third and fourth terms refer to GVC production activities. GVC activities are those activities in which value-added crosses national borders for production. It is the sum of value-added embodied in intermediate goods for export or import. GVC production activities can be further decomposed into simple and complex GVC activities. Simple GVCs involve domestic value-added crossing national borders for production only once, while complex GVCs involve domestic value-added crossing national borders for production at least twice.

By decomposing GVC participation indices between participation in non-GVC and GVC production activities, the extent by which domestic value-added in a economy-sector is involved in the GVCs production activities can be measured. Furthermore, the structural change in an economy's different types of value-added creation activities at the sectoral level and its relevance to an economy's GDP growth can be analysed based on this decomposition.

### Measuring Participation Based on Forward and Backward Linkages in Global Value Chains

Based on the decomposition of value-added and final goods production, we can identify which types of production are GVC production activities. Therefore, participation in GVCs can be measured at the economy-sector level in four ways, based on forward and backward linkages through

- (i) exports of domestic value-added embodied in intermediate exports used by direct importers for domestic consumption, labelled as simple GVCs based on forward linkages;
- (ii) exports of domestic value-added in intermediate exports used by direct importers to produce exports to third-party economies, labelled as complex GVCs based on forward linkages;
- (iii) imports of foreign value-added that are used to produce goods for domestic consumption, labelled as simple GVCs based on backward linkages; and
- (iv) imports of foreign value-added that are used to produce exports to other economies, labelled as complex GVCs based on backward linkages.

The sum of Eq. 28 along the rows provides the decomposition of value-added from an economy-sector from upstream activities, which indicates GVC participation based on forward linkages, **GVCpt\_F**. It refers to the sum of each economy-sector's value-added used in all downstream sectors.

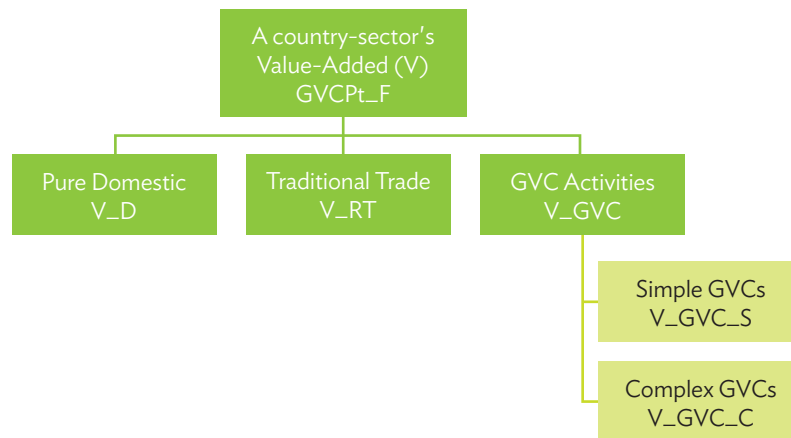
$$\hat{V}B\hat{Y} = \underbrace{\hat{V}L\hat{Y}^D}_{(1)V\_D} + \underbrace{\hat{V}L\hat{Y}^F}_{(2)V\_RT} + \underbrace{\hat{V}L\hat{A}^F L\hat{Y}^D}_{(3a)V\_GVC\_S} + \underbrace{\hat{V}L\hat{A}^F (B\hat{Y} - L\hat{Y}^D)}_{(3b)V\_GVC\_C} \quad (29)$$

The sum of Eq. 28 along the columns provides the decomposition of an economy-sector's final goods production, which indicates GVC participation based on backward linkages, **GVCpt\_B**. It refers to the sum of value-added in an economy-sector's final goods production that is involved in GVC activities from all upstream sectors.

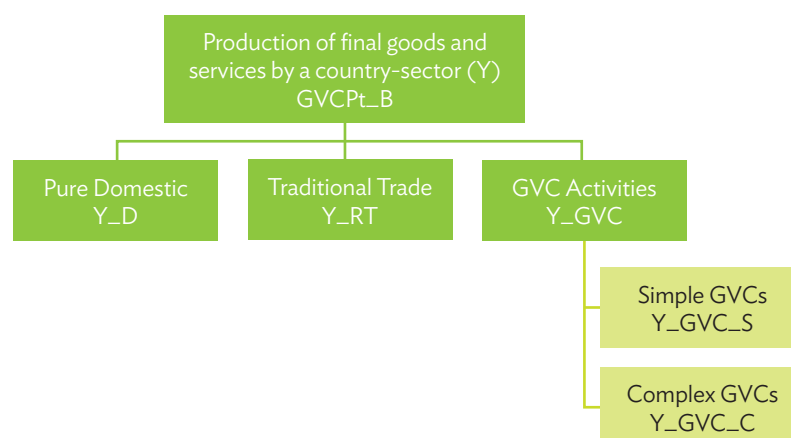
$$\hat{V}B\hat{Y} = \underbrace{\hat{V}L\hat{Y}^D}_{Y\_D} + \underbrace{\hat{V}L\hat{Y}^F}_{Y\_RT} + \underbrace{\hat{V}L\hat{A}^F L\hat{Y}^D}_{Y\_GVC\_S} + \underbrace{\hat{V}L\hat{A}^F (B\hat{Y} - L\hat{Y}^D)}_{Y\_GVC\_C} \quad (30)$$

$\hat{V}L\hat{Y}^D$  and  $V L\hat{Y}^D$  are labelled as **V\_D** and **Y\_D** which refers to the value-added that is produced and absorbed domestically.  $\hat{V}L\hat{Y}^F$  and  $V L\hat{Y}^F$  are labelled as **V\_RT** and **Y\_RT** which refers to value-added that is embodied in final goods exports and absorbed by the direct importer for consumption only. At the economy aggregate level, **V\_D** and **V\_RT** are equal to **Y\_D** and **Y\_RT**.  $\hat{V}L\hat{A}^F L\hat{Y}^D$  and  $V L\hat{A}^F L\hat{Y}^D$  are labelled as simple GVC activities **V\_GVC\_S** and **Y\_GVC\_S** while  $\hat{V}L\hat{A}^F (B\hat{Y} - L\hat{Y}^D)$  and  $V L\hat{A}^F (B\hat{Y} - L\hat{Y}^D)$  are labelled as complex GVC activities **V\_GVC\_C** and **Y\_GVC\_C**. **V\_GVC\_S** is domestic value-added embodied in an economy-sector's intermediate exports that are used by the direct importer to produce domestic final goods that are absorbed by domestic final demand. **Y\_GVC\_S** is foreign value-added in an economy-sector that is imported directly from partner countries and are used to produce domestic final goods consumed domestically. **V\_GVC\_C** is an economy-sector's value-added embodied in its intermediate exports and used by the direct importer to produce intermediate and final exports to other countries. **Y\_GVC\_C** is the returned domestic value-added or foreign value-added embodied in an economy-sector's intermediate imports that are used to produce final goods absorbed at the home economy or exported to other countries. Because **V\_GVC\_C** and **Y\_GVC\_C** involves indirect international trade through third countries, they will only equal each other at the global aggregate level.

**Figure 1: Decomposition of Value-added by Industry (Forward Linkages)**



Source: Wang et al. (2017).

**Figure 2: Decomposition of Final Goods Production by Economy/Sector (Backward Linkages)**

Source: Wang et al. (2017).

### **GVC Participation Based on Backward and Forward Linkages at the Economy/Sector Level**

For each sector, the GVC participation index based on forward and backward linkages, and their decomposition into simple and complex GVC activities, can be measured. Breaking down the decomposition of economic sectors into both forward and backward linkages shows the general pattern in production structures among sectors. In general, services tend to have a low degree of participation in both backward and forward linkages, while manufacturing tends to have a high degree of both backward and forward participation. Major producers and exporters in the primary sector, including agriculture and mining, often have a high degree of forward participation and a low degree of backward participation.

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# COUNTRY PROFILES

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Eastern Asia

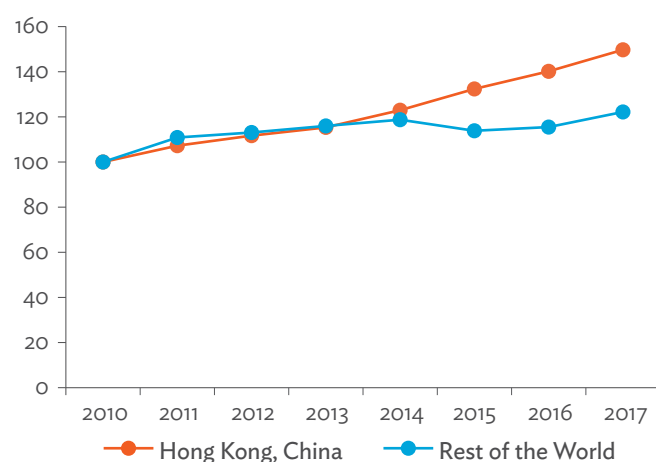


# OVERVIEW OF PRODUCTION AND DEMAND STRUCTURES

# 1.1

## Hong Kong, China

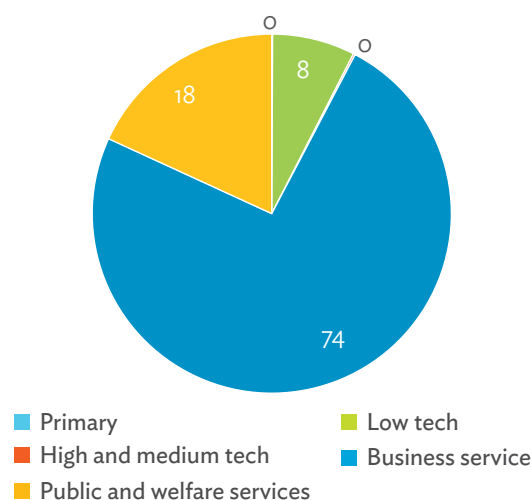
**Figure 1.1.1a: Gross Domestic Product Scaled to 2010 Levels in Comparison with the Rest of the World, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

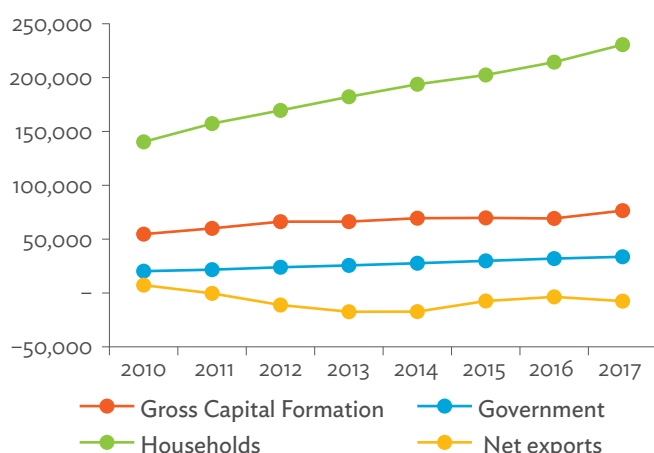
**Figure 1.1.1b: Gross Domestic Product Share by 5-Sector Aggregation, 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.1.2a: Gross Domestic Product Trend by Final Consumption Expenditure Components, 2010–2017 (\$ million)**

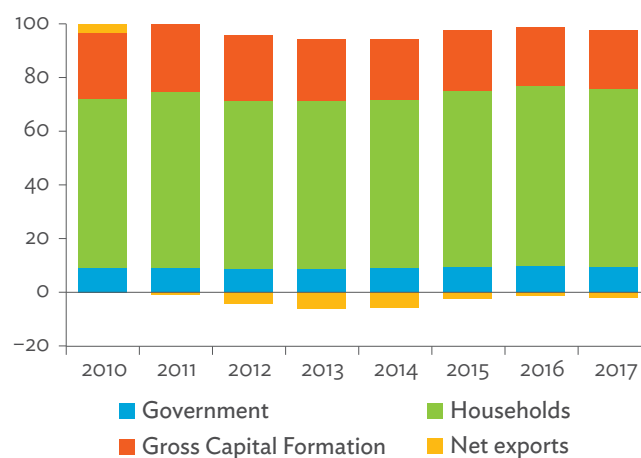


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.1.2b: Share of Consumption Expenditure by Final Consumption Expenditure Components, 2010–2017 (%)**

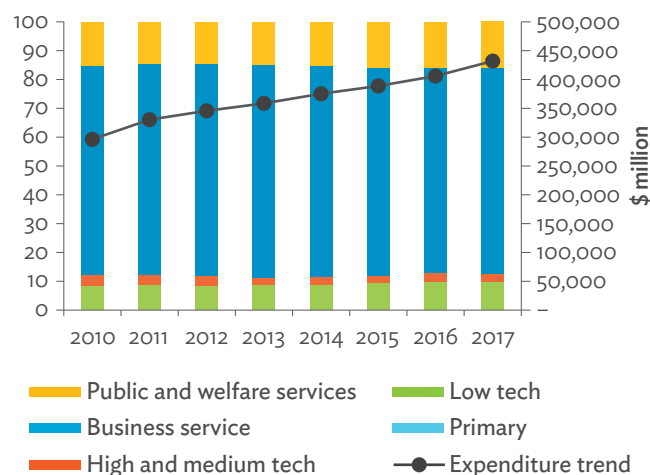


Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



**Figure 1.1.2c: Final Consumption Expenditure Total Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

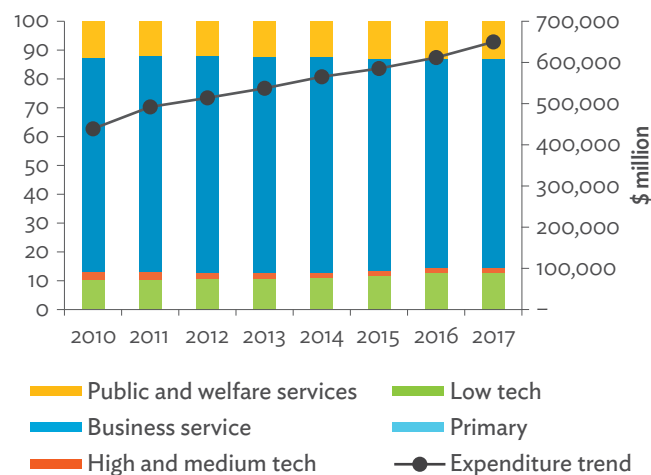


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.1.3a: Gross Total Output Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**



\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.1.3b: Shares by 5-Sector Aggregation Attributed to Foreign and Domestic Final Demand, 2010 and 2017 (%)**

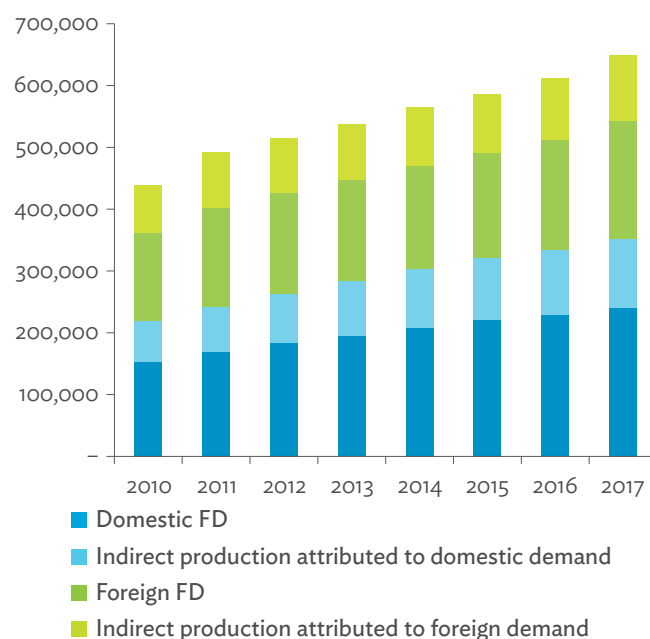


FD=final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

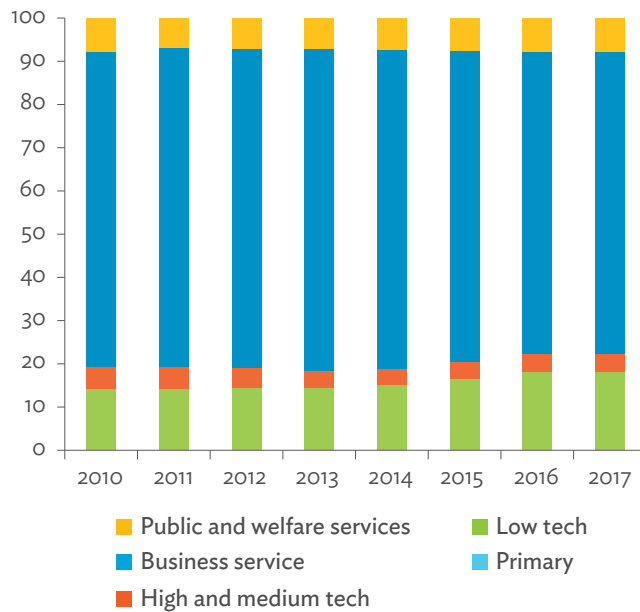
**Figure 1.1.3c: Gross Output by Production Attributed to Foreign and Domestic Demand, 2010–2017 (\$ million)**



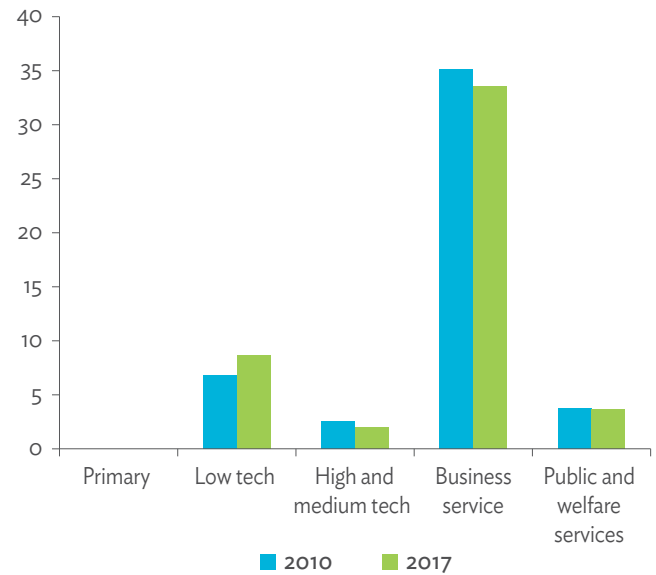
\$ = United States dollar, FD = final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

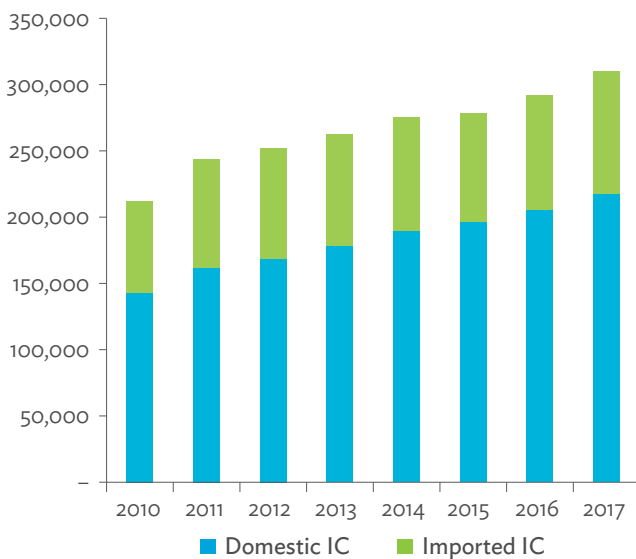
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**Figure 1.1.4a: Intermediate Consumption Shares by 5-Sector Aggregation, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

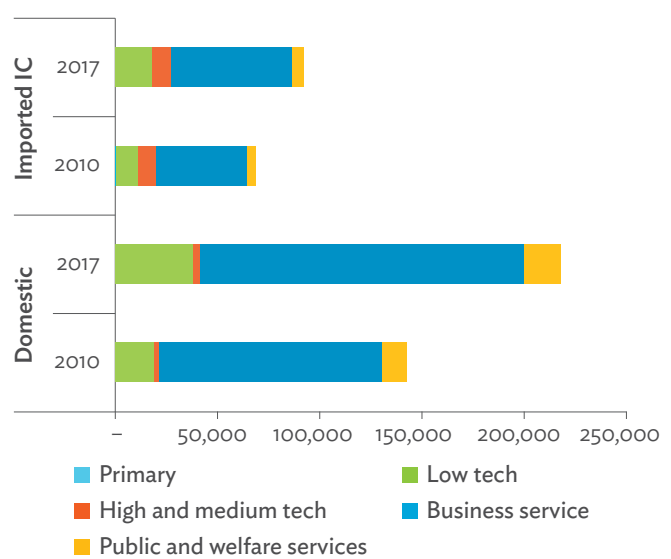
[Click here for figure data](#)**Figure 1.1.4b: Intermediate Consumption Ratio to Output by 5-Sector Aggregation, 2010 and 2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.1.4c: Shares of Domestic and Imported Intermediate Consumption, 2010–2017 (\$ million)**

\$ = United States dollar, IC= intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

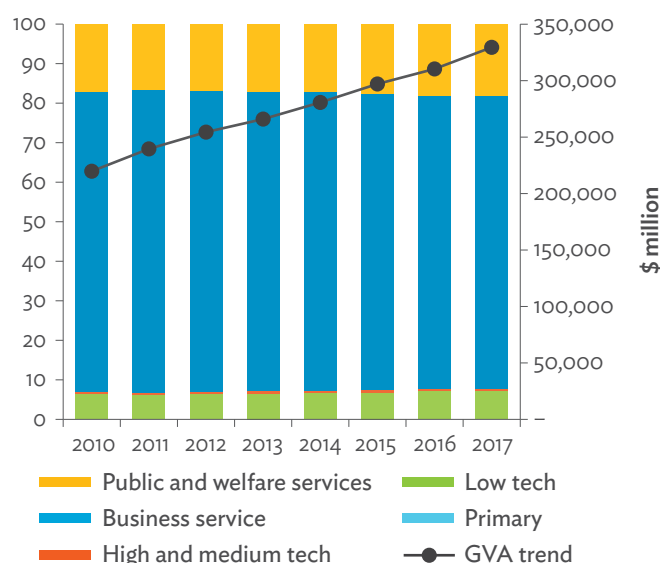
[Click here for figure data](#)**Figure 1.1.4d: Shares of Domestic and Imported Intermediate Consumption by 5-Sector Aggregation, 2010 and 2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.1.5a: Gross Value Added Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

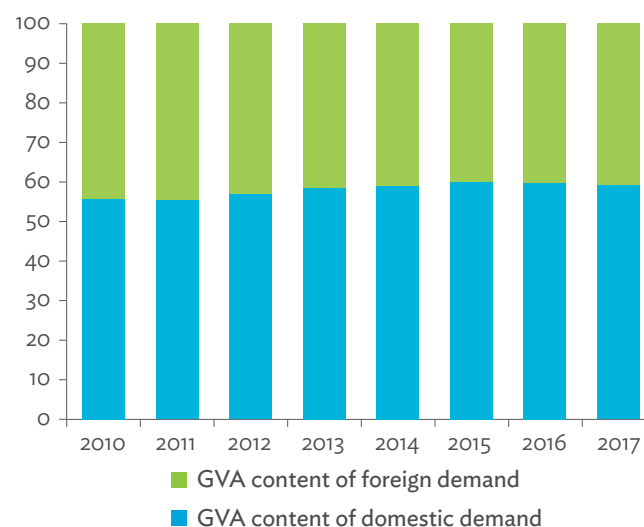


\$ = United States dollar, GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.1.5b: Gross Value Added Share Attributed to Foreign and Domestic Final Demand, 2010–2017 (%)**

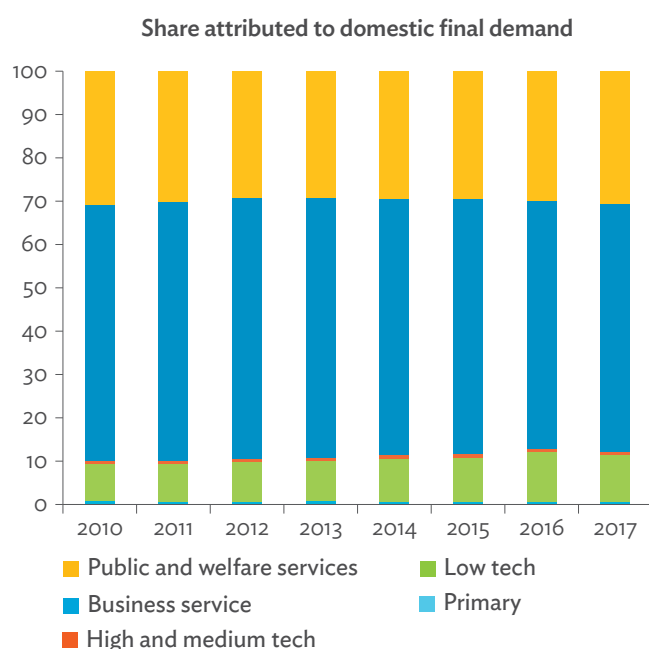


GVA = gross value added.

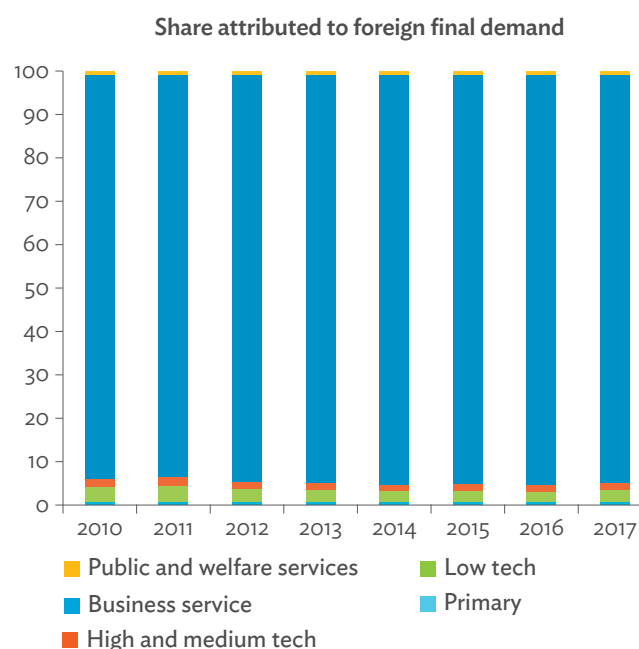
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.1.5c: Sectoral Shares of Gross Value Added Content in Domestic and Foreign Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.



[Click here for figure data](#)

**Table 1.1.1: Gross Value Added Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.476	0.445	0.480	0.527	0.548	0.600	0.619	0.621
Mining and quarrying	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Food, beverages, and tobacco	0.477	0.455	0.464	0.470	0.482	0.487	0.439	0.470
Textiles and textile products	0.549	0.533	0.560	0.575	0.592	0.601	0.560	0.590
Leather, leather products, and footwear	0.415	0.408	0.435	0.456	0.476	0.486	0.435	0.471
Wood and products of wood and cork	0.604	0.587	0.604	0.606	0.626	0.628	0.596	0.612
Pulp, paper, paper products, printing, and publishing	0.489	0.483	0.487	0.500	0.512	0.522	0.492	0.508
Coke, refined petroleum, and nuclear fuel	0.259	0.252	0.245	0.254	0.248	0.265	0.258	0.253
Chemicals and chemical products	0.187	0.189	0.184	0.185	0.183	0.207	0.199	0.200
Rubber and plastics	0.201	0.201	0.199	0.197	0.192	0.217	0.215	0.212
Other nonmetallic minerals	0.215	0.213	0.211	0.210	0.209	0.232	0.226	0.223
Basic metals and fabricated metal	0.211	0.207	0.209	0.215	0.213	0.232	0.221	0.227
Machinery, nec	0.202	0.201	0.201	0.200	0.196	0.219	0.216	0.212
Electrical and optical equipment	0.200	0.199	0.198	0.196	0.191	0.216	0.214	0.209
Transport equipment	0.199	0.198	0.197	0.194	0.189	0.213	0.212	0.205
Manufacturing, nec; recycling	0.216	0.216	0.211	0.206	0.202	0.227	0.227	0.221
Electricity, gas, and water supply	0.759	0.728	0.728	0.730	0.718	0.725	0.736	0.740
Construction	0.651	0.611	0.638	0.641	0.641	0.652	0.685	0.647
Sale, maintenance, and repair	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wholesale trade and commission trade	0.696	0.691	0.697	0.692	0.698	0.712	0.719	0.710
Retail trade	0.865	0.864	0.871	0.869	0.873	0.878	0.868	0.882
Hotels and restaurants	0.695	0.672	0.674	0.671	0.672	0.685	0.660	0.685
Inland transport	0.815	0.773	0.776	0.796	0.793	0.821	0.828	0.826
Water transport	0.593	0.540	0.537	0.548	0.563	0.597	0.595	0.605
Air transport	0.636	0.563	0.557	0.570	0.580	0.622	0.634	0.631
Other supporting and auxiliary transport activities	0.811	0.773	0.773	0.790	0.790	0.814	0.816	0.820
Post and telecommunications	0.730	0.722	0.740	0.733	0.746	0.767	0.771	0.774
Financial intermediation	0.866	0.856	0.872	0.861	0.872	0.886	0.884	0.887
Real estate activities	0.929	0.926	0.931	0.942	0.931	0.937	0.936	0.938
Renting of M&Eq and other business activities	0.832	0.833	0.841	0.855	0.848	0.861	0.869	0.865
Public administration and defense; compulsory social security	0.913	0.916	0.920	0.922	0.923	0.928	0.932	0.928
Education	0.891	0.890	0.897	0.898	0.899	0.906	0.906	0.908
Health and social work	0.847	0.848	0.853	0.853	0.854	0.864	0.860	0.866
Other community, social, and personal services	0.764	0.757	0.773	0.774	0.776	0.787	0.780	0.792
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 1.1.2: Import Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.507	0.536	0.506	0.458	0.438	0.384	0.368	0.365
Mining and quarrying	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Food, beverages, and tobacco	0.505	0.525	0.520	0.512	0.500	0.492	0.544	0.512
Textiles and textile products	0.422	0.434	0.412	0.394	0.376	0.366	0.411	0.380
Leather, leather products, and footwear	0.563	0.566	0.543	0.519	0.499	0.487	0.542	0.505
Wood and products of wood and cork	0.376	0.390	0.377	0.373	0.352	0.348	0.383	0.365
Pulp, paper, paper products, printing, and publishing	0.494	0.497	0.496	0.483	0.469	0.459	0.490	0.473
Coke, refined petroleum, and nuclear fuel	0.732	0.738	0.746	0.737	0.743	0.724	0.732	0.737
Chemicals and chemical products	0.806	0.803	0.810	0.809	0.810	0.785	0.794	0.793
Rubber and plastics	0.791	0.791	0.794	0.796	0.801	0.775	0.778	0.780
Other nonmetallic minerals	0.777	0.778	0.782	0.783	0.784	0.759	0.766	0.769
Basic metals and fabricated metal	0.781	0.784	0.784	0.777	0.779	0.759	0.771	0.765
Machinery, nec	0.791	0.791	0.793	0.793	0.797	0.772	0.776	0.780
Electrical and optical equipment	0.793	0.793	0.796	0.797	0.802	0.776	0.779	0.784
Transport equipment	0.794	0.794	0.797	0.800	0.805	0.779	0.780	0.788
Manufacturing, nec; recycling	0.776	0.775	0.782	0.787	0.791	0.764	0.765	0.772
Electricity, gas, and water supply	0.225	0.254	0.256	0.254	0.264	0.254	0.244	0.240
Construction	0.335	0.374	0.350	0.347	0.348	0.336	0.304	0.343
Sale, maintenance, and repair	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wholesale trade and commission trade	0.279	0.282	0.281	0.285	0.279	0.263	0.257	0.266
Retail trade	0.100	0.101	0.099	0.099	0.093	0.086	0.100	0.085
Hotels and restaurants	0.284	0.307	0.309	0.310	0.309	0.293	0.321	0.295
Inland transport	0.163	0.196	0.199	0.178	0.181	0.154	0.148	0.149
Water transport	0.355	0.395	0.412	0.399	0.385	0.348	0.349	0.338
Air transport	0.347	0.415	0.426	0.411	0.401	0.357	0.347	0.349
Other supporting and auxiliary transport activities	0.142	0.166	0.177	0.159	0.160	0.136	0.134	0.129
Post and telecommunications	0.242	0.244	0.234	0.239	0.226	0.205	0.202	0.199
Financial intermediation	0.102	0.108	0.099	0.108	0.097	0.085	0.089	0.086
Real estate activities	0.054	0.056	0.054	0.041	0.051	0.046	0.049	0.046
Renting of M&Eq and other business activities	0.146	0.141	0.139	0.123	0.130	0.117	0.110	0.115
Public administration and defense; compulsory social security	0.081	0.077	0.074	0.072	0.071	0.066	0.062	0.066
Education	0.081	0.075	0.076	0.075	0.074	0.068	0.069	0.067
Health and social work	0.139	0.137	0.135	0.135	0.133	0.123	0.128	0.122
Other community, social, and personal services	0.151	0.143	0.146	0.143	0.142	0.131	0.146	0.131
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 1.1.3: Output Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.357	1.398	1.345	1.329	1.307	1.310	1.285	1.289
Mining and quarrying	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Food, beverages, and tobacco	1.449	1.483	1.448	1.432	1.448	1.495	1.442	1.504
Textiles and textile products	1.547	1.574	1.578	1.559	1.562	1.597	1.555	1.611
Leather, leather products, and footwear	1.466	1.496	1.501	1.488	1.494	1.538	1.469	1.546
Wood and products of wood and cork	1.475	1.533	1.496	1.476	1.498	1.538	1.525	1.556
Pulp, paper, paper products, printing, and publishing	1.526	1.581	1.550	1.545	1.568	1.611	1.589	1.620
Coke, refined petroleum, and nuclear fuel	1.340	1.366	1.337	1.324	1.313	1.372	1.379	1.367
Chemicals and chemical products	1.326	1.353	1.321	1.313	1.304	1.367	1.360	1.359
Rubber and plastics	1.355	1.375	1.355	1.344	1.330	1.391	1.397	1.384
Other nonmetallic minerals	1.359	1.380	1.357	1.346	1.335	1.395	1.397	1.388
Basic metals and fabricated metal	1.315	1.336	1.314	1.307	1.298	1.358	1.350	1.353
Machinery, nec	1.352	1.372	1.353	1.342	1.330	1.391	1.394	1.383
Electrical and optical equipment	1.358	1.377	1.357	1.345	1.332	1.393	1.398	1.385
Transport equipment	1.358	1.376	1.358	1.344	1.329	1.390	1.397	1.382
Manufacturing, nec; recycling	1.384	1.405	1.380	1.365	1.352	1.413	1.423	1.406
Electricity, gas, and water supply	1.277	1.308	1.295	1.299	1.307	1.327	1.302	1.304
Construction	2.038	1.916	2.013	2.006	2.020	2.059	2.139	2.072
Sale, maintenance, and repair	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Wholesale trade and commission trade	1.521	1.526	1.522	1.530	1.535	1.545	1.561	1.545
Retail trade	1.630	1.640	1.640	1.649	1.654	1.648	1.625	1.648
Hotels and restaurants	1.461	1.436	1.430	1.430	1.427	1.444	1.393	1.439
Inland transport	1.402	1.495	1.496	1.499	1.487	1.444	1.431	1.426
Water transport	1.866	1.913	1.884	1.900	1.926	1.902	1.867	1.876
Air transport	1.534	1.546	1.526	1.536	1.545	1.531	1.523	1.512
Other supporting and auxiliary transport activities	1.544	1.632	1.641	1.647	1.639	1.587	1.564	1.563
Post and telecommunications	1.652	1.688	1.641	1.661	1.704	1.686	1.660	1.665
Financial intermediation	1.455	1.493	1.457	1.484	1.499	1.466	1.470	1.473
Real estate activities	1.271	1.280	1.278	1.294	1.292	1.281	1.275	1.281
Renting of M&Eq and other business activities	1.396	1.407	1.405	1.435	1.440	1.426	1.425	1.415
Public administration and defense; compulsory social security	1.208	1.199	1.199	1.207	1.212	1.211	1.210	1.210
Education	1.216	1.201	1.204	1.212	1.217	1.214	1.210	1.212
Health and social work	1.239	1.227	1.223	1.230	1.235	1.236	1.222	1.231
Other community, social, and personal services	1.540	1.511	1.522	1.534	1.540	1.534	1.511	1.533
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

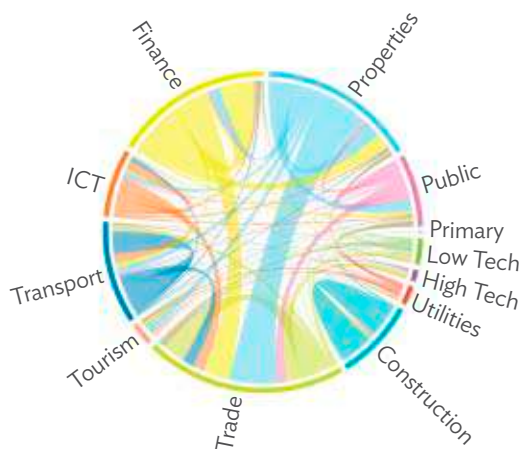
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 1.2

## DOMESTIC INTERINDUSTRY LINKAGES

### Hong Kong, China

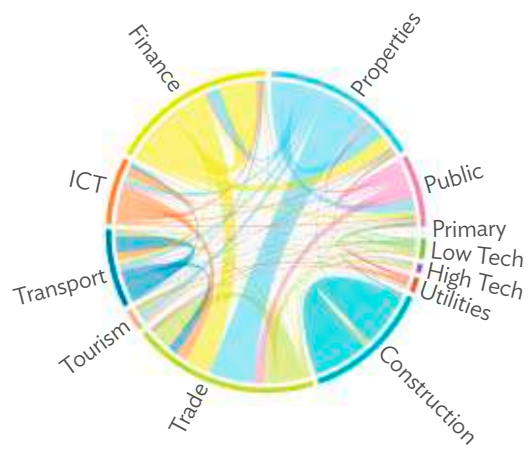
**Figure 1.2.1a: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2010**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

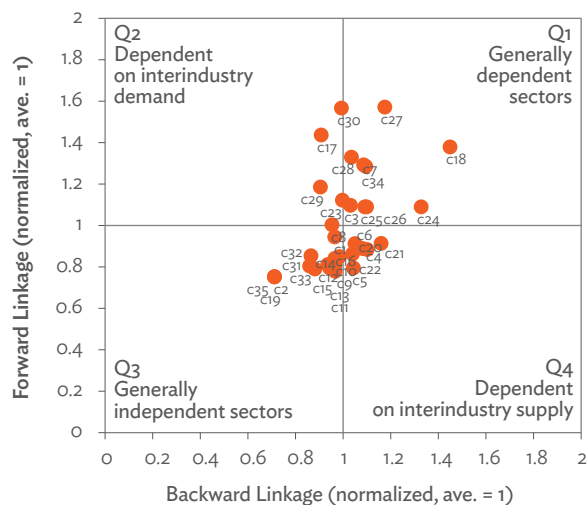
**Figure 1.2.1b: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2017**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

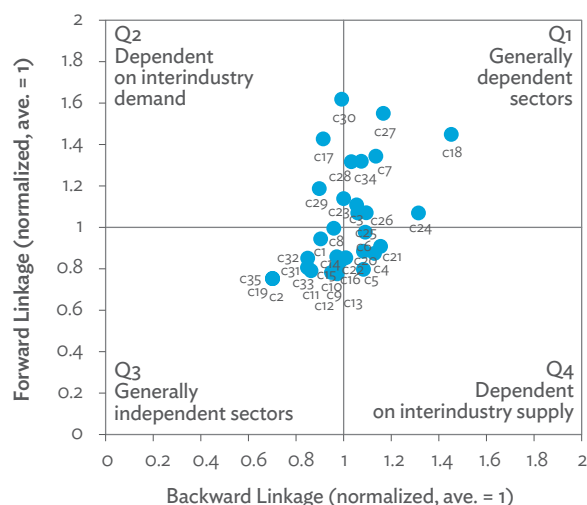
**Figure 1.2.2a: Backward and Forward Linkages by Industry, 2010**



Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

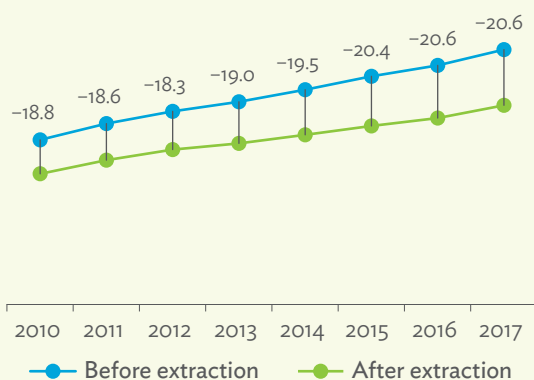
**Figure 1.2.2b: Backward and Forward Linkages by Industry, 2017**



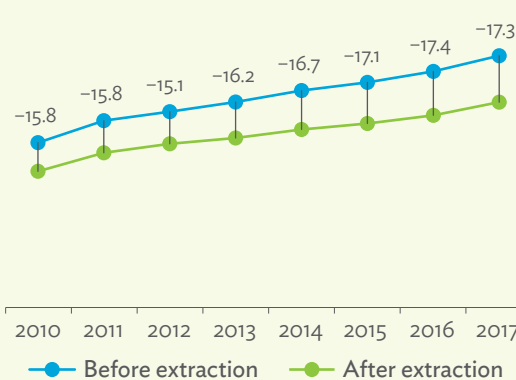
Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

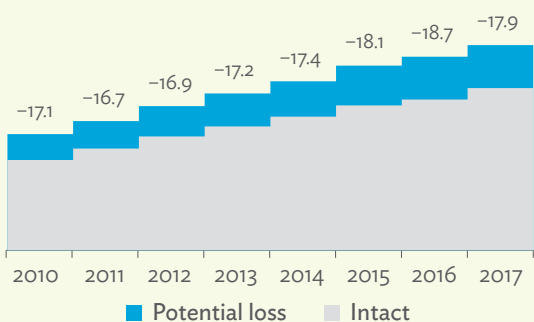


**Box 1: Hypothetical Extraction of Financial Intermediation Industry in Hong Kong, China****Figure 1.2.3a: Potential Decline in Gross Value Added, 2010–2017 (%)**

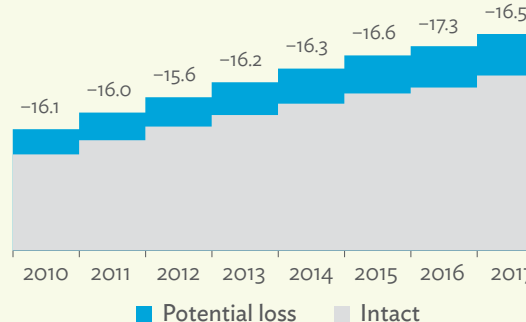
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.2.4a: Potential Decline in Gross Output, 2010–2017 (%)**

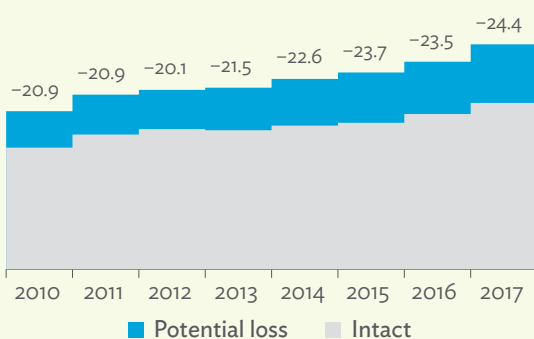
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.2.3b: Potential Decline in Gross Value Added Attributed to Domestic Final Demand, 2010–2017 (%)**

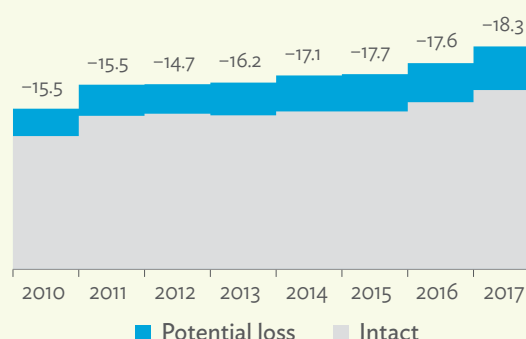
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.2.4b: Potential Decline in Gross Output Attributed to Domestic Final Demand, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.2.3c: Potential Decline in Gross Value Added Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.2.4c: Potential Decline in Gross Output Attributed to Exports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Table 1.2.1: Input-Output Backward Linkage**



Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.965	0.982	0.953	0.942	0.925	0.915	0.904	0.903
Mining and quarrying	0.711	0.702	0.708	0.708	0.707	0.699	0.704	0.701
Food, beverages, and tobacco	1.031	1.042	1.026	1.014	1.024	1.044	1.014	1.054
Textiles and textile products	1.100	1.106	1.117	1.104	1.105	1.116	1.094	1.129
Leather, leather products, and footwear	1.043	1.051	1.063	1.054	1.057	1.074	1.034	1.083
Wood and products of wood and cork	1.049	1.077	1.059	1.046	1.059	1.075	1.073	1.091
Pulp, paper, paper products, printing, and publishing	1.085	1.110	1.098	1.095	1.109	1.126	1.118	1.135
Coke, refined petroleum, and nuclear fuel	0.953	0.959	0.947	0.938	0.929	0.958	0.970	0.958
Chemicals and chemical products	0.943	0.951	0.935	0.930	0.923	0.955	0.957	0.953
Rubber and plastics	0.963	0.966	0.960	0.952	0.941	0.972	0.983	0.970
Other nonmetallic minerals	0.966	0.970	0.961	0.953	0.944	0.975	0.983	0.973
Basic metals and fabricated metal	0.935	0.939	0.930	0.926	0.918	0.949	0.950	0.949
Machinery, nec	0.962	0.964	0.958	0.951	0.941	0.971	0.981	0.969
Electrical and optical equipment	0.966	0.968	0.961	0.953	0.942	0.973	0.983	0.971
Transport equipment	0.966	0.967	0.962	0.952	0.940	0.971	0.983	0.969
Manufacturing, nec; recycling	0.984	0.987	0.977	0.967	0.956	0.987	1.001	0.985
Electricity, gas, and water supply	0.908	0.919	0.917	0.920	0.925	0.927	0.916	0.914
Construction	1.449	1.346	1.425	1.421	1.429	1.439	1.505	1.452
Sale, maintenance, and repair	0.711	0.702	0.708	0.708	0.707	0.699	0.704	0.701
Wholesale trade and commission trade	1.082	1.072	1.078	1.084	1.086	1.079	1.098	1.083
Retail trade	1.159	1.152	1.162	1.168	1.170	1.151	1.143	1.155
Hotels and restaurants	1.039	1.009	1.013	1.013	1.009	1.009	0.980	1.009
Inland transport	0.997	1.050	1.059	1.062	1.052	1.009	1.007	1.000
Water transport	1.327	1.344	1.334	1.346	1.362	1.329	1.314	1.315
Air transport	1.091	1.086	1.081	1.088	1.093	1.070	1.072	1.060
Other supporting and auxiliary transport activities	1.098	1.147	1.162	1.166	1.159	1.108	1.100	1.095
Post and telecommunications	1.175	1.186	1.162	1.177	1.205	1.178	1.168	1.167
Financial intermediation	1.035	1.049	1.032	1.051	1.060	1.024	1.034	1.033
Real estate activities	0.904	0.899	0.905	0.917	0.914	0.895	0.897	0.898
Renting of M&Eq and other business activities	0.992	0.988	0.995	1.016	1.018	0.996	1.003	0.992
Public administration and defense; compulsory social security	0.859	0.842	0.849	0.855	0.857	0.846	0.851	0.848
Education	0.865	0.844	0.853	0.859	0.861	0.848	0.851	0.849
Health and social work	0.881	0.862	0.866	0.871	0.873	0.863	0.860	0.863
Other community, social, and personal services	1.095	1.061	1.078	1.087	1.090	1.071	1.063	1.075
Private households with employed persons	0.711	0.702	0.708	0.708	0.707	0.699	0.704	0.701
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.2.2: Input-Output Forward Linkage**

	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.944	0.951	0.949	0.945	0.938	0.929	0.933	0.942
Mining and quarrying	0.747	0.741	0.744	0.740	0.737	0.738	0.736	0.745
Food, beverages, and tobacco	1.102	1.133	1.108	1.107	1.112	1.103	1.114	1.111
Textiles and textile products	0.882	0.879	0.880	0.878	0.876	0.864	0.873	0.870
Leather, leather products, and footwear	0.791	0.785	0.789	0.787	0.785	0.783	0.784	0.791
Wood and products of wood and cork	0.912	0.922	0.935	0.943	0.970	0.968	0.977	0.975
Pulp, paper, paper products, printing, and publishing	1.303	1.361	1.341	1.340	1.353	1.342	1.353	1.353
Coke, refined petroleum, and nuclear fuel	1.005	1.026	1.009	1.011	1.012	1.045	0.982	0.995
Chemicals and chemical products	0.791	0.786	0.782	0.774	0.770	0.775	0.770	0.768
Rubber and plastics	0.824	0.825	0.826	0.819	0.815	0.822	0.805	0.792
Other nonmetallic minerals	0.774	0.767	0.768	0.763	0.758	0.760	0.759	0.769
Basic metals and fabricated metal	0.807	0.802	0.801	0.791	0.783	0.794	0.784	0.775
Machinery, nec	0.780	0.776	0.774	0.769	0.764	0.770	0.763	0.778
Electrical and optical equipment	0.838	0.844	0.857	0.861	0.856	0.863	0.838	0.854
Transport equipment	0.804	0.803	0.795	0.795	0.792	0.796	0.786	0.801
Manufacturing, nec; recycling	0.848	0.850	0.841	0.844	0.841	0.887	0.834	0.830
Electricity, gas, and water supply	1.451	1.442	1.451	1.442	1.446	1.431	1.488	1.438
Construction	1.391	1.278	1.381	1.370	1.361	1.403	1.415	1.461
Sale, maintenance, and repair	0.747	0.741	0.744	0.740	0.737	0.738	0.736	0.745
Wholesale trade and commission trade	0.887	0.898	0.889	0.886	0.884	0.886	0.859	0.880
Retail trade	0.913	0.921	0.912	0.910	0.909	0.908	0.927	0.905
Hotels and restaurants	0.860	0.852	0.850	0.848	0.846	0.841	0.856	0.849
Inland transport	1.127	1.168	1.175	1.176	1.164	1.139	1.163	1.142
Water transport	1.094	1.082	1.070	1.088	1.099	1.096	1.104	1.071
Air transport	1.094	1.082	1.071	1.089	1.100	1.096	1.112	1.071
Other supporting and auxiliary transport activities	1.094	1.083	1.071	1.089	1.100	1.096	1.105	1.072
Post and telecommunications	1.589	1.595	1.562	1.571	1.578	1.563	1.568	1.565
Financial intermediation	1.341	1.366	1.364	1.349	1.336	1.318	1.306	1.325
Real estate activities	1.193	1.184	1.196	1.196	1.187	1.175	1.168	1.192
Renting of M&Eq and other business activities	1.585	1.597	1.590	1.616	1.622	1.620	1.610	1.636
Public administration and defense; compulsory social security	0.801	0.797	0.799	0.796	0.792	0.790	0.792	0.799
Education	0.851	0.846	0.848	0.839	0.836	0.834	0.852	0.847
Health and social work	0.786	0.781	0.783	0.780	0.776	0.775	0.775	0.784
Other community, social, and personal services	1.295	1.296	1.301	1.309	1.328	1.312	1.334	1.327
Private households with employed persons	0.747	0.741	0.744	0.740	0.737	0.738	0.736	0.745
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

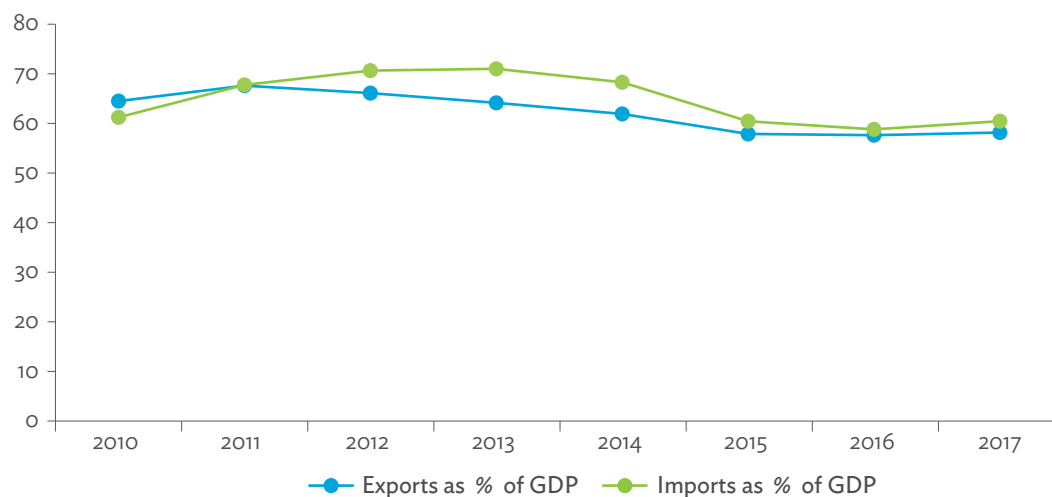
Source: Asian Development Bank Multi-Regional Input-Output Database.

# 1.3

## INTERNATIONAL TRADE AND PRODUCTION LINKAGES

### Hong Kong, China

**Figure 1.3.1: Exports and Imports as a Share of Gross Domestic Product, 2010–2017 (%)**

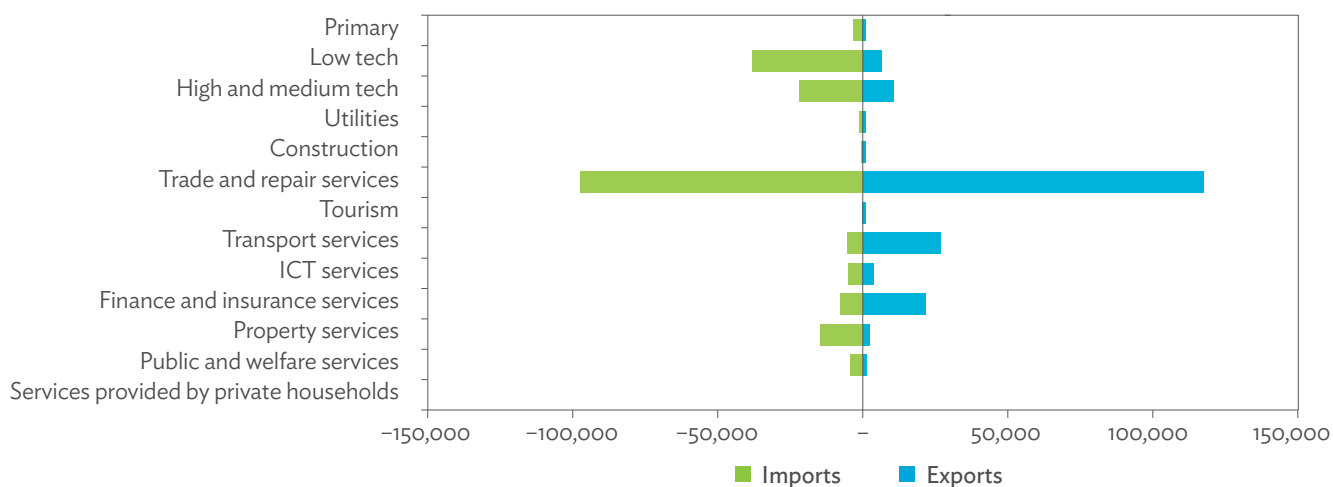


GDP = gross domestic product.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

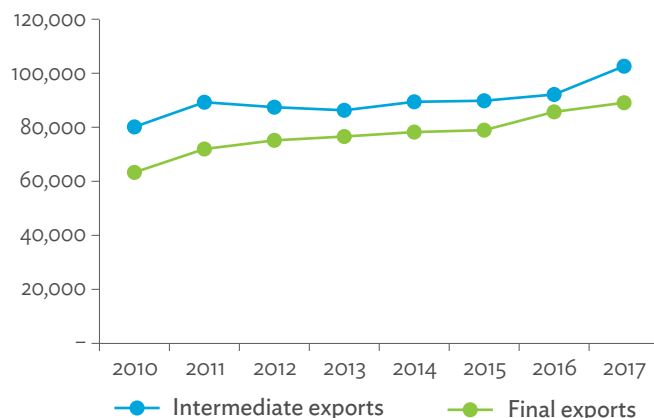
**Figure 1.3.2: Total Foreign Trade by Sector, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

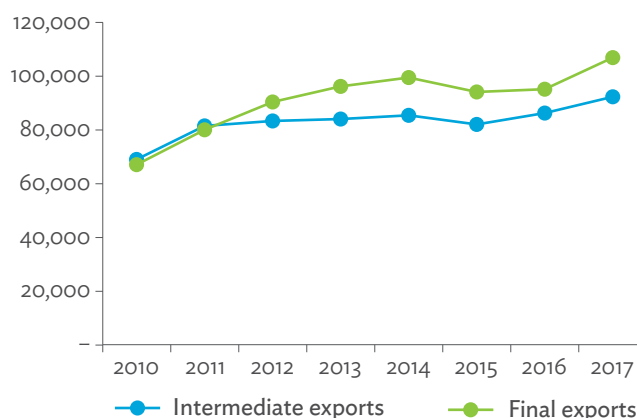
Source: Asian Development Bank Multi-Regional Input-Output Database.

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**Figure 1.3.3: Trend of Export Activity by End-Use Category, 2010–2017 (\$ million)**

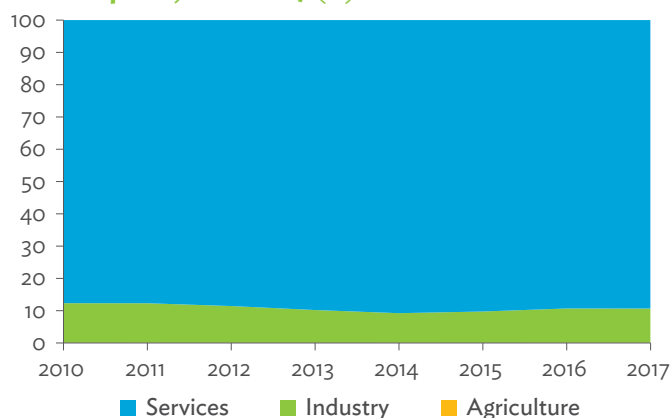
\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

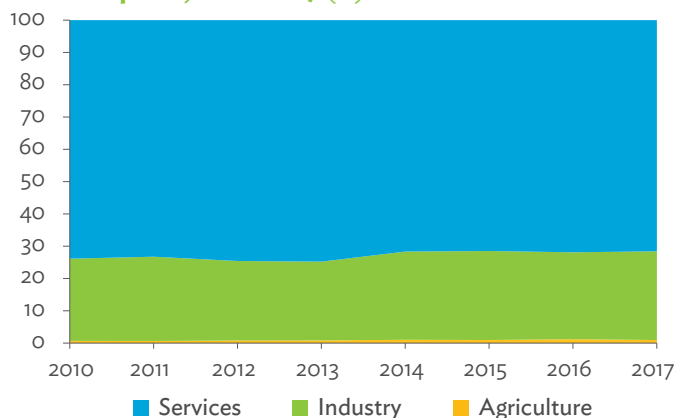
[Click here for figure data](#)**Figure 1.3.6: Trend of Import Activity by End-Use Category, 2010–2017 (\$ million)**

\$ = United States dollar.

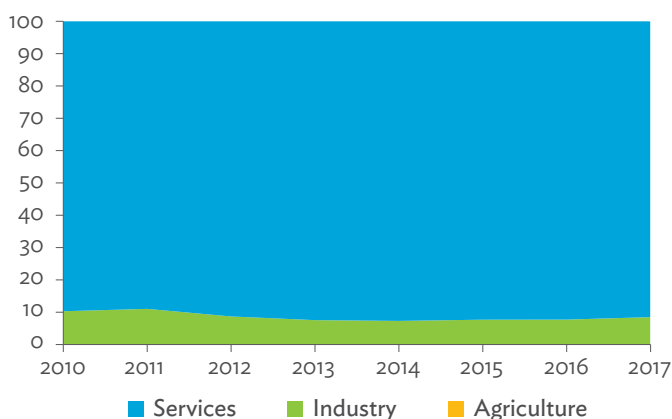
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.3.4: Shares of Sectors to Total Intermediate Exports, 2010–2017 (%)**

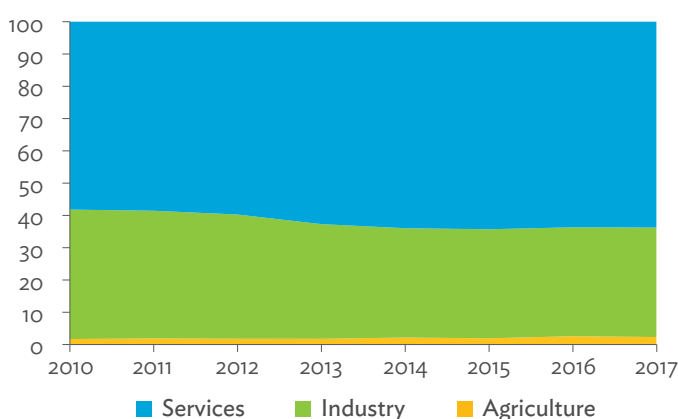
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.3.7: Shares of Sectors to Total Intermediate Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.3.5: Shares of Sectors to Total Final Exports, 2010–2017 (%)**

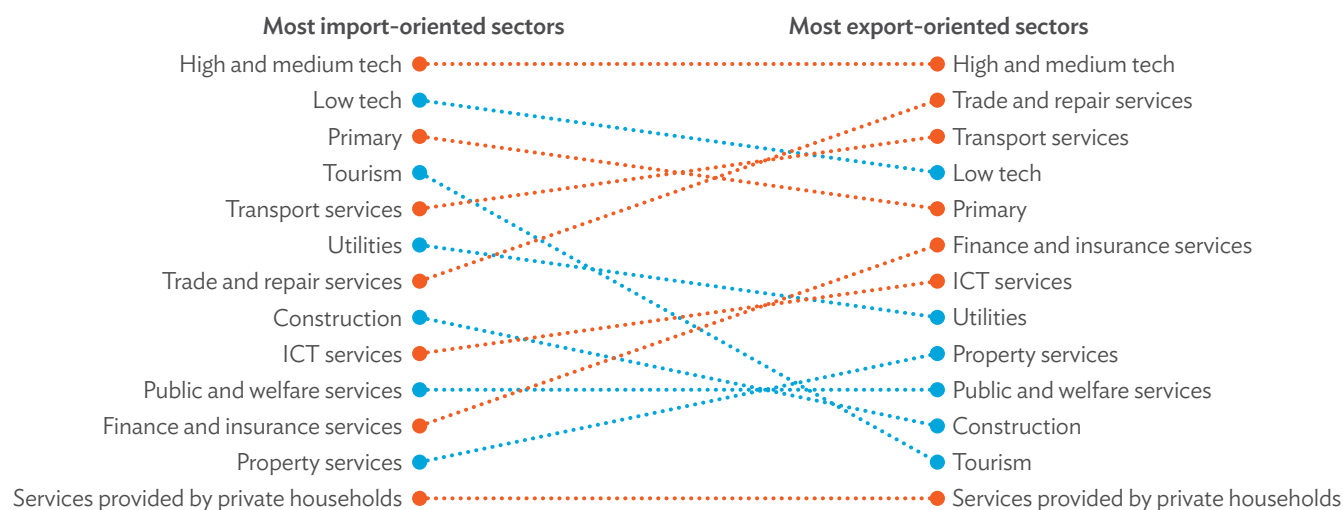
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 1.3.8: Shares of Sectors to Total Final Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.3.9: Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios, 2017**

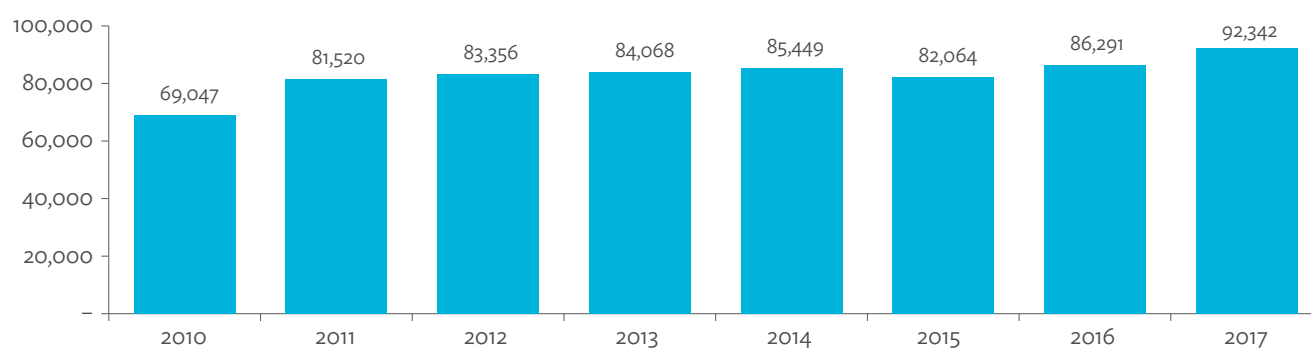


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.3.10: Total Foreign-Traded Input, 2010–2017 (\$ million)**

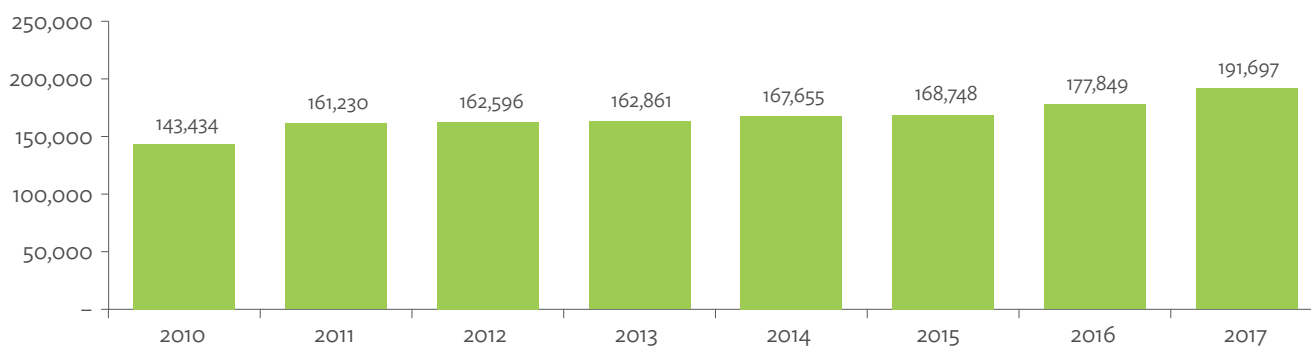


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.3.11: Total Foreign-Traded Output, 2010–2017 (\$ million)**

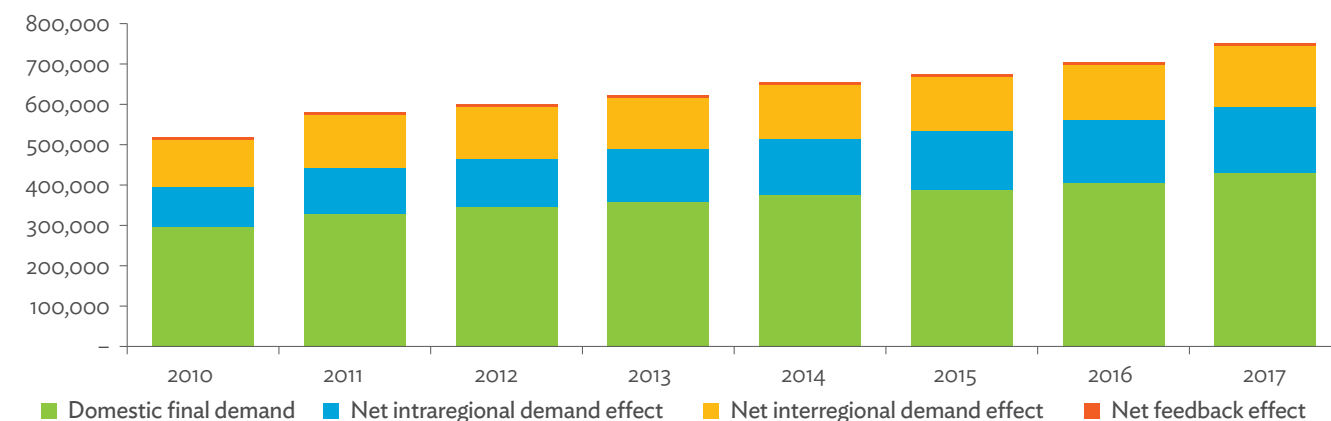


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.3.12: Decomposition of Total Production Attributable to Domestic and Interregional Demand, 2010–2017 (\$ million)**

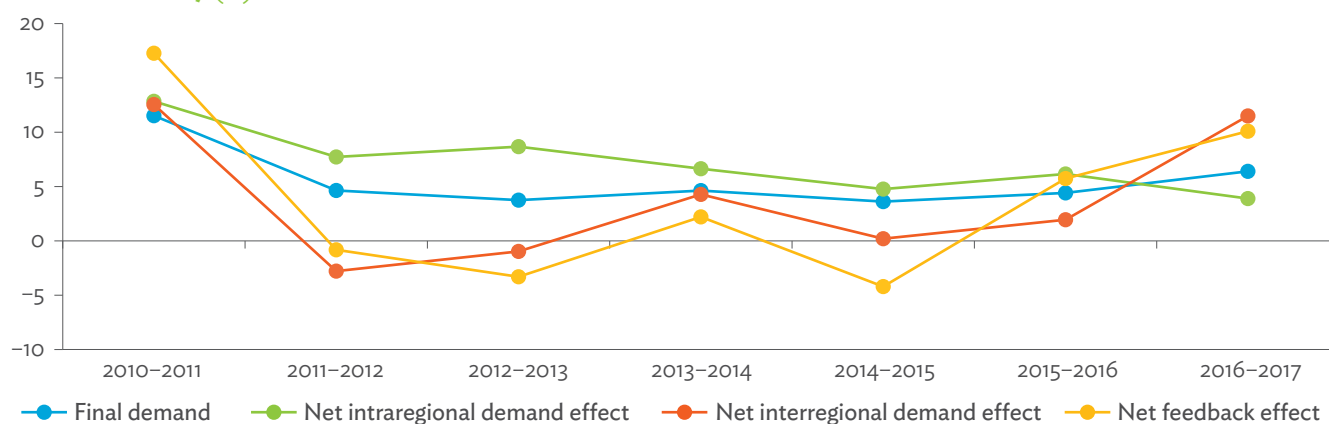


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

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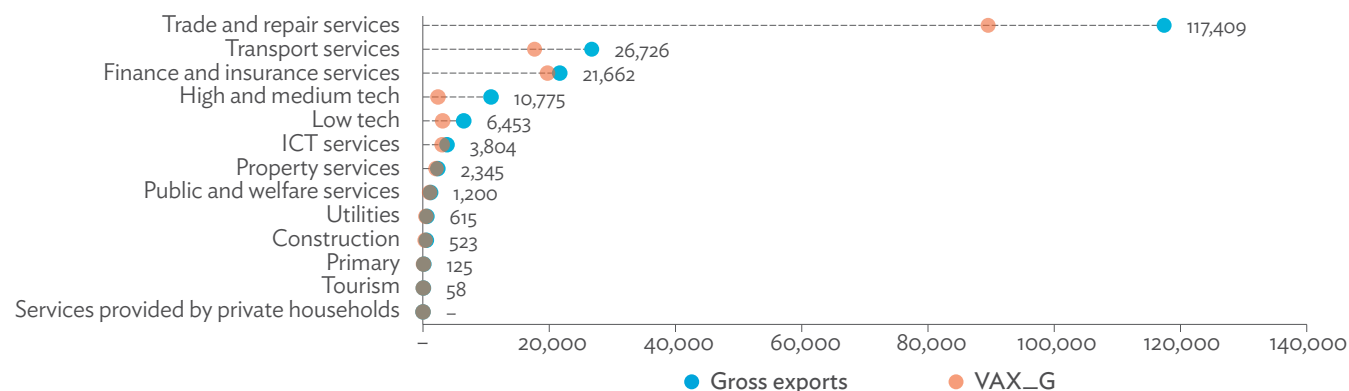
**Figure 1.3.13: Growth Rates of Production Components Based on Two-Region Input-Output Table, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.3.14: Gross Exports versus Value-Added Exports by Sector, 2017 (\$ million)**



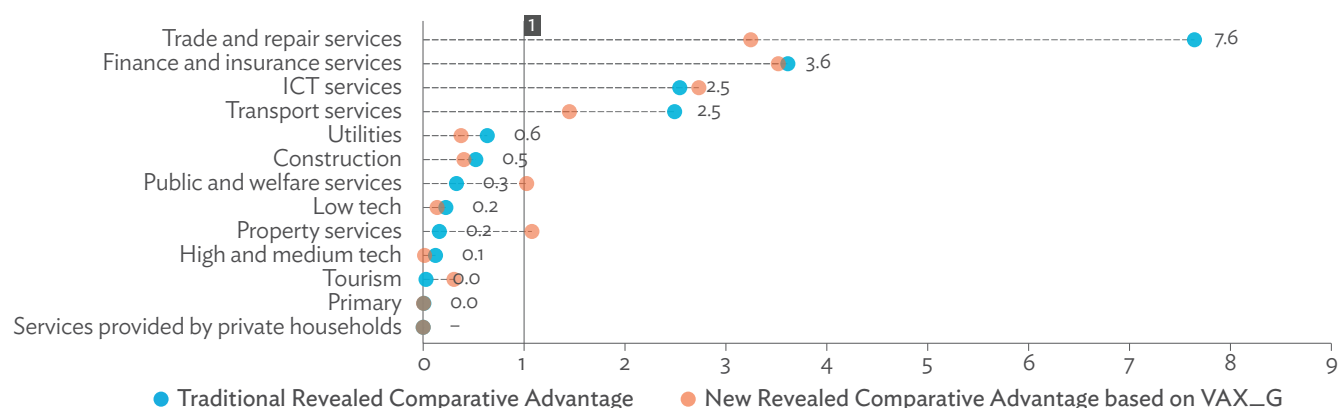
\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)



**Figure 1.3.15: Comparison of Traditional and New Revealed Comparative Advantage by Sector, 2017**

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Table 1.3.1: Production Attributable to Domestic Linkages by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Final demand								
Primary	310	345	348	346	371	366	399	423
Low tech	24,813	28,613	29,337	30,776	33,484	36,091	40,124	42,438
High and medium tech	10,771	12,138	11,359	9,836	9,371	9,979	11,547	12,265
Business service	215,143	241,799	254,280	264,181	275,139	281,235	289,387	307,531
Personal service	45,165	47,432	50,332	53,482	56,858	61,121	64,502	69,291
Intraregional effects (M1)								
Primary	68	82	84	84	89	84	93	99
Low tech	17,876	18,804	21,923	23,653	26,415	29,598	34,117	36,191
High and medium tech	485	599	565	505	474	541	517	542
Business service	73,272	84,623	89,522	97,544	102,636	105,652	108,814	112,622
Personal service	7,603	7,953	8,623	9,403	10,287	10,697	12,056	12,204

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.3.2: Production Attributable to Linkages with the Rest of the World by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Interregional effects (M2)								
Primary	80	95	86	85	93	89	93	109
Low tech	5,923	6,765	5,964	5,376	5,077	5,207	5,476	6,333
High and medium tech	6,594	7,413	6,815	5,893	5,588	6,011	6,922	7,514
Business service	107,394	121,099	118,497	118,672	124,769	124,441	125,314	140,134
Personal service	3,234	3,317	3,468	3,498	3,713	3,770	4,431	4,502
Feedback effects (M3)								
Primary	0.13	0.17	0.15	0.15	0.15	0.15	0.16	0.19
Low tech	9.00	10.73	9.67	8.54	8.02	7.98	8.78	10.06
High and medium tech	5.45	6.57	5.75	4.90	5.01	5.30	6.22	6.82
Business service	219.66	257.76	257.06	249.92	255.96	244.29	256.15	282.42
Personal service	6.20	6.76	7.04	6.92	7.26	7.07	8.68	8.76

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.3.3: Net Intraregional Multipliers (M1), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.3567	0.3985	0.3454	0.3294	0.3071	0.3097	0.2851	0.2889
Mining and quarrying	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Food, beverages, and tobacco	0.4492	0.4833	0.4482	0.4322	0.4475	0.4950	0.4417	0.5039
Textiles and textile products	0.5473	0.5739	0.5777	0.5590	0.5621	0.5969	0.5547	0.6113
Leather, leather products, and footwear	0.4665	0.4957	0.5005	0.4882	0.4943	0.5379	0.4694	0.5456
Wood and products of wood and cork	0.4753	0.5325	0.4959	0.4762	0.4976	0.5383	0.5247	0.5562
Pulp, paper, paper products, printing, and publishing	0.5265	0.5807	0.5502	0.5454	0.5684	0.6111	0.5886	0.6200
Coke, refined petroleum, and nuclear fuel	0.3403	0.3655	0.3370	0.3243	0.3130	0.3720	0.3790	0.3675
Chemicals and chemical products	0.3263	0.3535	0.3210	0.3129	0.3044	0.3666	0.3602	0.3595
Rubber and plastics	0.3548	0.3746	0.3552	0.3442	0.3302	0.3914	0.3966	0.3845
Other nonmetallic minerals	0.3591	0.3805	0.3572	0.3457	0.3350	0.3953	0.3970	0.3883
Basic metals and fabricated metal	0.3149	0.3360	0.3135	0.3070	0.2981	0.3580	0.3502	0.3534
Machinery, nec	0.3523	0.3721	0.3534	0.3423	0.3299	0.3906	0.3939	0.3831
Electrical and optical equipment	0.3580	0.3773	0.3565	0.3450	0.3318	0.3929	0.3977	0.3852
Transport equipment	0.3579	0.3761	0.3580	0.3438	0.3286	0.3902	0.3967	0.3821
Manufacturing, nec; recycling	0.3835	0.4052	0.3795	0.3652	0.3521	0.4129	0.4229	0.4058
Electricity, gas, and water supply	0.2766	0.3076	0.2952	0.2989	0.3072	0.3269	0.3020	0.3041
Construction	1.0376	0.9161	1.0127	1.0061	1.0201	1.0593	1.1387	1.0716
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.5210	0.5257	0.5222	0.5301	0.5347	0.5451	0.5609	0.5451
Retail trade	0.6298	0.6403	0.6403	0.6494	0.6540	0.6483	0.6247	0.6478
Hotels and restaurants	0.4612	0.4361	0.4301	0.4301	0.4270	0.4436	0.3932	0.4391
Inland transport	0.4020	0.4950	0.4961	0.4992	0.4869	0.4443	0.4308	0.4262
Water transport	0.8664	0.9129	0.8835	0.9005	0.9260	0.9018	0.8672	0.8756
Air transport	0.5343	0.5465	0.5261	0.5355	0.5450	0.5313	0.5230	0.5119
Other supporting and auxiliary transport activities	0.5444	0.6321	0.6411	0.6465	0.6387	0.5866	0.5636	0.5626
Post and telecommunications	0.6524	0.6881	0.6415	0.6613	0.7038	0.6862	0.6604	0.6648
Financial intermediation	0.4552	0.4927	0.4573	0.4843	0.4990	0.4661	0.4696	0.4732
Real estate activities	0.2713	0.2800	0.2779	0.2945	0.2923	0.2812	0.2749	0.2807
Renting of M&Eq and other business activities	0.3957	0.4066	0.4046	0.4349	0.4398	0.4259	0.4253	0.4153
Public administration and defense; compulsory social security	0.2083	0.1987	0.1987	0.2066	0.2117	0.2111	0.2102	0.2102
Education	0.2162	0.2008	0.2043	0.2122	0.2168	0.2143	0.2096	0.2115
Health and social work	0.2394	0.2273	0.2227	0.2297	0.2347	0.2357	0.2216	0.2310
Other community, social, and personal services	0.5398	0.5105	0.5217	0.5340	0.5402	0.5337	0.5106	0.5332
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.3.4: Net Interregional Multipliers (M2), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.9920	1.0698	0.9970	0.8989	0.8610	0.7487	0.7134	0.7066
Mining and quarrying	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Food, beverages, and tobacco	1.0642	1.1249	1.1017	1.0812	1.0567	1.0346	1.1343	1.0672
Textiles and textile products	0.8395	0.8763	0.8236	0.7882	0.7425	0.7185	0.7909	0.7368
Leather, leather products, and footwear	1.2036	1.2320	1.1669	1.1260	1.1027	1.0701	1.1904	1.1048
Wood and products of wood and cork	0.7469	0.7969	0.7615	0.7654	0.7229	0.7105	0.7945	0.7545
Pulp, paper, paper products, printing, and publishing	1.0353	1.0603	1.0502	1.0101	0.9606	0.9316	0.9893	0.9545
Coke, refined petroleum, and nuclear fuel	1.4918	1.5412	1.5483	1.5177	1.5500	1.5037	1.4792	1.5207
Chemicals and chemical products	1.7485	1.7738	1.7698	1.7539	1.7537	1.6935	1.7004	1.6944
Rubber and plastics	1.6498	1.6818	1.6575	1.6448	1.6557	1.5942	1.5848	1.5901
Other nonmetallic minerals	1.6297	1.6608	1.6516	1.6446	1.6430	1.5845	1.6026	1.5969
Basic metals and fabricated metal	1.8202	1.7861	1.7743	1.7136	1.6299	1.5824	1.5493	1.5531
Machinery, nec	1.6933	1.7078	1.6900	1.6754	1.6832	1.6242	1.6074	1.6239
Electrical and optical equipment	1.6786	1.6942	1.6849	1.6715	1.6783	1.6169	1.5965	1.6176
Transport equipment	1.6950	1.7203	1.6816	1.6668	1.6790	1.6175	1.6299	1.6483
Manufacturing, nec; recycling	1.5670	1.5801	1.5707	1.5736	1.5851	1.5223	1.5115	1.5246
Electricity, gas, and water supply	0.4277	0.4913	0.4977	0.4919	0.5124	0.4900	0.4636	0.4596
Construction	0.6922	0.7983	0.7405	0.7491	0.7304	0.7020	0.6294	0.7110
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.5540	0.5727	0.5670	0.5831	0.6077	0.5729	0.5509	0.5738
Retail trade	0.1941	0.1999	0.1963	0.1973	0.1890	0.1732	0.1988	0.1698
Hotels and restaurants	0.6235	0.6931	0.6982	0.7052	0.7039	0.6670	0.7267	0.6660
Inland transport	0.3116	0.3829	0.3868	0.3505	0.3561	0.3005	0.2863	0.2874
Water transport	0.7195	0.8196	0.8511	0.8329	0.7997	0.7174	0.7185	0.6887
Air transport	0.6864	0.8384	0.8532	0.8304	0.8065	0.7129	0.6894	0.6870
Other supporting and auxiliary transport activities	0.2871	0.3436	0.3686	0.3311	0.3353	0.2840	0.2784	0.2662
Post and telecommunications	0.4834	0.4956	0.4762	0.4898	0.4611	0.4164	0.4089	0.4001
Financial intermediation	0.1966	0.2114	0.1936	0.2134	0.1913	0.1656	0.1743	0.1672
Real estate activities	0.1045	0.1092	0.1058	0.0821	0.1020	0.0911	0.0963	0.0902
Renting of M&Eq and other business activities	0.2816	0.2789	0.2730	0.2432	0.2571	0.2313	0.2160	0.2247
Public administration and defense; compulsory social security	0.1581	0.1550	0.1488	0.1466	0.1432	0.1325	0.1237	0.1317
Education	0.1579	0.1488	0.1509	0.1506	0.1481	0.1356	0.1368	0.1332
Health and social work	0.2785	0.2796	0.2756	0.2763	0.2722	0.2504	0.2579	0.2463
Other community, social, and personal services	0.2943	0.2846	0.2914	0.2871	0.2847	0.2612	0.2887	0.2594
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.3.5: Net Feedback Multipliers (M3), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.0021	0.0022	0.0021	0.0017	0.0017	0.0015	0.0014	0.0015
Mining and quarrying	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Food, beverages, and tobacco	0.0019	0.0020	0.0020	0.0018	0.0018	0.0017	0.0019	0.0019
Textiles and textile products	0.0018	0.0019	0.0017	0.0015	0.0015	0.0015	0.0016	0.0016
Leather, leather products, and footwear	0.0022	0.0022	0.0021	0.0018	0.0018	0.0017	0.0019	0.0019
Wood and products of wood and cork	0.0016	0.0016	0.0015	0.0014	0.0013	0.0013	0.0014	0.0014
Pulp, paper, paper products, printing, and publishing	0.0018	0.0018	0.0018	0.0017	0.0017	0.0017	0.0017	0.0018
Coke, refined petroleum, and nuclear fuel	0.0030	0.0029	0.0030	0.0027	0.0027	0.0027	0.0027	0.0029
Chemicals and chemical products	0.0030	0.0030	0.0030	0.0028	0.0028	0.0027	0.0027	0.0029
Rubber and plastics	0.0032	0.0032	0.0032	0.0029	0.0030	0.0029	0.0029	0.0031
Other nonmetallic minerals	0.0031	0.0030	0.0030	0.0028	0.0028	0.0028	0.0027	0.0029
Basic metals and fabricated metal	0.0029	0.0029	0.0029	0.0027	0.0029	0.0029	0.0029	0.0031
Machinery, nec	0.0034	0.0033	0.0033	0.0030	0.0031	0.0030	0.0030	0.0032
Electrical and optical equipment	0.0035	0.0034	0.0034	0.0031	0.0032	0.0030	0.0030	0.0033
Transport equipment	0.0034	0.0033	0.0034	0.0030	0.0031	0.0030	0.0030	0.0032
Manufacturing, nec; recycling	0.0032	0.0032	0.0033	0.0029	0.0030	0.0029	0.0029	0.0031
Electricity, gas, and water supply	0.0010	0.0011	0.0011	0.0010	0.0010	0.0010	0.0009	0.0010
Construction	0.0014	0.0015	0.0014	0.0012	0.0013	0.0012	0.0011	0.0013
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.0013	0.0013	0.0013	0.0012	0.0012	0.0011	0.0012	0.0012
Retail trade	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004	0.0005	0.0004
Hotels and restaurants	0.0010	0.0010	0.0010	0.0009	0.0009	0.0009	0.0009	0.0009
Inland transport	0.0007	0.0008	0.0008	0.0007	0.0007	0.0006	0.0006	0.0006
Water transport	0.0035	0.0042	0.0041	0.0039	0.0037	0.0033	0.0035	0.0033
Air transport	0.0025	0.0030	0.0029	0.0028	0.0026	0.0023	0.0023	0.0023
Other supporting and auxiliary transport activities	0.0011	0.0013	0.0015	0.0013	0.0014	0.0012	0.0012	0.0011
Post and telecommunications	0.0017	0.0017	0.0015	0.0016	0.0014	0.0012	0.0013	0.0012
Financial intermediation	0.0004	0.0005	0.0004	0.0004	0.0004	0.0003	0.0004	0.0004
Real estate activities	0.0002	0.0002	0.0002	0.0001	0.0002	0.0002	0.0002	0.0002
Renting of M&Eq and other business activities	0.0006	0.0006	0.0005	0.0005	0.0005	0.0004	0.0004	0.0004
Public administration and defense; compulsory social security	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0002
Education	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0003
Health and social work	0.0005	0.0005	0.0005	0.0005	0.0005	0.0004	0.0005	0.0005
Other community, social, and personal services	0.0006	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.3.6: Comparison of Exports in Gross and Value-Added Terms, 2010–2017 (\$ million)**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	88	43	105	48	93	46	95	51	105	59	103	63	107	67	125	79
Low tech	6,237	3,009	6,348	2,947	6,086	2,864	5,344	2,563	4,956	2,429	5,201	2,599	5,692	2,588	6,453	3,113
High and medium tech	9,308	1,955	10,489	2,202	9,538	1,971	8,204	1,700	7,967	1,621	8,534	1,944	10,009	2,226	10,775	2,371
Utilities	621	481	647	482	585	435	583	435	586	431	579	432	476	360	615	467
Construction	146	97	1,342	841	229	149	362	237	361	236	406	270	174	121	523	344
Trade and repair services	85,496	64,102	97,805	72,592	100,699	75,296	101,607	75,687	104,645	78,581	104,204	79,747	112,939	86,401	117,409	89,524
Tourism	52	37	61	42	69	47	57	39	51	35	51	36	69	47	58	41
Transport services	22,956	15,079	24,717	14,887	25,503	15,025	25,037	15,086	25,639	15,723	24,888	16,268	23,721	15,615	26,726	17,675
ICT services	2,404	1,817	2,620	1,974	3,137	2,396	3,220	2,441	3,354	2,589	3,369	2,669	3,233	2,571	3,804	3,036
Finance and insurance services	12,960	11,582	13,949	12,391	12,883	11,561	15,142	13,451	17,129	15,410	18,405	16,795	18,334	16,638	21,662	19,724
Property services	2,071	1,761	2,332	1,995	2,545	2,185	2,081	1,818	1,907	1,655	1,996	1,756	1,987	1,762	2,345	2,068
Public and welfare services	1,094	941	815	706	1,227	1,060	1,129	978	954	829	1,011	889	1,108	963	1,200	1,055
Services provided by private households	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

\$ = United States dollar, ICT = information and communication technology.

Note: “VAX\_G” refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 1.3.7: Comparison of Revealed Comparative Advantage Measures in Gross and Value-Added Terms, 2010–2017**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	0.006	0.002	0.005	0.002	0.005	0.002	0.005	0.002	0.006	0.003	0.006	0.003	0.006	0.004	0.007	0.004
Low tech	0.301	0.220	0.278	0.197	0.266	0.189	0.225	0.171	0.199	0.151	0.206	0.140	0.214	0.134	0.225	0.138
High and medium tech	0.139	0.019	0.139	0.018	0.126	0.017	0.109	0.016	0.103	0.015	0.109	0.014	0.123	0.014	0.122	0.014
Utilities	0.967	0.537	0.898	0.456	0.790	0.452	0.773	0.437	0.745	0.433	0.706	0.392	0.443	0.384	0.635	0.375
Construction	0.258	0.220	0.169	0.795	0.348	0.260	0.413	0.309	0.419	0.308	0.453	0.343	0.160	0.205	0.521	0.404
Trade and repair services	7.617	3.505	7.846	3.703	7.775	3.646	7.968	3.594	7.946	3.547	7.699	3.329	7.869	3.322	7.643	3.246
Tourism	0.035	0.343	0.036	0.370	0.041	0.366	0.033	0.362	0.028	0.352	0.028	0.310	0.032	0.345	0.028	0.305
Transport services	2.684	1.745	2.749	1.475	2.772	1.433	2.779	1.472	2.745	1.478	2.607	1.513	2.390	1.488	2.492	1.449
ICT services	2.498	3.015	2.582	3.206	2.789	3.481	2.881	3.478	2.882	3.475	2.841	3.361	2.467	3.163	2.543	2.732
Finance and insurance services	2.934	3.205	2.972	3.339	2.737	3.175	3.101	3.282	3.349	3.346	3.491	3.383	3.173	3.310	3.614	3.519
Property services	0.221	1.103	0.226	1.143	0.245	1.182	0.188	1.117	0.161	1.066	0.161	1.036	0.147	1.039	0.160	1.077
Public and welfare services	0.409	0.997	0.290	0.990	0.419	1.046	0.361	1.002	0.299	0.988	0.301	0.949	0.294	1.056	0.330	1.025
Services provided by private households	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ICT = information and communication technology.

Note: “VAX\_G” refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

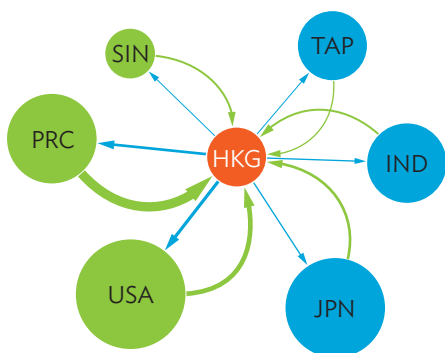
Source: Asian Development Bank Multi-Regional Input-Output Database.

# GLOBAL VALUE CHAIN INDICATORS

# 1.4

## Hong Kong, China

**Figure 1.4.1a: Trade in Value-Added Flow with Top Trading Partners, 2010**



● Economy in focus ● Import partner ● Export partner

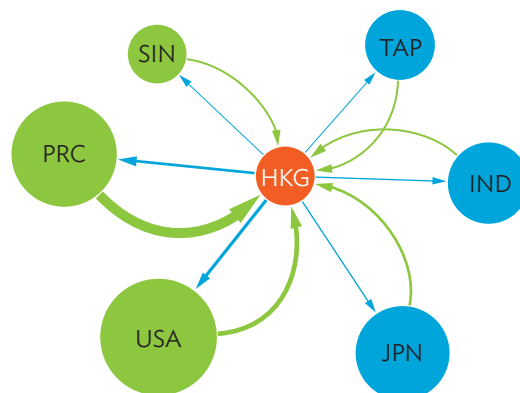
HKG = Hong Kong, China; IND = India; JPN = Japan; PRC = People's Republic of China; SIN = Singapore; TAP = Taipei, China; USA = United States.

Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 1.4.1b: Trade in Value-Added Flow with Top Trading Partners, 2017**



● Economy in focus ● Import partner ● Export partner

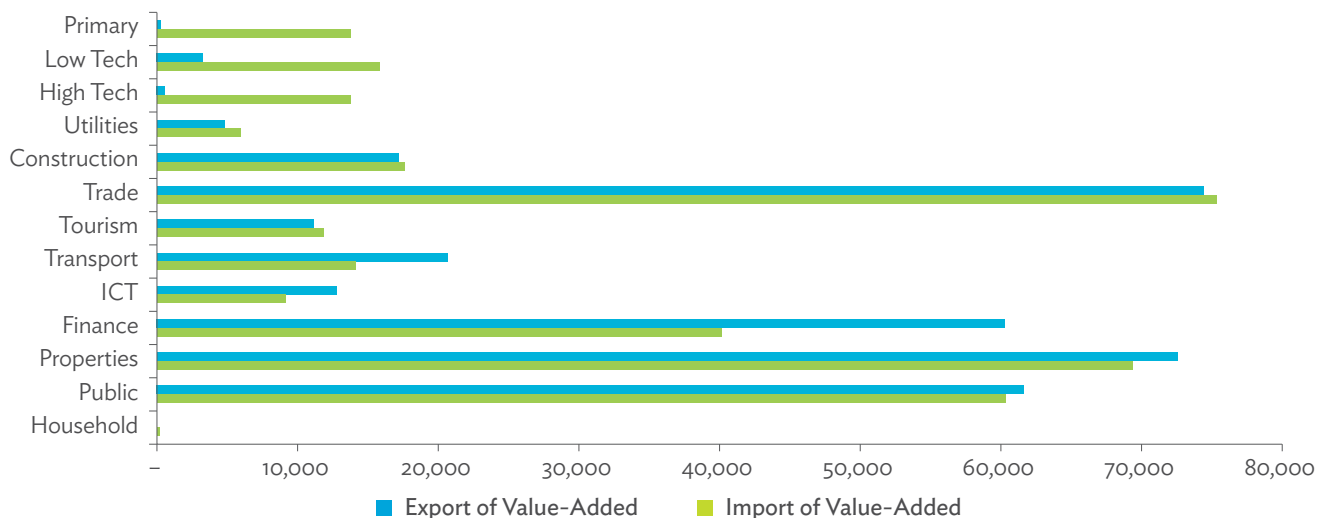
HKG = Hong Kong, China; IND = India; JPN = Japan; PRC = People's Republic of China; SIN = Singapore; TAP = Taipei, China; USA = United States.

Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

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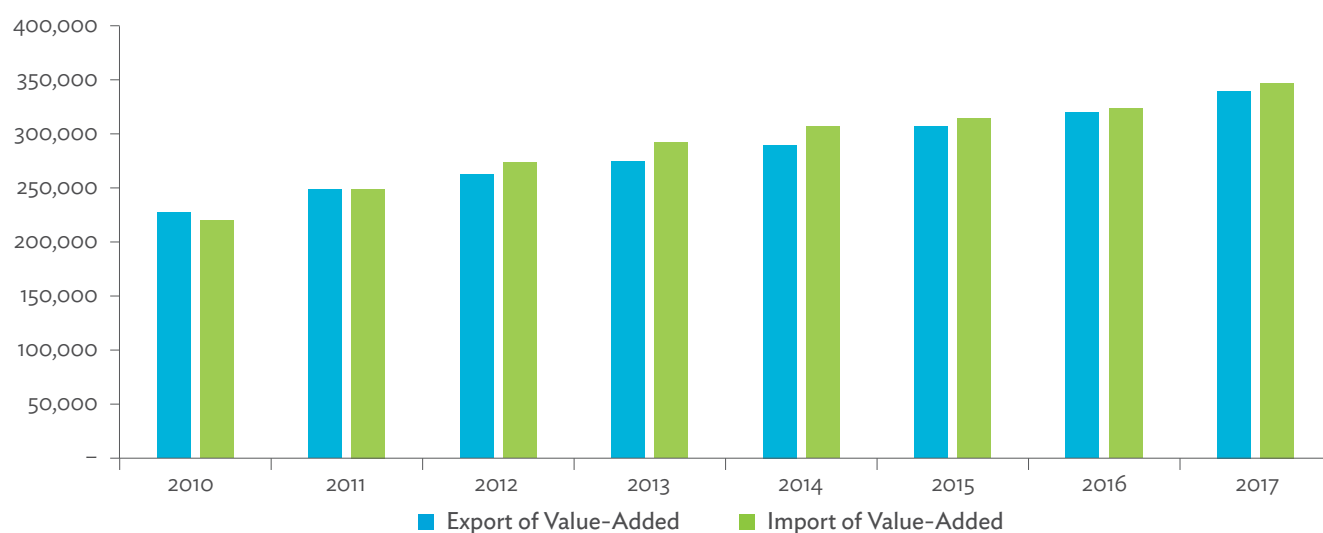
**Figure 1.4.2: Trade in Value-Added by Industry, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

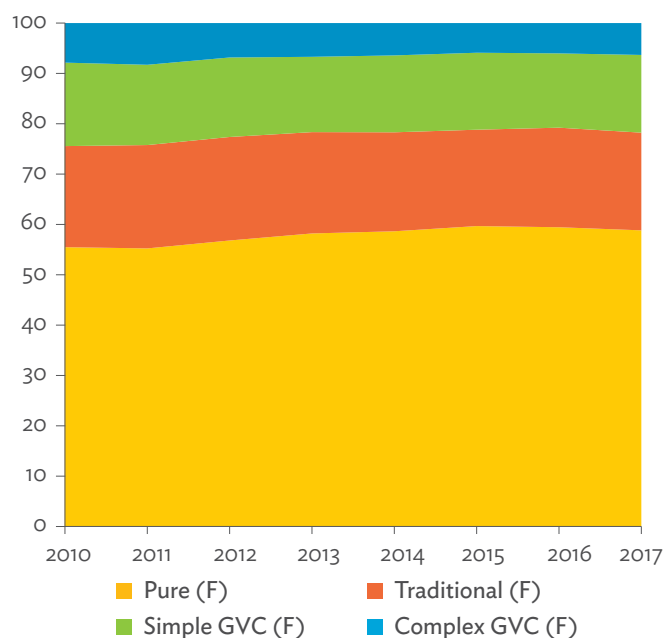
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**Figure 1.4.3: Trade in Value-Added, 2010–2017 (\$ million)**

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

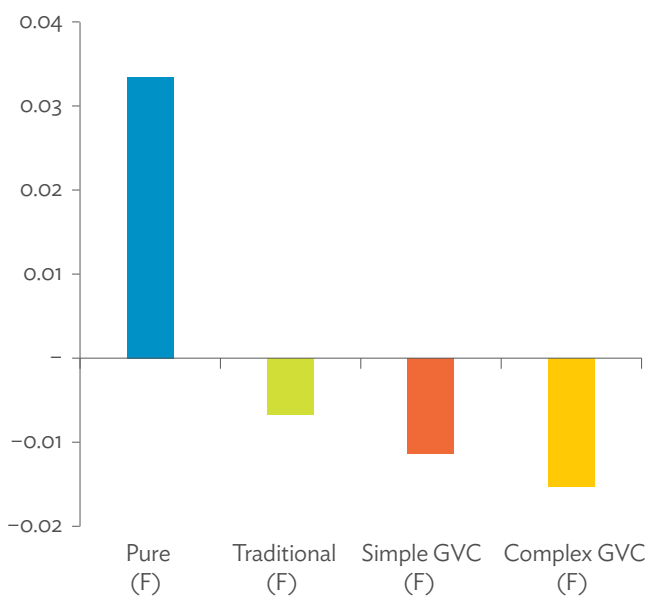
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**Figure 1.4.4: Trends in Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Forward Linkages, 2010–2017 (%)**

GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.4.5: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Forward Linkages (%)**

GVC = global value chain.

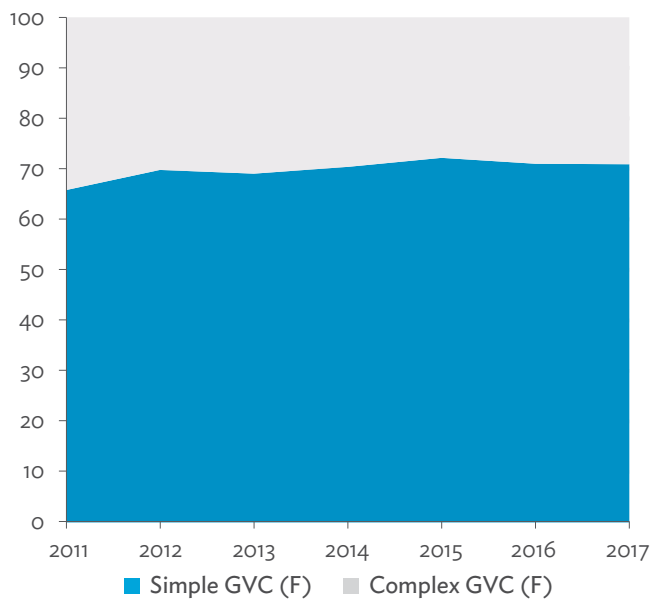
Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



**Figure 1.4.6: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Forward Linkages, 2010–2017 (%)**

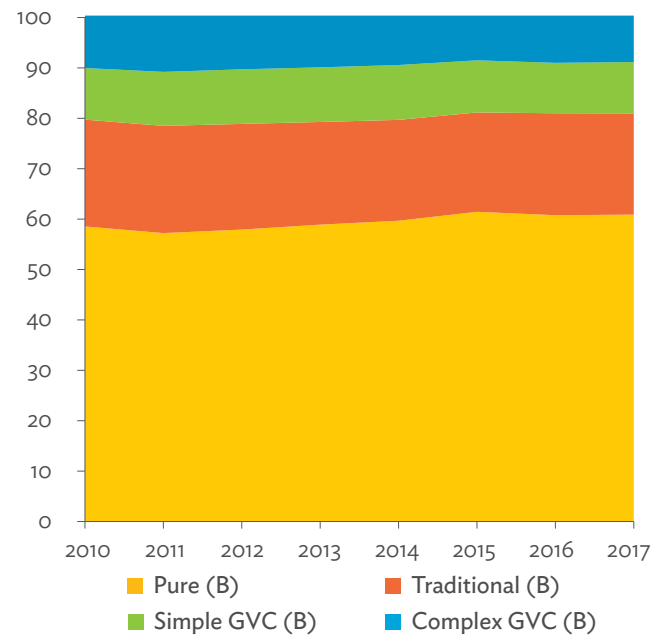


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.4.7: Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Backward Linkages, 2010–2017 (%)**

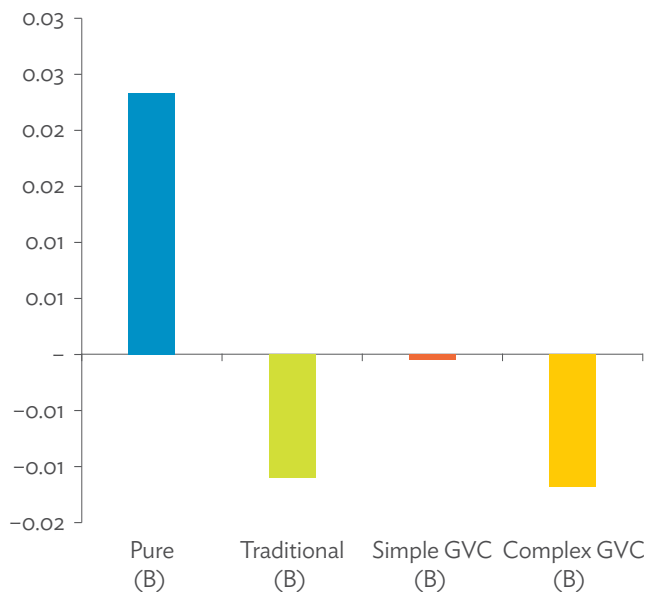


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.4.8: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Backward Linkages (%)**



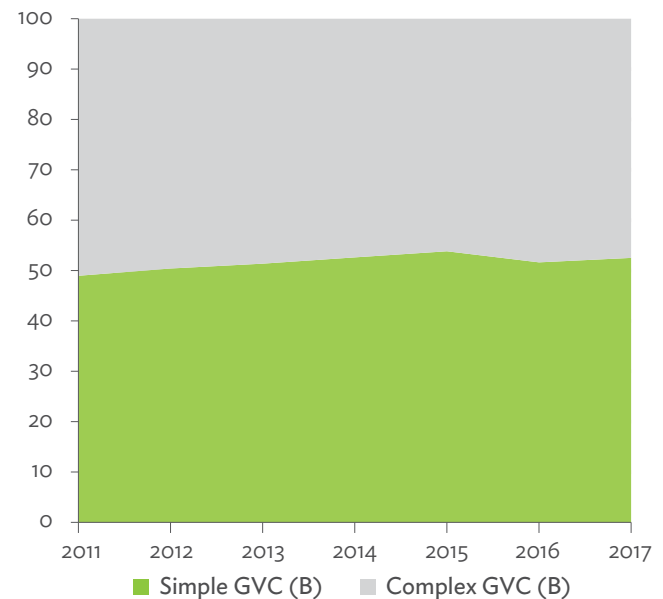
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.4.9: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Backward Linkages (%)**

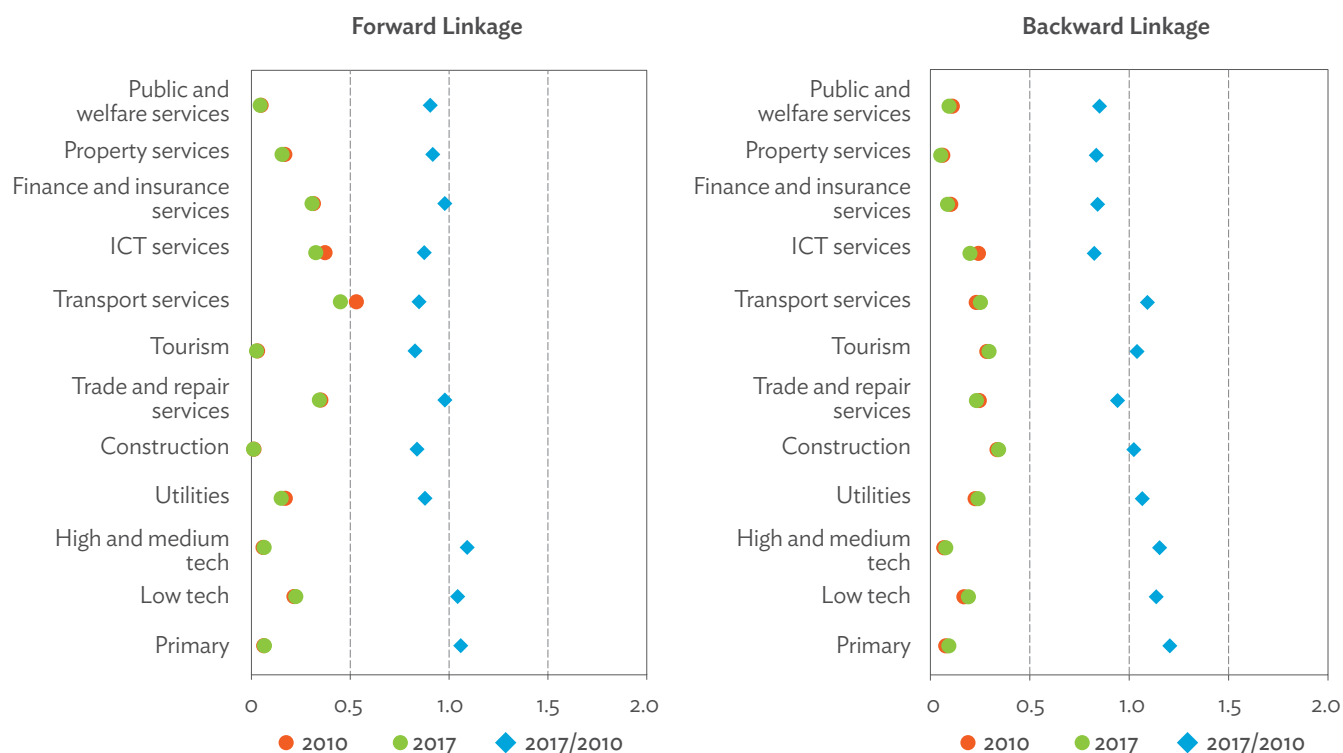


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.4.10: Global Value Chain Participation Based on Forward and Backward Linkages at the Sectoral Level, 2010 and 2017**

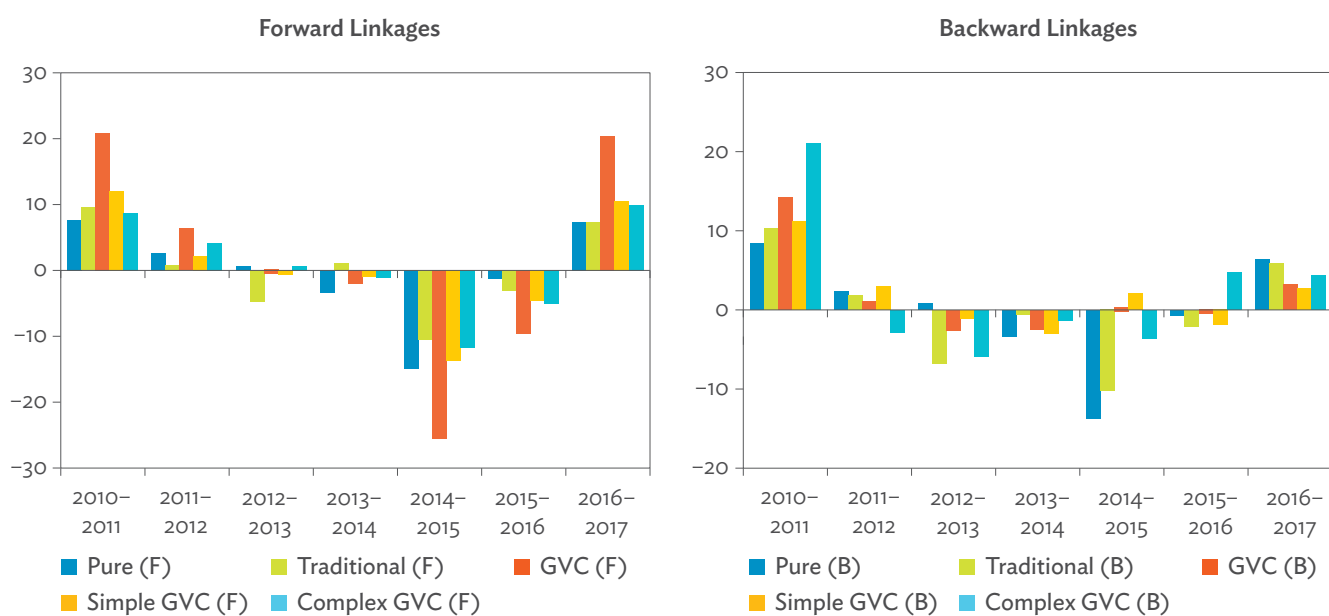


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 1.4.11: Nominal Growth Rates of Different Value-Added Activities in the Manufacturing Sector, 2010–2017 (%)**



GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

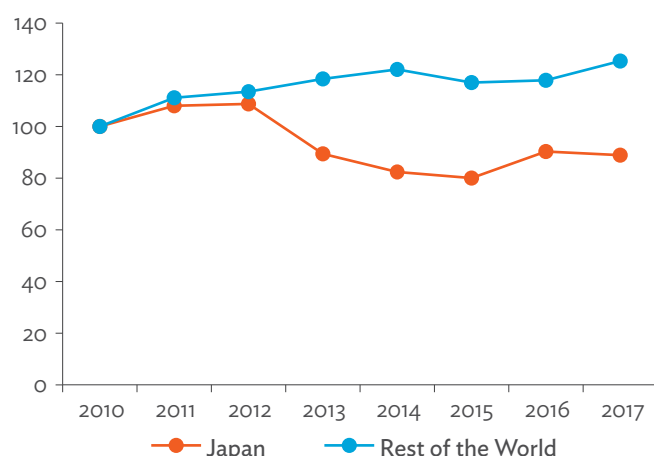
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# OVERVIEW OF PRODUCTION AND DEMAND STRUCTURES

## 2.1

### Japan

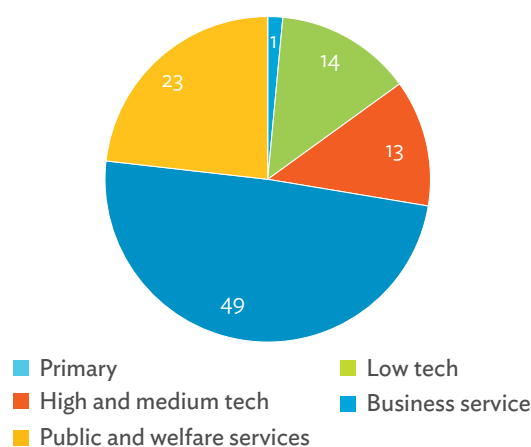
**Figure 2.1.1a: Gross Domestic Product Scaled to 2010 Levels in Comparison with the Rest of the World, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

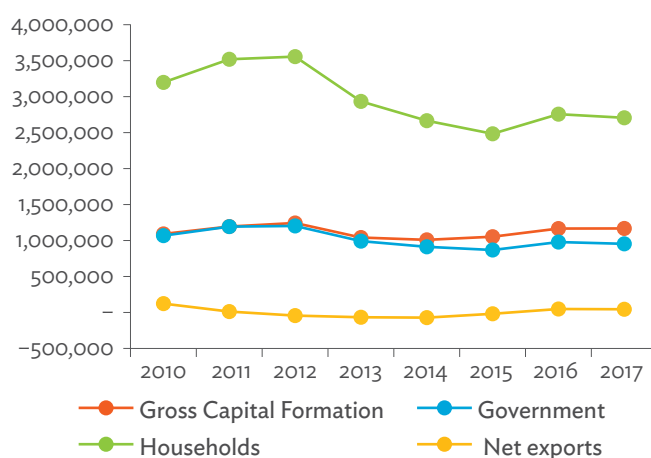
**Figure 2.1.1b: Gross Domestic Product Share by 5-Sector Aggregation, 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.1.2a: Gross Domestic Product Trend by Final Consumption Expenditure Components, 2010–2017 (\$ million)**

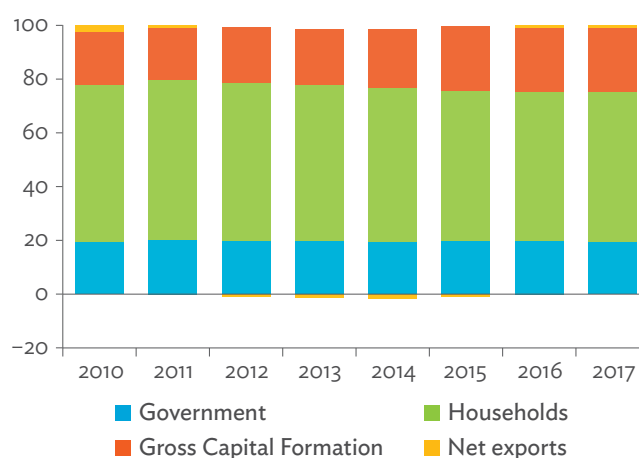


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

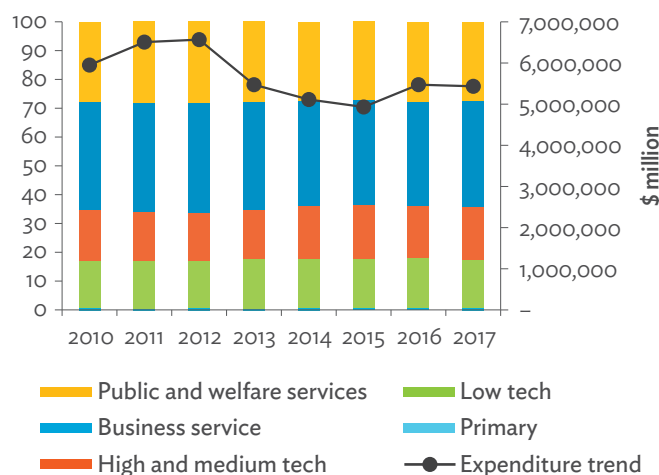
**Figure 2.1.2b: Share of Consumption Expenditure by Final Consumption Expenditure Components, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.1.2c: Final Consumption Expenditure Total Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

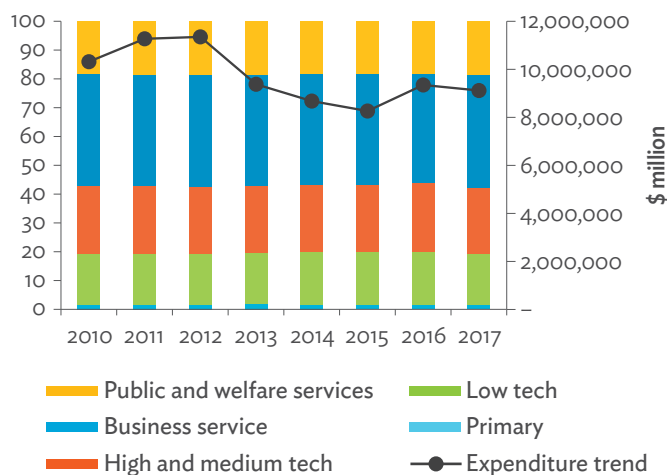


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.1.3a: Gross Total Output Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

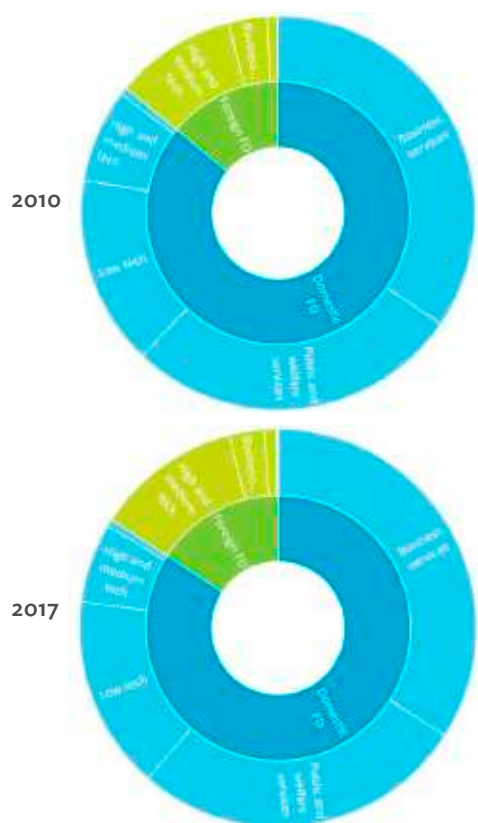


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.1.3b: Shares by 5-Sector Aggregation Attributed to Foreign and Domestic Final Demand, 2010 and 2017 (%)**

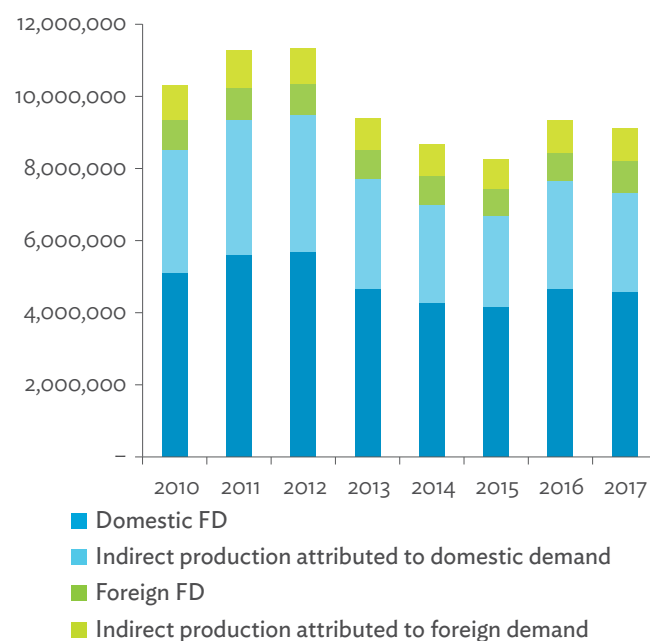


FD=final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.1.3c: Gross Output by Production Attributed to Foreign and Domestic Demand, 2010–2017 (\$ million)**

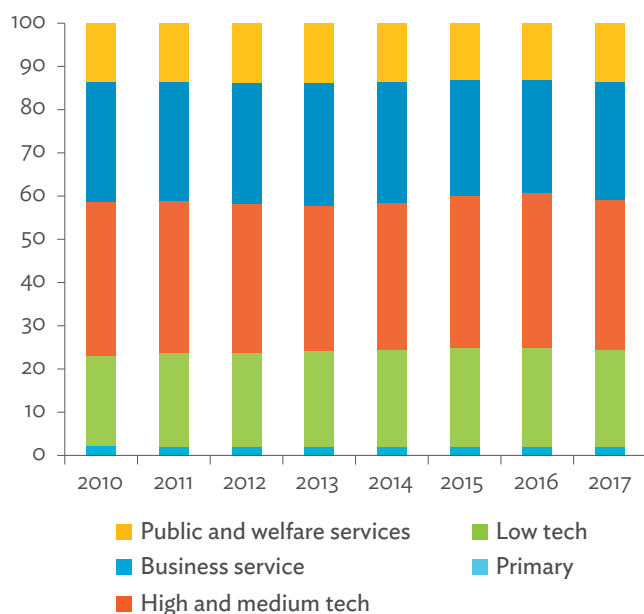


\$ = United States dollar, FD = final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

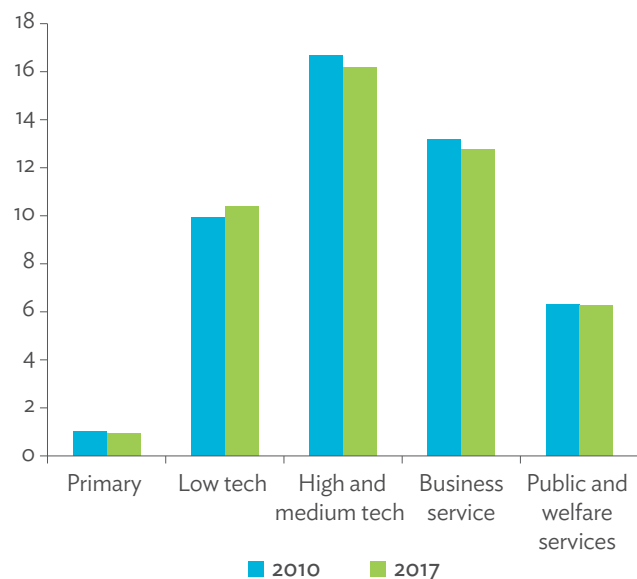
**Figure 2.1.4a: Intermediate Consumption Shares by 5-Sector Aggregation, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

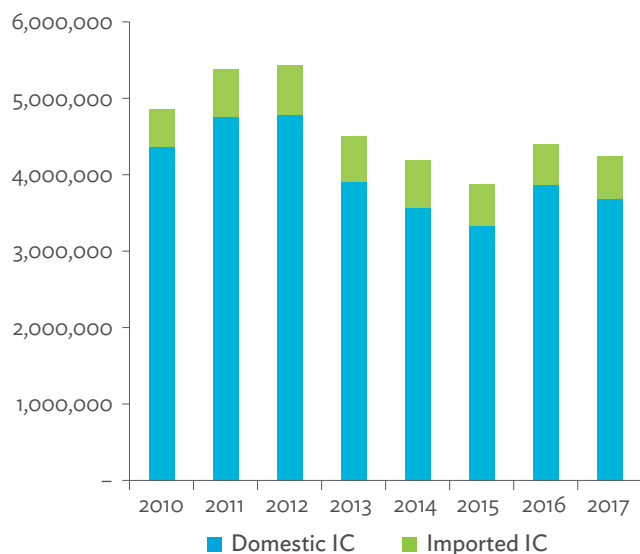
**Figure 2.1.4b: Intermediate Consumption Ratio to Output by 5-Sector Aggregation, 2010 and 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.1.4c: Shares of Domestic and Imported Intermediate Consumption, 2010–2017 (\$ million)**

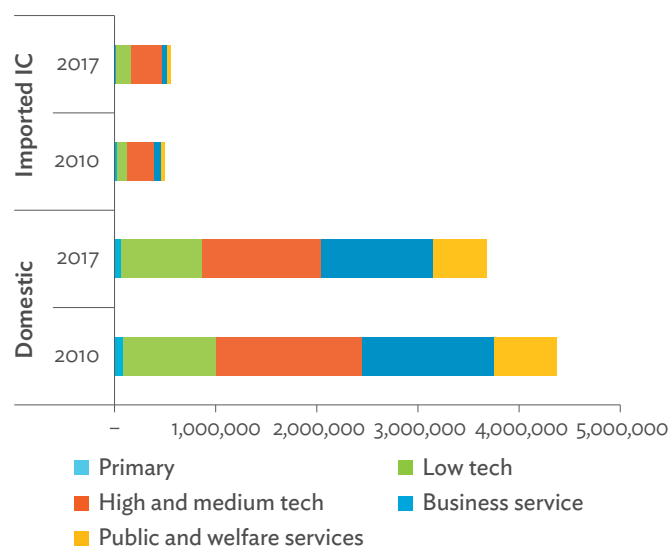


\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.1.4d: Shares of Domestic and Imported Intermediate Consumption by 5-Sector Aggregation, 2010 and 2017 (\$ million)**

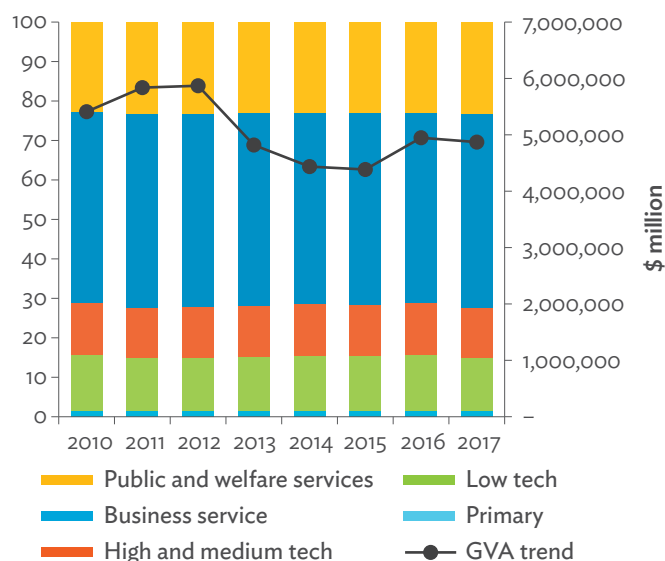


\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.1.5a: Gross Value Added Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

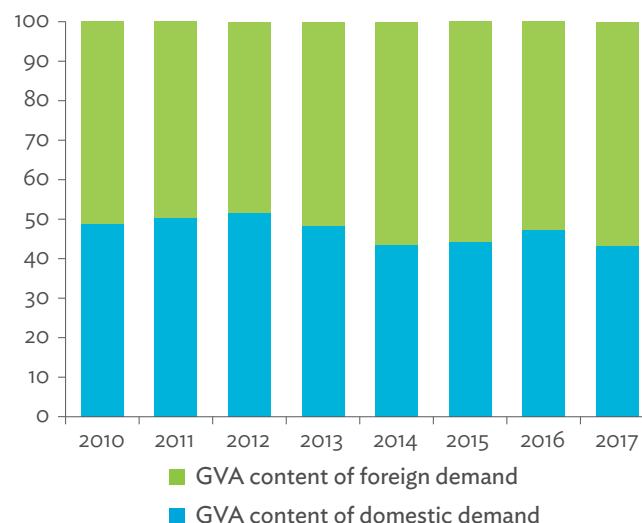


\$ = United States dollar, GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.1.5b: Gross Value Added Share Attributed to Foreign and Domestic Final Demand, 2010–2017 (%)**

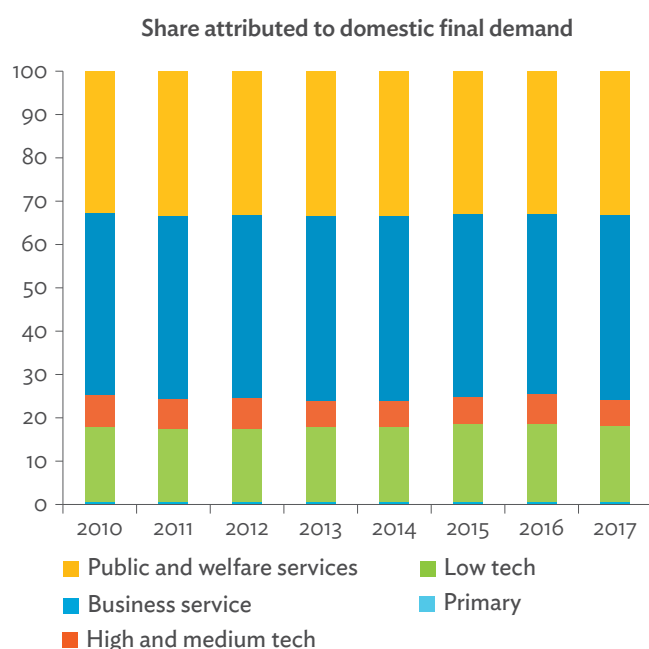


GVA = gross value added.

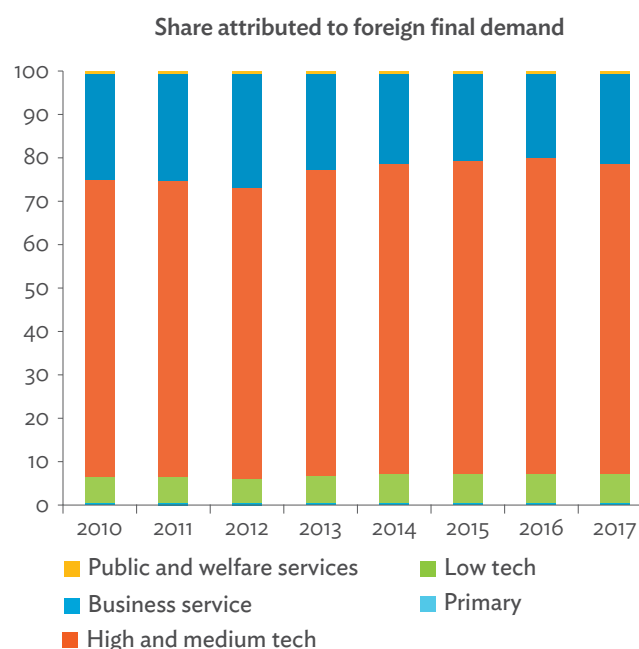
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.1.5c: Sectoral Shares of Gross Value Added Content in Domestic and Foreign Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.



[Click here for figure data](#)

**Table 2.1.1: Gross Value Added Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.890	0.873	0.879	0.869	0.862	0.878	0.893	0.884
Mining and quarrying	0.544	0.501	0.477	0.430	0.415	0.495	0.565	0.518
Food, beverages, and tobacco	0.896	0.875	0.878	0.867	0.860	0.878	0.895	0.884
Textiles and textile products	0.872	0.852	0.852	0.841	0.828	0.858	0.877	0.865
Leather, leather products, and footwear	0.829	0.820	0.826	0.810	0.766	0.799	0.828	0.810
Wood and products of wood and cork	0.838	0.833	0.831	0.823	0.808	0.831	0.855	0.840
Pulp, paper, paper products, printing, and publishing	0.904	0.890	0.887	0.880	0.870	0.887	0.902	0.894
Coke, refined petroleum, and nuclear fuel	0.424	0.408	0.400	0.383	0.377	0.418	0.490	0.440
Chemicals and chemical products	0.775	0.725	0.724	0.704	0.685	0.730	0.760	0.739
Rubber and plastics	0.840	0.808	0.809	0.793	0.776	0.803	0.829	0.814
Other nonmetallic minerals	0.832	0.790	0.777	0.744	0.728	0.764	0.798	0.776
Basic metals and fabricated metal	0.726	0.693	0.690	0.647	0.614	0.677	0.723	0.694
Machinery, nec	0.853	0.834	0.834	0.814	0.790	0.819	0.845	0.830
Electrical and optical equipment	0.822	0.811	0.808	0.781	0.755	0.788	0.818	0.801
Transport equipment	0.844	0.827	0.819	0.793	0.766	0.798	0.826	0.810
Manufacturing, nec; recycling	0.862	0.841	0.841	0.825	0.804	0.831	0.855	0.841
Electricity, gas, and water supply	0.772	0.658	0.635	0.588	0.569	0.638	0.690	0.656
Construction	0.877	0.862	0.854	0.827	0.812	0.848	0.870	0.857
Sale, maintenance, and repair	0.872	0.858	0.854	0.834	0.813	0.846	0.868	0.856
Wholesale trade and commission trade	0.961	0.957	0.955	0.955	0.952	0.962	0.966	0.964
Retail trade	0.961	0.953	0.952	0.948	0.944	0.956	0.961	0.959
Hotels and restaurants	0.927	0.912	0.911	0.903	0.896	0.914	0.926	0.920
Inland transport	0.924	0.914	0.910	0.905	0.899	0.919	0.926	0.921
Water transport	0.715	0.701	0.683	0.717	0.709	0.747	0.777	0.758
Air transport	0.863	0.867	0.859	0.858	0.827	0.855	0.871	0.861
Other supporting and auxiliary transport activities	0.944	0.934	0.931	0.927	0.920	0.936	0.945	0.941
Post and telecommunications	0.960	0.954	0.951	0.952	0.947	0.958	0.964	0.960
Financial intermediation	0.971	0.967	0.962	0.961	0.957	0.966	0.971	0.968
Real estate activities	0.989	0.987	0.985	0.982	0.981	0.986	0.988	0.987
Renting of M&Eq and other business activities	0.963	0.958	0.955	0.954	0.949	0.960	0.965	0.962
Public administration and defense; compulsory social security	0.949	0.943	0.938	0.933	0.927	0.942	0.949	0.945
Education	0.973	0.969	0.965	0.960	0.956	0.965	0.969	0.967
Health and social work	0.919	0.904	0.899	0.890	0.881	0.902	0.915	0.908
Other community, social, and personal services	0.949	0.941	0.939	0.937	0.931	0.945	0.952	0.949
Private households with employed persons	0.923	0.913	0.908	0.903	0.894	0.913	0.923	0.918

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.



**Table 2.1.2: Import Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.102	0.118	0.112	0.121	0.129	0.122	0.107	0.116
Mining and quarrying	0.410	0.454	0.470	0.511	0.529	0.505	0.435	0.482
Food, beverages, and tobacco	0.097	0.117	0.113	0.123	0.131	0.122	0.105	0.116
Textiles and textile products	0.118	0.138	0.137	0.147	0.160	0.142	0.123	0.135
Leather, leather products, and footwear	0.163	0.172	0.165	0.180	0.225	0.201	0.172	0.190
Wood and products of wood and cork	0.150	0.155	0.156	0.164	0.179	0.169	0.145	0.160
Pulp, paper, paper products, printing, and publishing	0.090	0.103	0.105	0.111	0.121	0.113	0.098	0.106
Coke, refined petroleum, and nuclear fuel	0.515	0.536	0.536	0.552	0.562	0.582	0.510	0.560
Chemicals and chemical products	0.207	0.254	0.253	0.272	0.290	0.270	0.240	0.261
Rubber and plastics	0.148	0.179	0.177	0.191	0.208	0.197	0.171	0.186
Other nonmetallic minerals	0.153	0.193	0.202	0.232	0.248	0.236	0.202	0.224
Basic metals and fabricated metal	0.251	0.283	0.282	0.321	0.355	0.323	0.277	0.306
Machinery, nec	0.136	0.154	0.154	0.171	0.195	0.181	0.155	0.170
Electrical and optical equipment	0.164	0.176	0.177	0.201	0.226	0.212	0.182	0.199
Transport equipment	0.144	0.161	0.167	0.191	0.216	0.202	0.174	0.190
Manufacturing, nec; recycling	0.128	0.148	0.147	0.161	0.182	0.169	0.145	0.159
Electricity, gas, and water supply	0.206	0.311	0.327	0.370	0.390	0.362	0.310	0.344
Construction	0.113	0.128	0.134	0.158	0.173	0.152	0.130	0.143
Sale, maintenance, and repair	0.119	0.132	0.135	0.153	0.174	0.154	0.132	0.144
Wholesale trade and commission trade	0.037	0.040	0.042	0.042	0.045	0.038	0.034	0.036
Retail trade	0.036	0.043	0.044	0.047	0.051	0.044	0.039	0.041
Hotels and restaurants	0.068	0.083	0.083	0.090	0.097	0.086	0.074	0.080
Inland transport	0.070	0.080	0.083	0.087	0.093	0.081	0.074	0.079
Water transport	0.277	0.291	0.309	0.273	0.282	0.253	0.223	0.242
Air transport	0.129	0.125	0.132	0.132	0.164	0.145	0.129	0.139
Other supporting and auxiliary transport activities	0.052	0.062	0.064	0.068	0.075	0.064	0.055	0.059
Post and telecommunications	0.038	0.043	0.047	0.045	0.050	0.042	0.036	0.040
Financial intermediation	0.028	0.032	0.036	0.037	0.041	0.034	0.029	0.032
Real estate activities	0.010	0.012	0.014	0.017	0.018	0.014	0.012	0.013
Renting of M&Eq and other business activities	0.035	0.039	0.042	0.043	0.048	0.040	0.035	0.038
Public administration and defense; compulsory social security	0.047	0.053	0.057	0.062	0.067	0.058	0.051	0.055
Education	0.025	0.029	0.033	0.037	0.041	0.035	0.031	0.033
Health and social work	0.075	0.089	0.094	0.102	0.111	0.098	0.085	0.092
Other community, social, and personal services	0.047	0.055	0.056	0.058	0.064	0.055	0.048	0.051
Private households with employed persons	0.072	0.081	0.086	0.090	0.099	0.087	0.077	0.082

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 2.1.3: Output Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.859	1.862	1.817	1.795	1.780	1.798	1.835	1.806
Mining and quarrying	1.785	1.638	1.583	1.466	1.433	1.506	1.657	1.553
Food, beverages, and tobacco	2.025	2.042	2.029	1.989	1.976	1.992	2.031	2.002
Textiles and textile products	2.115	2.144	2.141	2.101	2.071	2.031	2.077	2.040
Leather, leather products, and footwear	2.173	2.070	2.069	2.019	1.952	1.932	1.999	1.949
Wood and products of wood and cork	2.062	2.040	2.019	1.976	1.946	1.973	2.026	1.987
Pulp, paper, paper products, printing, and publishing	2.083	2.079	2.068	2.035	2.014	2.027	2.065	2.035
Coke, refined petroleum, and nuclear fuel	1.345	1.253	1.223	1.167	1.153	1.241	1.415	1.296
Chemicals and chemical products	2.270	2.323	2.321	2.244	2.197	2.212	2.289	2.222
Rubber and plastics	2.258	2.345	2.344	2.277	2.233	2.258	2.324	2.270
Other nonmetallic minerals	1.929	1.885	1.851	1.762	1.727	1.769	1.843	1.789
Basic metals and fabricated metal	2.417	2.398	2.389	2.251	2.162	2.176	2.290	2.209
Machinery, nec	2.074	2.112	2.103	2.032	1.972	1.990	2.052	2.003
Electrical and optical equipment	2.161	2.190	2.179	2.093	2.025	2.052	2.129	2.070
Transport equipment	2.596	2.601	2.566	2.459	2.378	2.409	2.494	2.417
Manufacturing, nec; recycling	2.161	2.190	2.185	2.129	2.084	2.098	2.155	2.108
Electricity, gas, and water supply	1.765	1.814	1.766	1.655	1.613	1.651	1.761	1.684
Construction	1.905	1.886	1.891	1.879	1.842	1.812	1.860	1.823
Sale, maintenance, and repair	2.091	2.119	2.098	2.027	1.968	1.939	1.999	1.947
Wholesale trade and commission trade	1.516	1.511	1.501	1.503	1.496	1.452	1.463	1.454
Retail trade	1.524	1.509	1.499	1.496	1.488	1.447	1.460	1.449
Hotels and restaurants	1.960	1.976	1.962	1.943	1.933	1.889	1.916	1.896
Inland transport	1.615	1.617	1.601	1.591	1.576	1.537	1.560	1.540
Water transport	1.885	1.902	1.863	1.960	1.938	1.918	1.990	1.931
Air transport	1.756	1.724	1.699	1.696	1.658	1.630	1.673	1.634
Other supporting and auxiliary transport activities	1.757	1.775	1.766	1.761	1.746	1.693	1.712	1.695
Post and telecommunications	1.627	1.651	1.652	1.639	1.630	1.576	1.589	1.579
Financial intermediation	1.616	1.622	1.661	1.691	1.684	1.626	1.636	1.628
Real estate activities	1.216	1.214	1.238	1.263	1.259	1.230	1.234	1.230
Renting of M&Eq and other business activities	1.633	1.632	1.641	1.650	1.642	1.589	1.601	1.591
Public administration and defense; compulsory social security	1.551	1.546	1.547	1.541	1.528	1.488	1.506	1.490
Education	1.297	1.295	1.309	1.331	1.324	1.295	1.305	1.297
Health and social work	1.685	1.709	1.714	1.709	1.692	1.656	1.685	1.659
Other community, social, and personal services	1.616	1.625	1.611	1.593	1.581	1.535	1.552	1.538
Private households with employed persons	2.482	2.450	2.460	2.461	2.442	2.393	2.418	2.393

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

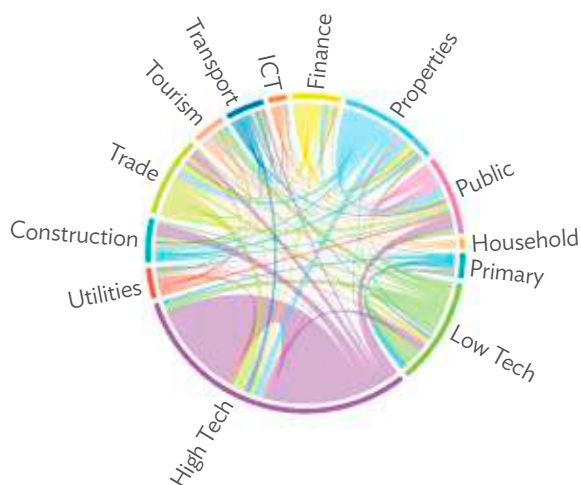
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 2.2

## DOMESTIC INTERINDUSTRY LINKAGES

### Japan

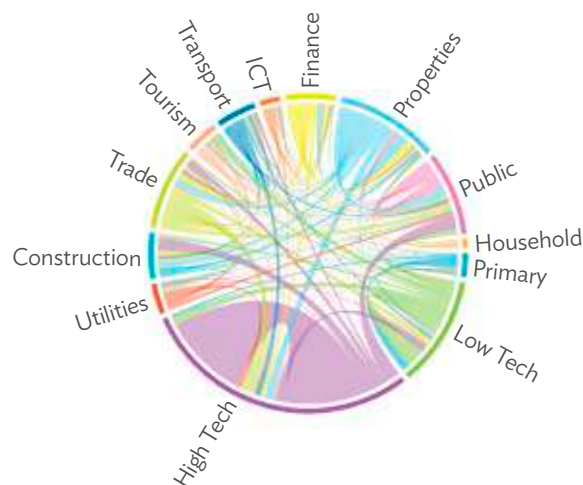
**Figure 2.2.1a: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2010**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

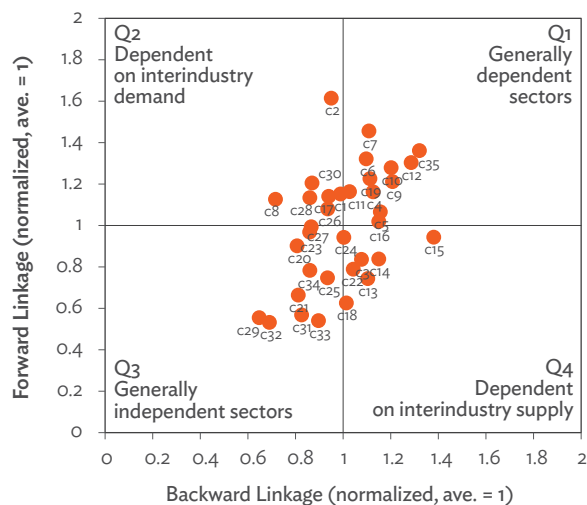
**Figure 2.2.1b: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2017**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

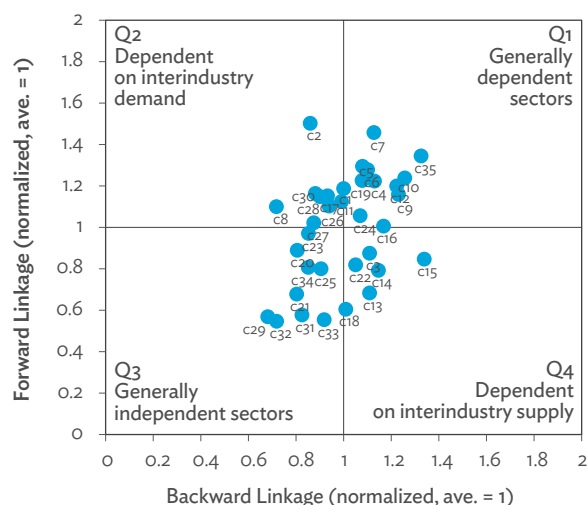
**Figure 2.2.2a: Backward and Forward Linkages by Industry, 2010**



Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.2.2b: Backward and Forward Linkages by Industry, 2017**

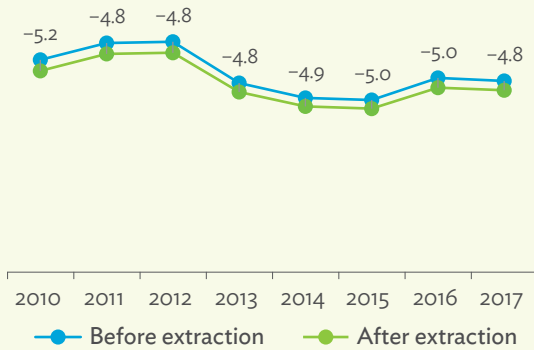


Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

## Box 2: Hypothetical Extraction of Transport Equipment Industry in Japan

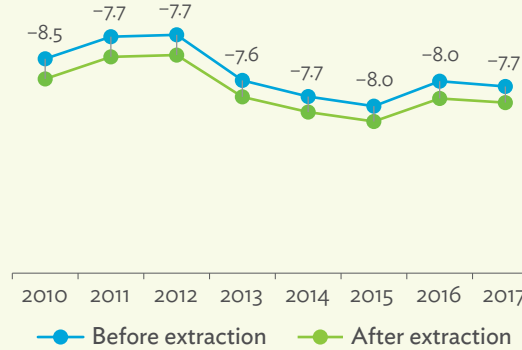
**Figure 2.2.3a: Potential Decline in Gross Value Added, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

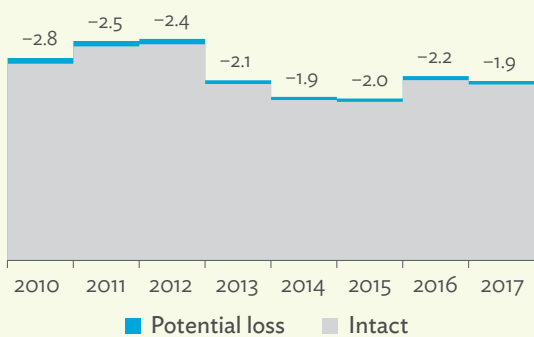
**Figure 2.2.4a: Potential Decline in Gross Output, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

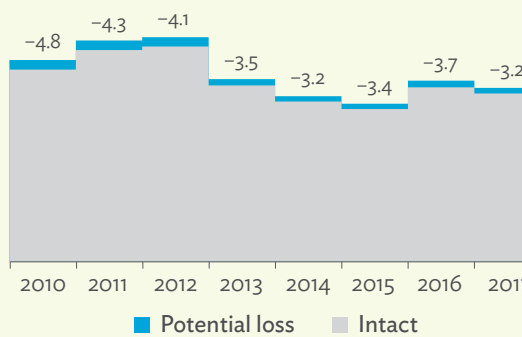
**Figure 2.2.3b: Potential Decline in Gross Value Added Attributed to Domestic Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

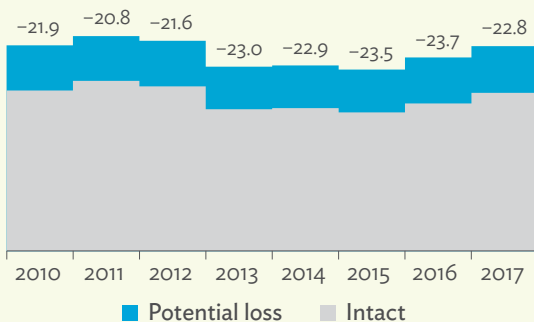
**Figure 2.2.4b: Potential Decline in Gross Output Attributed to Domestic Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

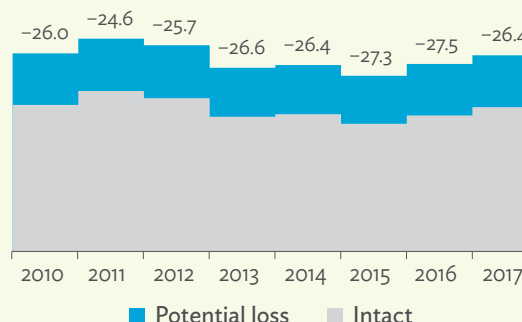
**Figure 2.2.3c: Potential Decline in Gross Value Added Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.2.4c: Potential Decline in Gross Output Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

Table 2.2.1: Input-Output Backward Linkage

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.989	0.991	0.973	0.979	0.987	1.002	0.994	1.000
Mining and quarrying	0.950	0.872	0.848	0.800	0.794	0.839	0.898	0.860
Food, beverages, and tobacco	1.077	1.087	1.087	1.085	1.095	1.110	1.100	1.109
Textiles and textile products	1.125	1.141	1.146	1.146	1.148	1.132	1.125	1.129
Leather, leather products, and footwear	1.156	1.102	1.108	1.101	1.082	1.076	1.083	1.079
Wood and products of wood and cork	1.097	1.086	1.081	1.077	1.079	1.099	1.098	1.100
Pulp, paper, paper products, printing, and publishing	1.108	1.107	1.107	1.110	1.116	1.130	1.119	1.127
Coke, refined petroleum, and nuclear fuel	0.715	0.667	0.655	0.636	0.639	0.691	0.766	0.718
Chemicals and chemical products	1.207	1.237	1.243	1.224	1.218	1.232	1.240	1.230
Rubber and plastics	1.201	1.248	1.255	1.242	1.238	1.258	1.259	1.257
Other nonmetallic minerals	1.026	1.003	0.991	0.961	0.957	0.986	0.998	0.991
Basic metals and fabricated metal	1.285	1.276	1.279	1.227	1.198	1.212	1.240	1.223
Machinery, nec	1.103	1.124	1.126	1.108	1.093	1.109	1.112	1.109
Electrical and optical equipment	1.149	1.166	1.167	1.141	1.122	1.143	1.154	1.146
Transport equipment	1.381	1.384	1.374	1.341	1.318	1.342	1.351	1.338
Manufacturing, nec; recycling	1.149	1.166	1.170	1.161	1.155	1.169	1.167	1.167
Electricity, gas, and water supply	0.939	0.966	0.945	0.902	0.894	0.920	0.954	0.932
Construction	1.013	1.004	1.012	1.024	1.021	1.009	1.008	1.009
Sale, maintenance, and repair	1.112	1.128	1.123	1.106	1.091	1.080	1.083	1.078
Wholesale trade and commission trade	0.806	0.804	0.804	0.819	0.829	0.809	0.792	0.805
Retail trade	0.811	0.803	0.803	0.816	0.825	0.806	0.791	0.802
Hotels and restaurants	1.042	1.052	1.051	1.060	1.071	1.053	1.038	1.050
Inland transport	0.859	0.861	0.857	0.867	0.873	0.856	0.845	0.852
Water transport	1.003	1.013	0.998	1.069	1.074	1.069	1.078	1.069
Air transport	0.934	0.918	0.910	0.925	0.919	0.908	0.906	0.905
Other supporting and auxiliary transport activities	0.935	0.945	0.945	0.960	0.968	0.943	0.928	0.939
Post and telecommunications	0.865	0.879	0.885	0.894	0.903	0.878	0.861	0.874
Financial intermediation	0.859	0.864	0.889	0.922	0.933	0.906	0.886	0.901
Real estate activities	0.647	0.646	0.663	0.689	0.698	0.685	0.669	0.681
Renting of M&Eq and other business activities	0.868	0.869	0.879	0.900	0.910	0.885	0.867	0.881
Public administration and defense; compulsory social security	0.825	0.823	0.828	0.840	0.847	0.829	0.816	0.825
Education	0.690	0.690	0.701	0.726	0.734	0.722	0.707	0.718
Health and social work	0.896	0.910	0.917	0.932	0.938	0.922	0.913	0.919
Other community, social, and personal services	0.859	0.865	0.862	0.868	0.876	0.855	0.841	0.852
Private households with employed persons	1.320	1.304	1.317	1.342	1.353	1.333	1.310	1.325
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values

Source: Asian Development Bank Multi-Regional Input-Output Database.

Table 2.2.2: Input-Output Forward Linkage

	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.157	1.161	1.145	1.165	1.182	1.166	1.165	1.192
Mining and quarrying	1.633	1.628	1.612	1.568	1.544	1.492	1.522	1.516
Food, beverages, and tobacco	0.831	0.832	0.829	0.831	0.848	0.856	0.849	0.872
Textiles and textile products	1.167	1.174	1.187	1.272	1.296	1.224	1.237	1.229
Leather, leather products, and footwear	1.068	1.128	1.147	1.298	1.348	1.290	1.307	1.303
Wood and products of wood and cork	1.331	1.334	1.322	1.318	1.310	1.289	1.276	1.286
Pulp, paper, paper products, printing, and publishing	1.470	1.468	1.468	1.458	1.461	1.474	1.462	1.471
Coke, refined petroleum, and nuclear fuel	1.130	1.117	1.114	1.072	1.075	1.085	1.110	1.103
Chemicals and chemical products	1.218	1.209	1.228	1.166	1.147	1.176	1.179	1.163
Rubber and plastics	1.287	1.293	1.302	1.267	1.251	1.259	1.269	1.245
Other nonmetallic minerals	1.169	1.163	1.167	1.140	1.131	1.138	1.136	1.128
Basic metals and fabricated metal	1.313	1.322	1.331	1.280	1.231	1.225	1.243	1.206
Machinery, nec	0.736	0.731	0.742	0.731	0.705	0.691	0.689	0.675
Electrical and optical equipment	0.833	0.845	0.846	0.825	0.797	0.801	0.812	0.787
Transport equipment	0.942	0.942	0.927	0.883	0.854	0.862	0.874	0.843
Manufacturing, nec; recycling	1.020	1.016	1.027	1.044	1.037	1.024	1.017	1.006
Electricity, gas, and water supply	1.145	1.132	1.127	1.111	1.121	1.147	1.148	1.156
Construction	0.615	0.618	0.617	0.618	0.614	0.605	0.594	0.594
Sale, maintenance, and repair	1.232	1.222	1.216	1.201	1.209	1.228	1.226	1.232
Wholesale trade and commission trade	0.899	0.895	0.883	0.890	0.891	0.892	0.893	0.887
Retail trade	0.655	0.650	0.650	0.651	0.659	0.665	0.655	0.669
Hotels and restaurants	0.783	0.780	0.778	0.781	0.792	0.803	0.796	0.814
Inland transport	0.967	0.956	0.953	0.948	0.953	0.964	0.962	0.970
Water transport	0.941	0.969	0.988	1.056	1.052	1.076	1.118	1.058
Air transport	0.740	0.751	0.740	0.775	0.778	0.787	0.782	0.795
Other supporting and auxiliary transport activities	1.083	1.071	1.066	1.063	1.072	1.093	1.108	1.106
Post and telecommunications	0.993	0.987	0.988	0.991	1.004	1.011	0.999	1.022
Financial intermediation	1.138	1.129	1.126	1.126	1.135	1.145	1.133	1.152
Real estate activities	0.542	0.539	0.539	0.542	0.550	0.556	0.544	0.557
Renting of M&Eq and other business activities	1.211	1.206	1.205	1.205	1.201	1.185	1.170	1.168
Public administration and defense; compulsory social security	0.555	0.549	0.548	0.550	0.556	0.563	0.550	0.565
Education	0.519	0.518	0.518	0.520	0.526	0.534	0.521	0.534
Health and social work	0.527	0.525	0.525	0.527	0.533	0.541	0.528	0.542
Other community, social, and personal services	0.777	0.776	0.777	0.778	0.789	0.791	0.780	0.801
Private households with employed persons	1.372	1.365	1.360	1.347	1.349	1.363	1.348	1.354
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values

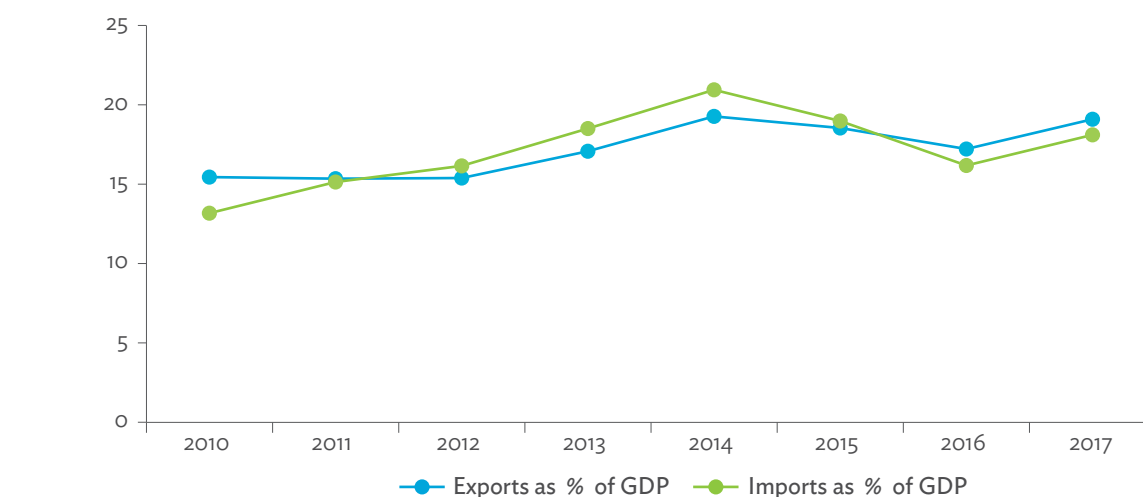
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 2.3

## INTERNATIONAL TRADE AND PRODUCTION LINKAGES

### Japan

**Figure 2.3.1: Exports and Imports as a Share of Gross Domestic Product, 2010–2017 (%)**

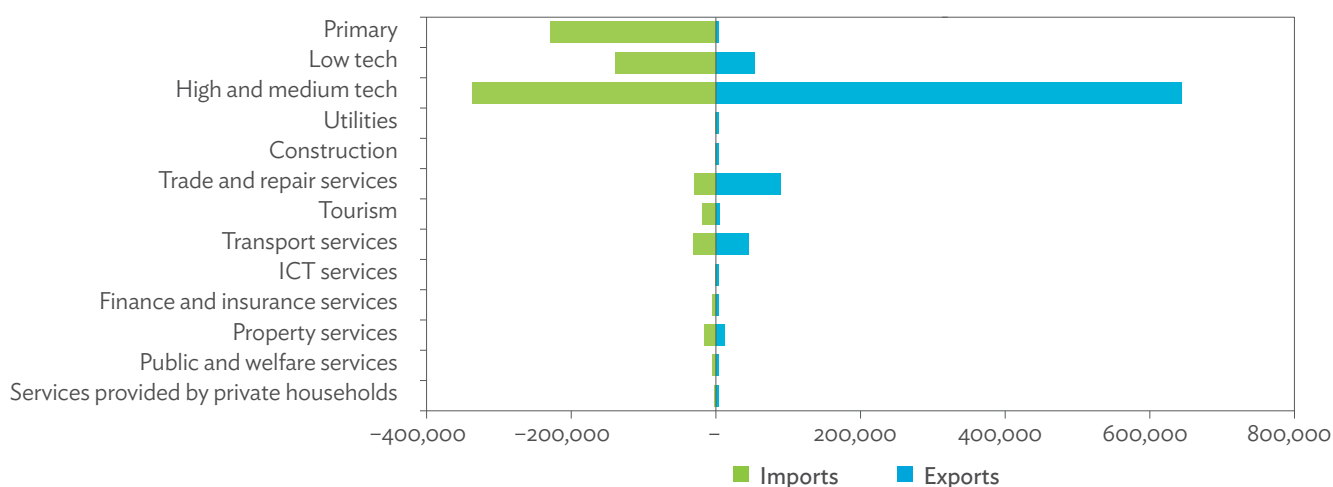


GDP = gross domestic product.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.3.2: Total Foreign Trade by Sector, 2017 (\$ million)**

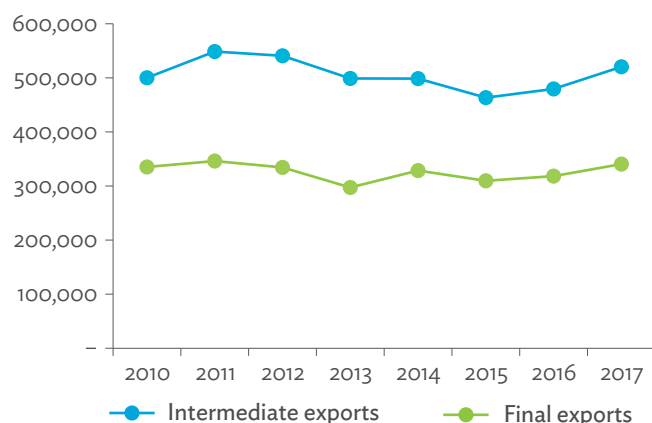


\$ = United States dollar, ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

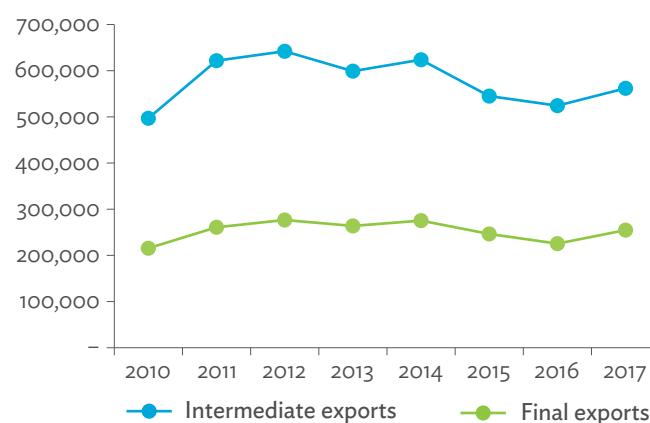
[Click here for figure data](#)



**Figure 2.3.3: Trend of Export Activity by End-Use Category, 2010–2017 (\$ million)**

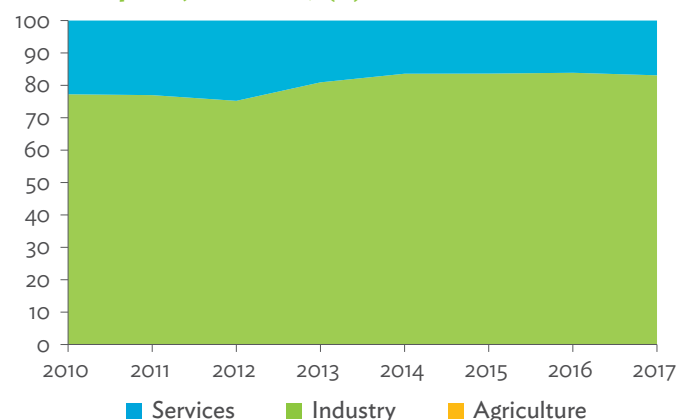
\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

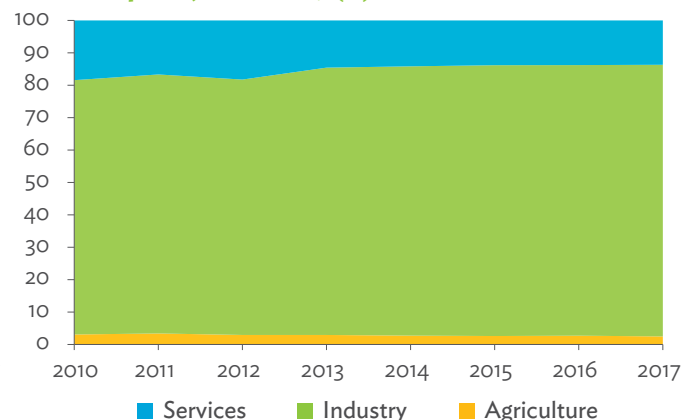
[Click here for figure data](#)**Figure 2.3.6: Trend of Import Activity by End-Use Category, 2010–2017 (\$ million)**

\$ = United States dollar.

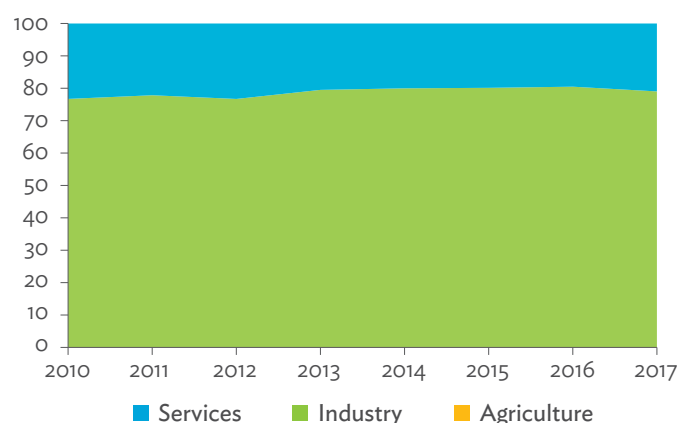
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 2.3.4: Shares of Sectors to Total Intermediate Exports, 2010–2017 (%)**

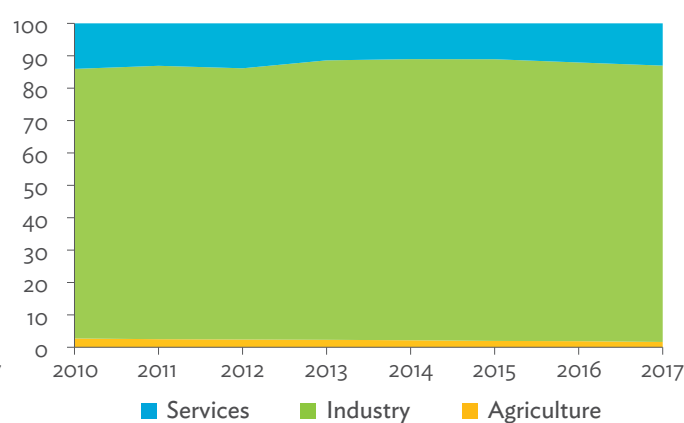
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 2.3.7: Shares of Sectors to Total Intermediate Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 2.3.5: Shares of Sectors to Total Final Exports, 2010–2017 (%)**

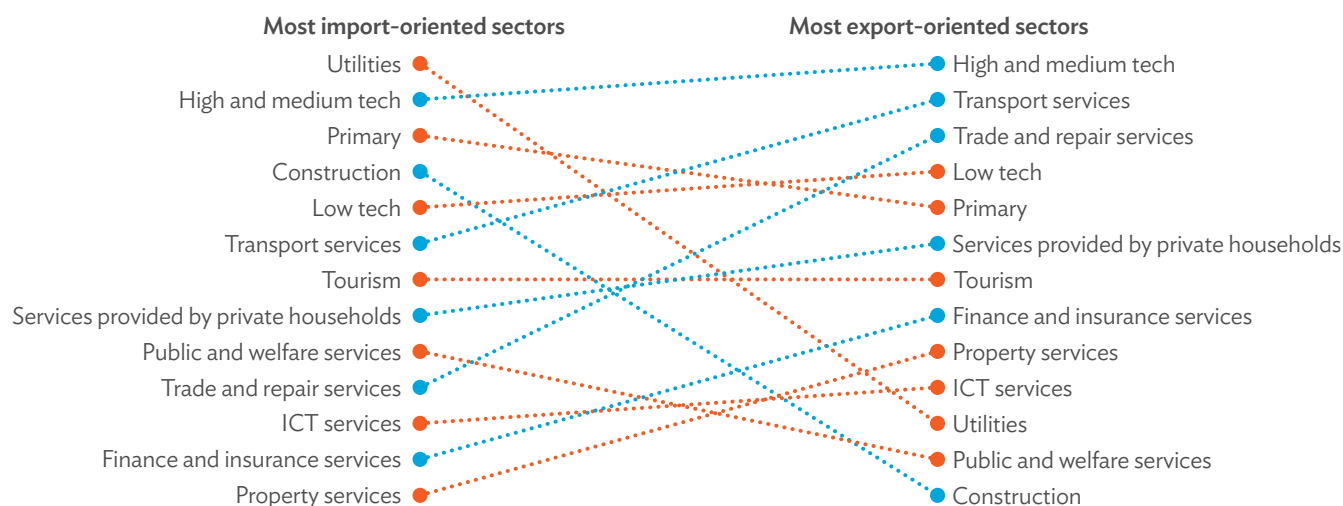
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 2.3.8: Shares of Sectors to Total Final Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.3.9: Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios, 2017**

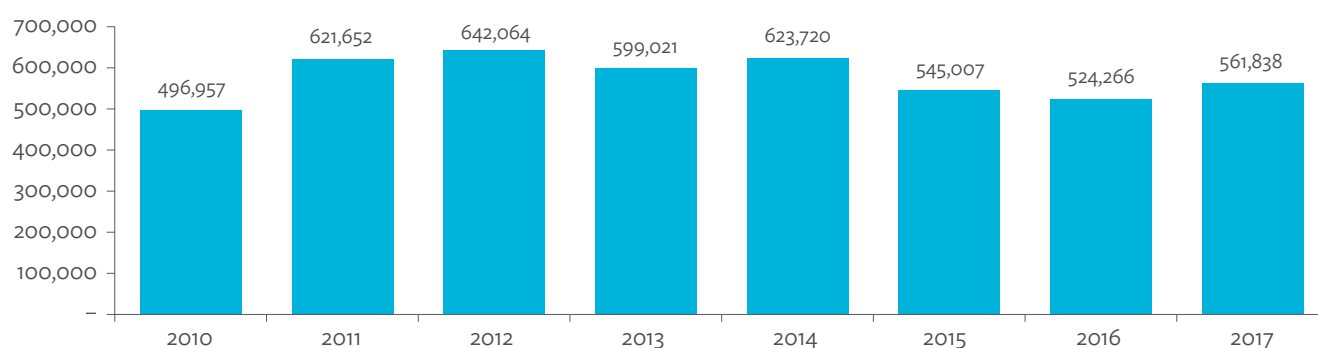


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.3.10: Total Foreign-Traded Input, 2010–2017 (\$ million)**

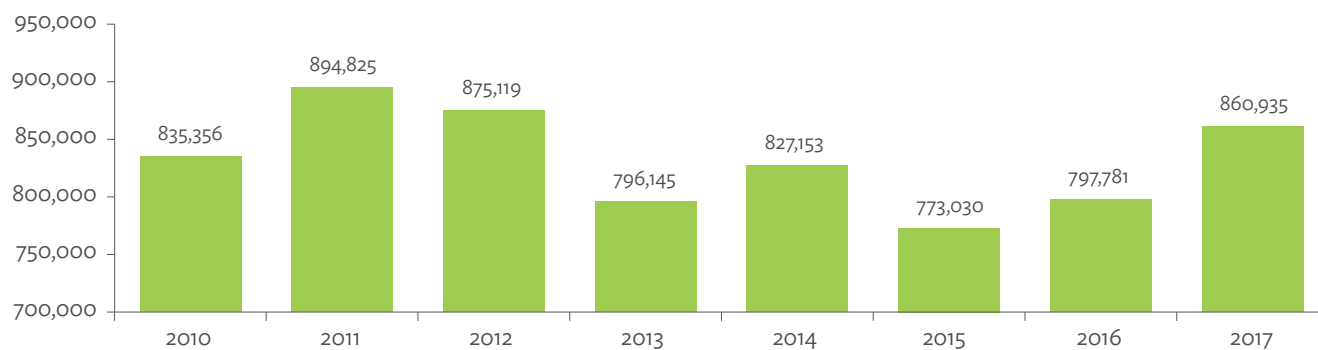


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.3.11: Total Foreign-Traded Output, 2010–2017 (\$ million)**

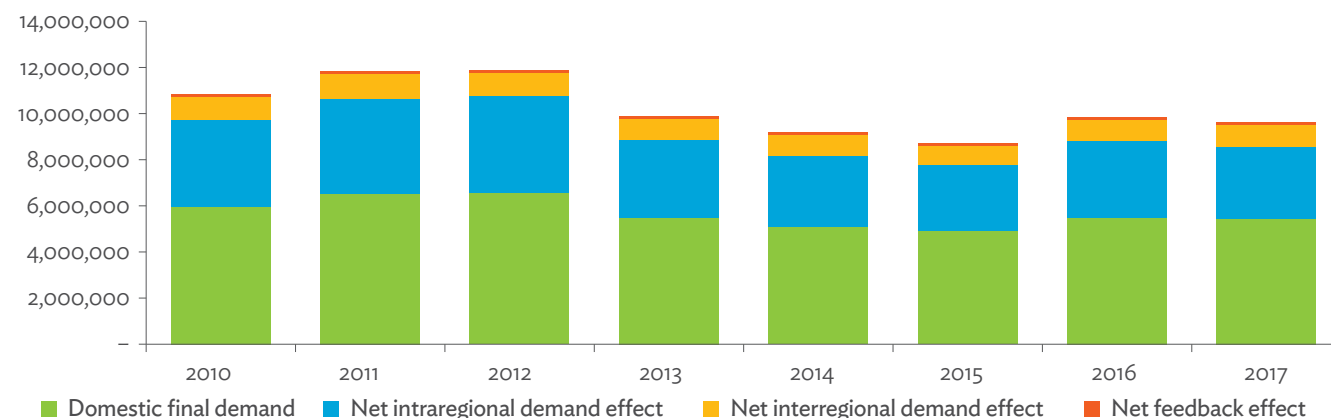


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.3.12: Decomposition of Total Production Attributable to Domestic and Interregional Demand, 2010–2017 (\$ million)**

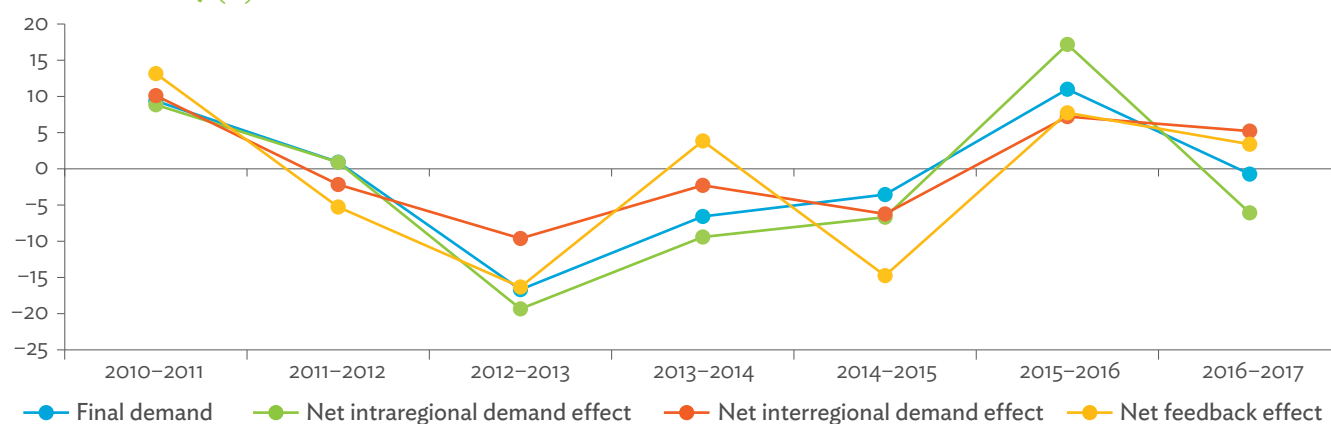


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

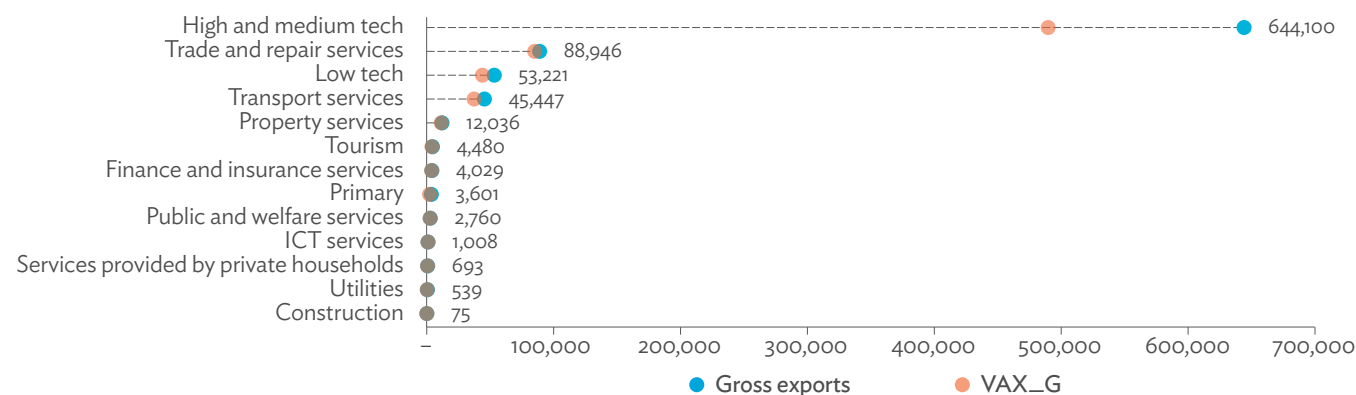
**Figure 2.3.13: Growth Rates of Production Components Based on Two-Region Input-Output Table, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.3.14: Gross Exports versus Value-Added Exports by Sector, 2017 (\$ million)**

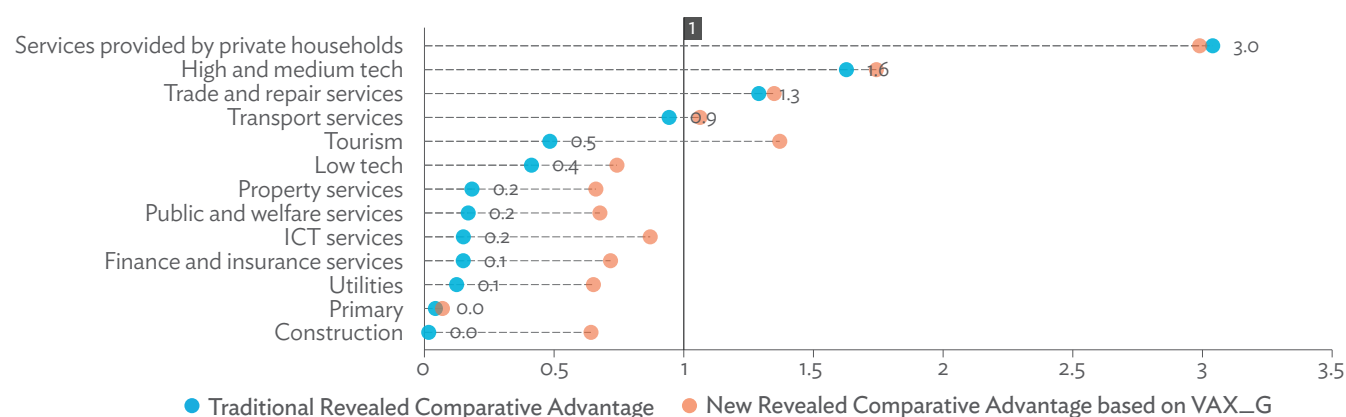


\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.3.15: Comparison of Traditional and New Revealed Comparative Advantage by Sector, 2017**

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Table 2.3.1: Production Attributable to Domestic Linkages by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Final demand								
Primary	38,616	40,695	43,121	34,133	31,993	35,289	37,555	35,940
Low tech	976,866	1,066,150	1,082,837	934,336	875,305	848,931	948,598	908,702
High and medium tech	1,048,281	1,114,830	1,104,525	947,560	947,789	915,310	997,286	994,453
Business service	2,242,491	2,451,835	2,486,427	2,034,260	1,864,205	1,795,883	1,982,972	2,008,578
Personal service	1,643,587	1,834,539	1,851,370	1,522,453	1,393,634	1,335,882	1,507,128	1,486,221
Intraregional effects (M1)								
Primary	138,082	148,462	148,216	121,741	111,565	98,528	115,596	111,552
Low tech	739,771	813,321	821,086	674,775	621,084	578,096	681,088	617,518
High and medium tech	1,146,886	1,247,660	1,256,626	954,706	849,235	799,044	975,277	847,975
Business service	1,567,657	1,700,195	1,719,162	1,427,607	1,296,245	1,209,579	1,380,214	1,364,763
Personal service	216,035	235,784	237,823	195,200	178,288	167,059	190,365	197,662

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 2.3.2: Production Attributable to Linkages with the Rest of the World by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Interregional effects (M2)								
Primary	12,902	13,655	12,780	12,667	13,055	10,578	10,944	12,633
Low tech	118,597	129,978	123,702	114,212	114,482	109,384	119,862	122,386
High and medium tech	601,893	666,387	648,572	611,114	608,259	567,331	608,196	628,901
Business service	291,715	319,347	320,371	262,174	241,759	229,017	243,354	268,213
Personal service	20,159	21,624	20,636	17,616	17,034	16,324	17,588	19,952
Feedback effects (M3)								
Primary	177.50	197.68	177.29	163.78	176.05	130.73	136.23	153.75
Low tech	1,448.21	1,632.89	1,522.42	1,298.31	1,372.47	1,193.76	1,322.33	1,315.75
High and medium tech	8,196.35	9,282.69	8,708.97	7,642.39	8,148.39	6,885.59	7,415.79	7,565.13
Business service	3,912.26	4,433.49	4,324.86	3,237.22	3,125.35	2,715.69	2,895.67	3,119.10
Personal service	262.09	290.81	269.46	213.07	216.69	190.05	205.79	229.54

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 2.3.3: Net Intraregional Multipliers (M1), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.8591	0.8617	0.8169	0.7945	0.7801	0.7982	0.8350	0.8059
Mining and quarrying	0.7854	0.6383	0.5833	0.4662	0.4326	0.5062	0.6573	0.5531
Food, beverages, and tobacco	1.0245	1.0423	1.0292	0.9892	0.9763	0.9918	1.0309	1.0022
Textiles and textile products	1.1153	1.1443	1.1411	1.1006	1.0714	1.0314	1.0770	1.0399
Leather, leather products, and footwear	1.1734	1.0698	1.0687	1.0194	0.9521	0.9315	0.9994	0.9492
Wood and products of wood and cork	1.0623	1.0395	1.0191	0.9759	0.9461	0.9733	1.0263	0.9874
Pulp, paper, paper products, printing, and publishing	1.0830	1.0787	1.0675	1.0350	1.0140	1.0274	1.0649	1.0349
Coke, refined petroleum, and nuclear fuel	0.3449	0.2534	0.2230	0.1667	0.1530	0.2411	0.4146	0.2965
Chemicals and chemical products	1.2702	1.3228	1.3212	1.2444	1.1966	1.2120	1.2887	1.2222
Rubber and plastics	1.2582	1.3447	1.3441	1.2771	1.2327	1.2576	1.3241	1.2698
Other nonmetallic minerals	0.9295	0.8848	0.8507	0.7622	0.7270	0.7694	0.8429	0.7894
Basic metals and fabricated metal	1.4168	1.3978	1.3890	1.2508	1.1620	1.1758	1.2895	1.2091
Machinery, nec	1.0737	1.1117	1.1035	1.0322	0.9721	0.9897	1.0523	1.0034
Electrical and optical equipment	1.1611	1.1905	1.1786	1.0928	1.0248	1.0523	1.1294	1.0695
Transport equipment	1.5957	1.6005	1.5663	1.4587	1.3782	1.4089	1.4937	1.4166
Manufacturing, nec; recycling	1.1607	1.1902	1.1853	1.1293	1.0841	1.0985	1.1546	1.1082
Electricity, gas, and water supply	0.7647	0.8139	0.7657	0.6546	0.6134	0.6510	0.7606	0.6840
Construction	0.9045	0.8864	0.8908	0.8785	0.8424	0.8117	0.8599	0.8227
Sale, maintenance, and repair	1.0914	1.1195	1.0977	1.0275	0.9677	0.9391	0.9986	0.9467
Wholesale trade and commission trade	0.5160	0.5107	0.5010	0.5027	0.4963	0.4520	0.4626	0.4538
Retail trade	0.5242	0.5091	0.4992	0.4961	0.4883	0.4470	0.4597	0.4494
Hotels and restaurants	0.9596	0.9759	0.9623	0.9434	0.9326	0.8893	0.9165	0.8964
Inland transport	0.6147	0.6169	0.6008	0.5908	0.5756	0.5372	0.5602	0.5395
Water transport	0.8850	0.9022	0.8631	0.9599	0.9379	0.9182	0.9896	0.9307
Air transport	0.7561	0.7237	0.6995	0.6958	0.6580	0.6296	0.6728	0.6344
Other supporting and auxiliary transport activities	0.7573	0.7750	0.7656	0.7606	0.7465	0.6927	0.7121	0.6954
Post and telecommunications	0.6271	0.6512	0.6523	0.6389	0.6298	0.5760	0.5886	0.5791
Financial intermediation	0.6160	0.6222	0.6611	0.6907	0.6836	0.6256	0.6358	0.6278
Real estate activities	0.2160	0.2143	0.2383	0.2633	0.2591	0.2298	0.2339	0.2301
Renting of M&Eq and other business activities	0.6330	0.6325	0.6412	0.6504	0.6416	0.5888	0.6009	0.5910
Public administration and defense; compulsory social security	0.5512	0.5457	0.5469	0.5410	0.5277	0.4879	0.5062	0.4903
Education	0.2966	0.2955	0.3092	0.3314	0.3242	0.2950	0.3050	0.2972
Health and social work	0.6853	0.7092	0.7135	0.7092	0.6922	0.6556	0.6854	0.6592
Other community, social, and personal services	0.6158	0.6247	0.6108	0.5925	0.5811	0.5352	0.5519	0.5383
Private households with employed persons	1.4816	1.4497	1.4596	1.4606	1.4416	1.3929	1.4181	1.3933

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 2.3.4: Net Interregional Multipliers (M2), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.2218	0.2617	0.2498	0.2765	0.2942	0.2813	0.2446	0.2685
Mining and quarrying	0.8123	0.8990	0.9360	1.0373	1.0781	1.0576	0.9173	1.0129
Food, beverages, and tobacco	0.2084	0.2539	0.2490	0.2760	0.2943	0.2782	0.2373	0.2638
Textiles and textile products	0.2848	0.3372	0.3355	0.3707	0.4053	0.3655	0.3146	0.3457
Leather, leather products, and footwear	0.4067	0.4400	0.4212	0.4744	0.6045	0.5454	0.4600	0.5166
Wood and products of wood and cork	0.3389	0.3481	0.3553	0.3765	0.4120	0.3935	0.3340	0.3723
Pulp, paper, paper products, printing, and publishing	0.2022	0.2354	0.2401	0.2589	0.2823	0.2674	0.2293	0.2516
Coke, refined petroleum, and nuclear fuel	0.9937	1.0348	1.0435	1.0977	1.1259	1.2007	1.0580	1.1558
Chemicals and chemical products	0.4722	0.5904	0.5881	0.6489	0.6945	0.6548	0.5802	0.6307
Rubber and plastics	0.3522	0.4332	0.4279	0.4740	0.5183	0.4946	0.4279	0.4681
Other nonmetallic minerals	0.3264	0.4082	0.4294	0.4991	0.5343	0.5206	0.4514	0.4960
Basic metals and fabricated metal	0.5664	0.6439	0.6350	0.7331	0.8137	0.7556	0.6557	0.7197
Machinery, nec	0.3328	0.3815	0.3800	0.4352	0.4974	0.4675	0.4003	0.4409
Electrical and optical equipment	0.4140	0.4465	0.4512	0.5281	0.5974	0.5653	0.4849	0.5350
Transport equipment	0.3602	0.4068	0.4242	0.4966	0.5676	0.5373	0.4619	0.5062
Manufacturing, nec; recycling	0.3030	0.3533	0.3526	0.3960	0.4488	0.4216	0.3614	0.3996
Electricity, gas, and water supply	0.4114	0.6203	0.6571	0.7558	0.8012	0.7629	0.6577	0.7271
Construction	0.2550	0.2901	0.3028	0.3657	0.4009	0.3578	0.3096	0.3419
Sale, maintenance, and repair	0.2965	0.3327	0.3425	0.3995	0.4550	0.4085	0.3503	0.3833
Wholesale trade and commission trade	0.0777	0.0866	0.0905	0.0942	0.1013	0.0856	0.0752	0.0809
Retail trade	0.0783	0.0939	0.0953	0.1058	0.1153	0.0999	0.0879	0.0938
Hotels and restaurants	0.1484	0.1819	0.1840	0.2033	0.2200	0.1970	0.1686	0.1846
Inland transport	0.1529	0.1762	0.1847	0.2010	0.2164	0.1920	0.1735	0.1855
Water transport	0.6494	0.7009	0.7518	0.6653	0.6830	0.6178	0.5398	0.5878
Air transport	0.2948	0.2900	0.3106	0.3166	0.3945	0.3516	0.3106	0.3364
Other supporting and auxiliary transport activities	0.1162	0.1381	0.1433	0.1547	0.1703	0.1477	0.1268	0.1369
Post and telecommunications	0.0824	0.0945	0.1013	0.1014	0.1133	0.0959	0.0820	0.0899
Financial intermediation	0.0601	0.0692	0.0786	0.0837	0.0926	0.0779	0.0671	0.0734
Real estate activities	0.0221	0.0255	0.0301	0.0374	0.0404	0.0316	0.0276	0.0291
Renting of M&Eq and other business activities	0.0770	0.0876	0.0941	0.0993	0.1104	0.0940	0.0812	0.0888
Public administration and defense; compulsory social security	0.1073	0.1221	0.1310	0.1468	0.1611	0.1401	0.1223	0.1325
Education	0.0531	0.0629	0.0700	0.0807	0.0907	0.0782	0.0688	0.0741
Health and social work	0.1746	0.2111	0.2232	0.2486	0.2719	0.2417	0.2093	0.2276
Other community, social, and personal services	0.1030	0.1226	0.1254	0.1331	0.1471	0.1274	0.1116	0.1198
Private households with employed persons	0.1578	0.1812	0.1922	0.2071	0.2303	0.2050	0.1797	0.1934

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 2.3.5: Net Feedback Multipliers (M<sub>3</sub>), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.0024	0.0027	0.0024	0.0024	0.0026	0.0024	0.0022	0.0024
Mining and quarrying	0.0083	0.0086	0.0083	0.0080	0.0086	0.0082	0.0079	0.0085
Food, beverages, and tobacco	0.0022	0.0025	0.0023	0.0023	0.0024	0.0022	0.0020	0.0022
Textiles and textile products	0.0035	0.0040	0.0036	0.0036	0.0039	0.0034	0.0031	0.0034
Leather, leather products, and footwear	0.0046	0.0048	0.0042	0.0042	0.0051	0.0045	0.0043	0.0046
Wood and products of wood and cork	0.0034	0.0034	0.0032	0.0030	0.0033	0.0030	0.0027	0.0030
Pulp, paper, paper products, printing, and publishing	0.0023	0.0026	0.0024	0.0024	0.0026	0.0024	0.0022	0.0024
Coke, refined petroleum, and nuclear fuel	0.0097	0.0095	0.0089	0.0082	0.0088	0.0091	0.0089	0.0095
Chemicals and chemical products	0.0059	0.0070	0.0062	0.0063	0.0069	0.0064	0.0062	0.0065
Rubber and plastics	0.0049	0.0058	0.0052	0.0053	0.0059	0.0055	0.0051	0.0055
Other nonmetallic minerals	0.0038	0.0044	0.0042	0.0043	0.0047	0.0044	0.0042	0.0045
Basic metals and fabricated metal	0.0083	0.0089	0.0078	0.0079	0.0087	0.0076	0.0074	0.0079
Machinery, nec	0.0064	0.0068	0.0061	0.0064	0.0074	0.0065	0.0060	0.0065
Electrical and optical equipment	0.0098	0.0096	0.0086	0.0091	0.0106	0.0093	0.0087	0.0093
Transport equipment	0.0073	0.0077	0.0077	0.0081	0.0090	0.0081	0.0074	0.0079
Manufacturing, nec; recycling	0.0043	0.0047	0.0042	0.0043	0.0049	0.0044	0.0040	0.0045
Electricity, gas, and water supply	0.0043	0.0061	0.0059	0.0060	0.0066	0.0060	0.0058	0.0062
Construction	0.0035	0.0037	0.0034	0.0037	0.0041	0.0035	0.0033	0.0036
Sale, maintenance, and repair	0.0063	0.0066	0.0062	0.0065	0.0075	0.0063	0.0058	0.0062
Wholesale trade and commission trade	0.0009	0.0010	0.0009	0.0009	0.0010	0.0008	0.0007	0.0008
Retail trade	0.0009	0.0010	0.0010	0.0010	0.0011	0.0009	0.0008	0.0009
Hotels and restaurants	0.0015	0.0018	0.0017	0.0016	0.0018	0.0015	0.0014	0.0015
Inland transport	0.0019	0.0021	0.0021	0.0020	0.0022	0.0019	0.0019	0.0019
Water transport	0.0094	0.0095	0.0096	0.0072	0.0074	0.0064	0.0061	0.0064
Air transport	0.0036	0.0035	0.0036	0.0034	0.0040	0.0034	0.0033	0.0034
Other supporting and auxiliary transport activities	0.0014	0.0016	0.0015	0.0015	0.0016	0.0013	0.0012	0.0013
Post and telecommunications	0.0010	0.0011	0.0011	0.0010	0.0011	0.0009	0.0008	0.0009
Financial intermediation	0.0007	0.0008	0.0008	0.0008	0.0009	0.0007	0.0007	0.0007
Real estate activities	0.0003	0.0003	0.0003	0.0004	0.0004	0.0003	0.0003	0.0003
Renting of M&Eq and other business activities	0.0010	0.0010	0.0010	0.0010	0.0011	0.0009	0.0008	0.0009
Public administration and defense; compulsory social security	0.0016	0.0016	0.0016	0.0017	0.0019	0.0015	0.0015	0.0016
Education	0.0006	0.0007	0.0007	0.0007	0.0008	0.0007	0.0007	0.0007
Health and social work	0.0024	0.0027	0.0026	0.0027	0.0030	0.0026	0.0025	0.0026
Other community, social, and personal services	0.0013	0.0014	0.0013	0.0013	0.0015	0.0012	0.0011	0.0012
Private households with employed persons	0.0020	0.0021	0.0021	0.0021	0.0023	0.0019	0.0018	0.0020

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 2.3.6: Comparison of Exports in Gross and Value-Added Terms, 2010–2017 (\$ million)**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	2,588	1,709	2,711	1,685	2,714	1,639	3,094	1,769	3,733	2,118	3,149	1,883	3,081	2,027	3,601	2,212
Low tech	48,551	41,321	52,213	43,015	48,100	39,677	46,507	37,925	50,583	40,593	47,483	38,733	49,716	41,676	53,221	43,896
High and medium tech	591,966	477,493	636,450	498,050	611,980	479,133	590,011	446,163	624,652	456,809	584,454	438,061	604,959	471,958	644,100	489,714
Utilities	371	292	423	288	410	273	384	240	530	320	518	328	546	372	539	350
Construction	5	5	2	2	9	8	54	46	73	61	67	56	69	60	75	64
Trade and repair services	100,512	95,682	108,218	102,358	119,770	113,001	87,319	82,577	80,887	76,401	75,999	72,436	77,042	73,827	88,946	85,073
Tourism	7,947	7,314	6,618	5,997	6,418	5,810	4,665	4,198	4,296	3,836	3,788	3,430	4,003	3,672	4,480	4,084
Transport services	59,493	47,307	60,619	47,500	58,956	45,509	44,547	35,439	43,461	34,330	39,760	32,350	40,167	33,477	45,447	37,326
ICT services	1,210	1,152	1,244	1,176	1,206	1,136	903	853	931	874	875	829	893	852	1,008	958
Finance and insurance services	4,565	4,370	5,726	5,445	5,553	5,254	4,081	3,861	3,730	3,513	3,477	3,303	3,424	3,270	4,029	3,835
Property services	14,471	13,745	16,745	15,797	16,271	15,357	11,862	11,203	11,059	10,392	10,477	9,932	10,855	10,349	12,036	11,432
Public and welfare services	2,873	2,728	2,881	2,712	2,784	2,614	2,028	1,897	2,537	2,362	2,388	2,247	2,434	2,305	2,760	2,606
Services provided by private households	804	738	975	886	948	857	690	622	681	608	594	538	593	543	693	631

\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 2.3.7: Comparison of Revealed Comparative Advantage Measures in Gross and Value-Added Terms, 2010–2017**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	0.028	0.056	0.025	0.053	0.025	0.053	0.034	0.062	0.042	0.070	0.042	0.065	0.041	0.066	0.042	0.069
Low tech	0.403	0.756	0.412	0.755	0.390	0.719	0.401	0.744	0.411	0.755	0.410	0.748	0.417	0.759	0.413	0.742
High and medium tech	1.514	1.653	1.521	1.695	1.508	1.700	1.610	1.812	1.640	1.820	1.631	1.788	1.655	1.806	1.627	1.743
Utilities	0.099	0.821	0.106	0.578	0.103	0.581	0.104	0.602	0.136	0.652	0.138	0.713	0.113	0.740	0.124	0.652
Construction	0.002	0.843	0.001	0.922	0.002	0.864	0.013	0.831	0.017	0.785	0.016	0.725	0.014	0.725	0.017	0.642
Trade and repair services	1.537	1.389	1.564	1.439	1.718	1.510	1.401	1.369	1.245	1.300	1.226	1.297	1.197	1.268	1.289	1.349
Tourism	0.902	1.511	0.700	1.406	0.708	1.379	0.553	1.312	0.479	1.274	0.454	1.274	0.408	1.240	0.484	1.370
Transport services	1.194	1.099	1.215	1.128	1.190	1.119	1.011	1.054	0.943	1.028	0.909	1.042	0.902	1.037	0.943	1.062
ICT services	0.216	0.934	0.221	1.031	0.199	1.018	0.165	0.993	0.162	0.993	0.161	1.028	0.152	0.961	0.150	0.871
Finance and insurance services	0.177	0.800	0.220	0.839	0.219	0.773	0.171	0.702	0.148	0.670	0.144	0.677	0.132	0.650	0.150	0.718
Property services	0.265	0.717	0.292	0.756	0.291	0.733	0.220	0.679	0.189	0.651	0.184	0.655	0.180	0.650	0.183	0.661
Public and welfare services	0.184	0.649	0.185	0.668	0.177	0.647	0.133	0.594	0.161	0.596	0.155	0.609	0.144	0.592	0.169	0.677
Services provided by private households	2.266	1.550	2.287	1.740	1.885	1.453	2.106	1.911	2.493	2.365	2.553	2.652	2.704	2.761	3.039	2.989

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

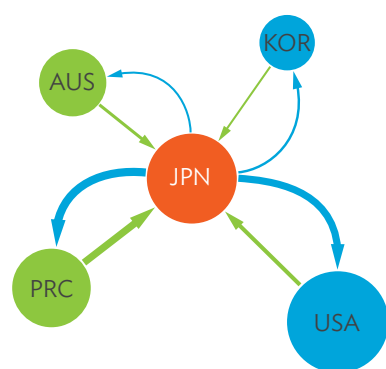
Source: Asian Development Bank Multi-Regional Input-Output Database.

# GLOBAL VALUE CHAIN INDICATORS

## 2.4

### Japan

**Figure 2.4.1a: Trade in Value-Added Flow with Top Trading Partners, 2010**

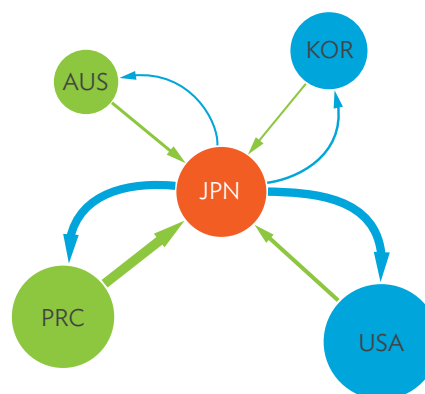


● Economy in focus ● Import partner ● Export partner

AUS = Australia, JPN = Japan, KOR = Republic of Korea, PRC = People's Republic of China, USA = United States.  
Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

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**Figure 2.4.1b: Trade in Value-Added Flow with Top Trading Partners, 2017**

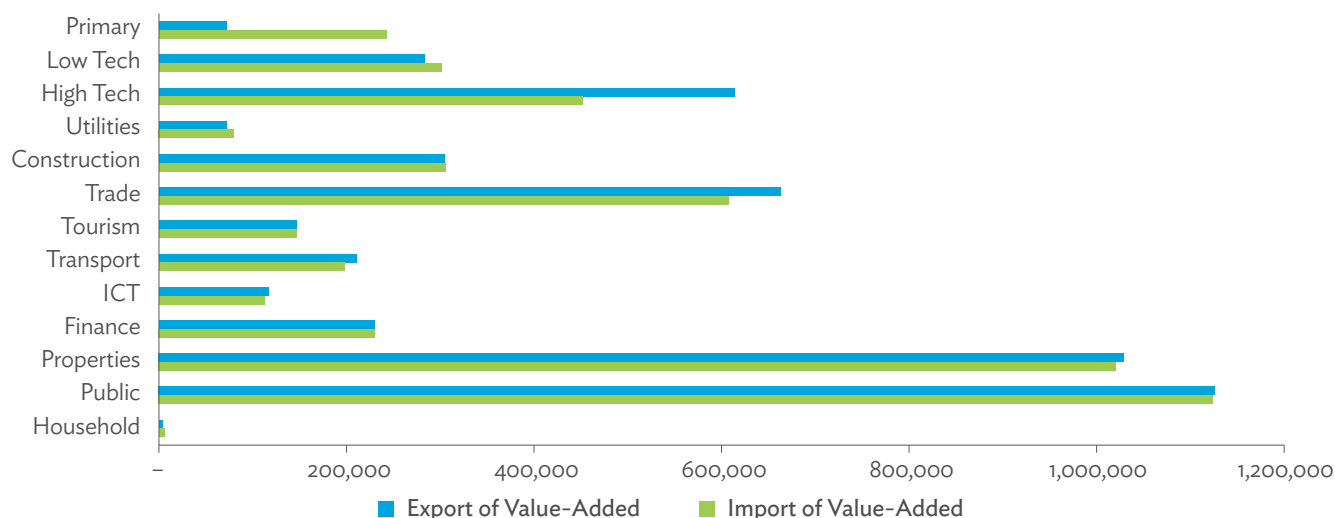


● Economy in focus ● Import partner ● Export partner

AUS = Australia, JPN = Japan, KOR = Republic of Korea, PRC = People's Republic of China, USA = United States.  
Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

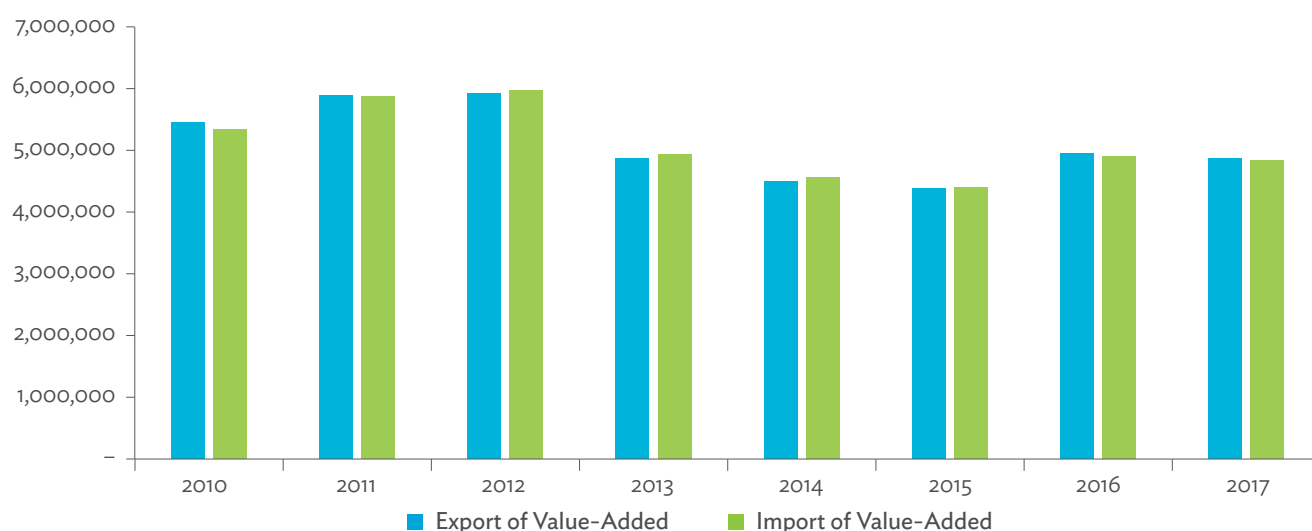
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**Figure 2.4.2: Trade in Value-Added by Industry, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

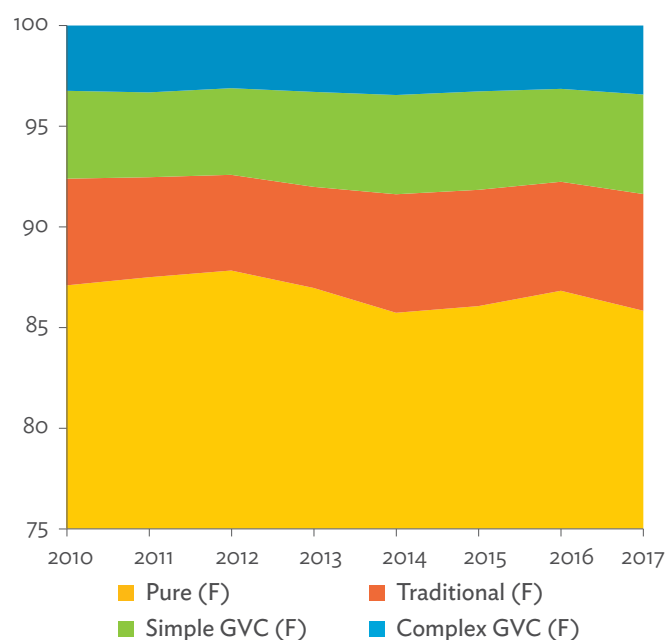
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**Figure 2.4.3: Trade in Value-Added, 2010–2017 (\$ million)**

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

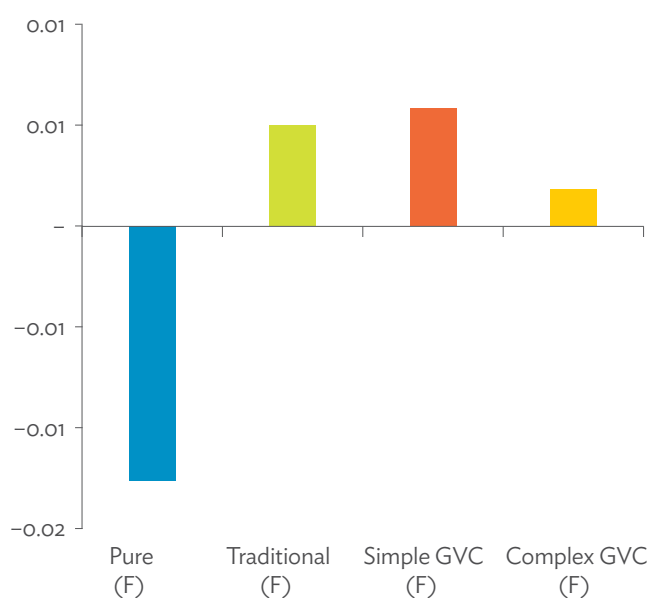
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**Figure 2.4.4: Trends in Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Forward Linkages, 2010–2017 (%)**

GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.4.5: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Forward Linkages (%)**

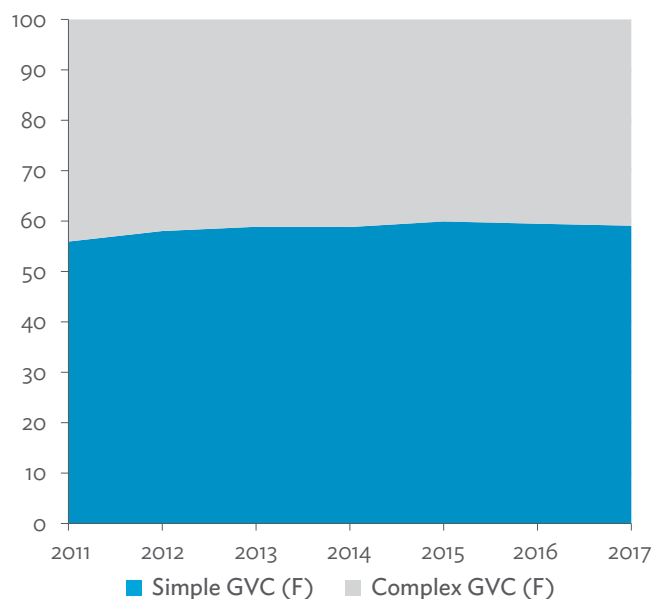
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.4.6: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Forward Linkages, 2010–2017 (%)**

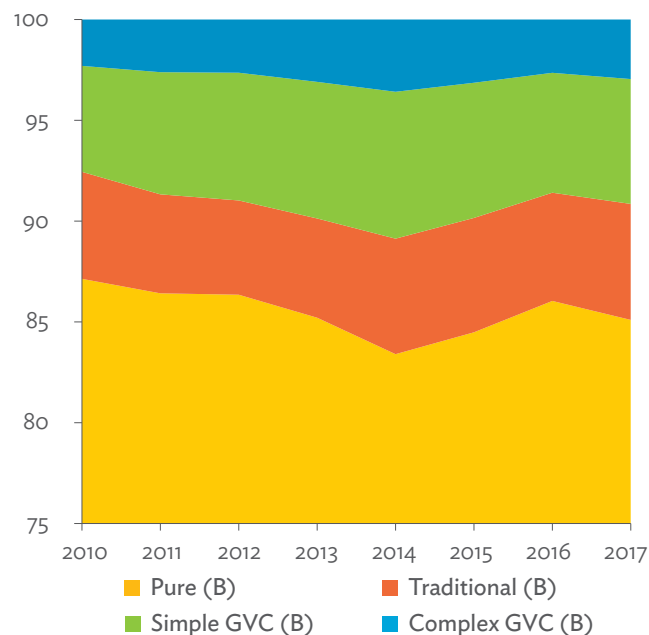


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.4.7: Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Backward Linkages, 2010–2017 (%)**

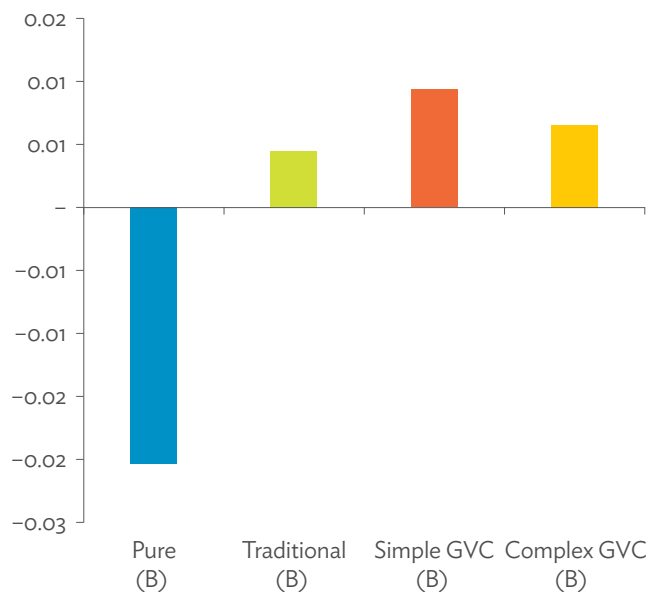


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.4.8: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Backward Linkages (%)**



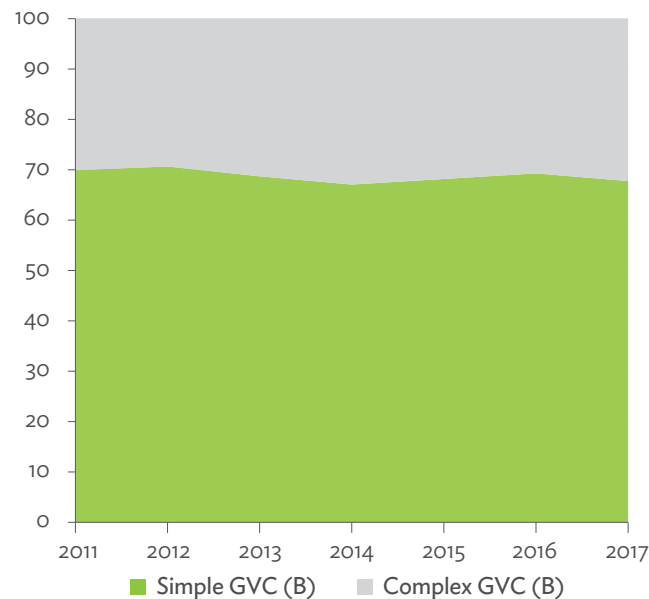
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.4.9: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Backward Linkages (%)**

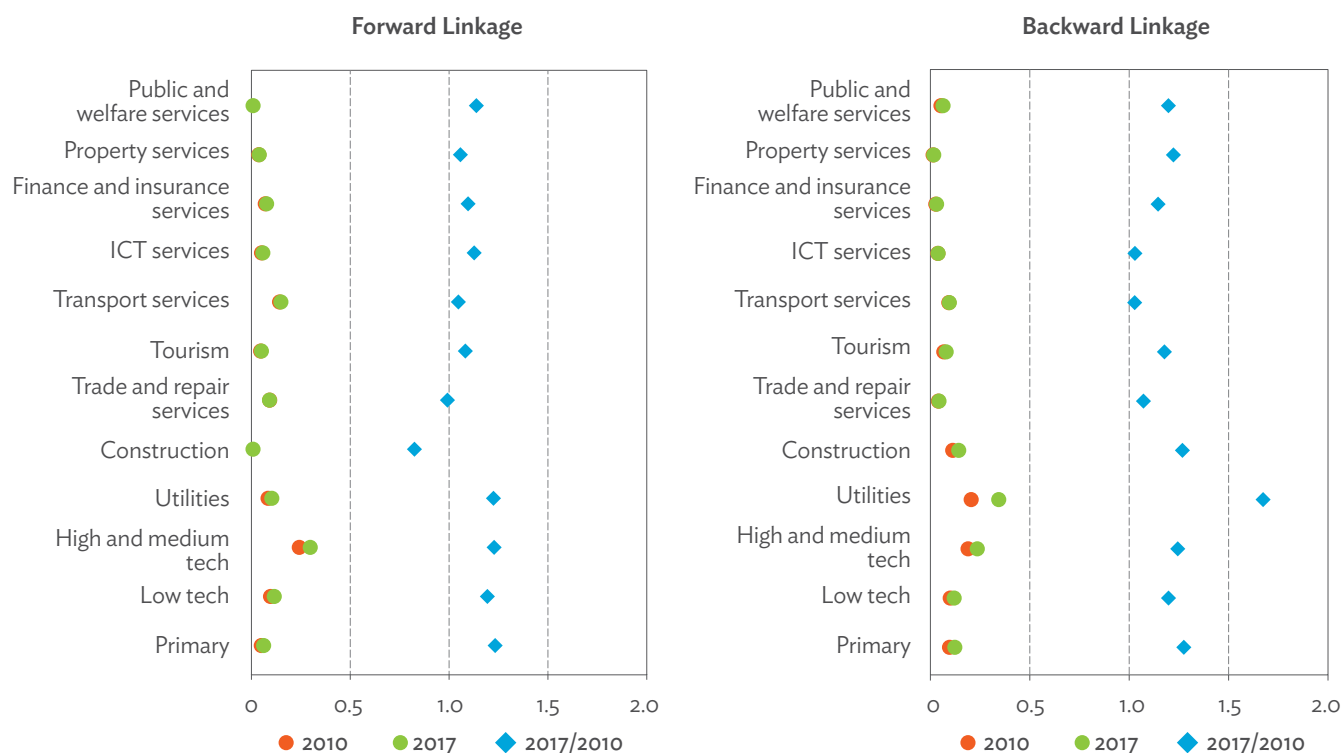


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 2.4.10: Global Value Chain Participation Based on Forward and Backward Linkages at the Sectoral Level, 2010 and 2017**

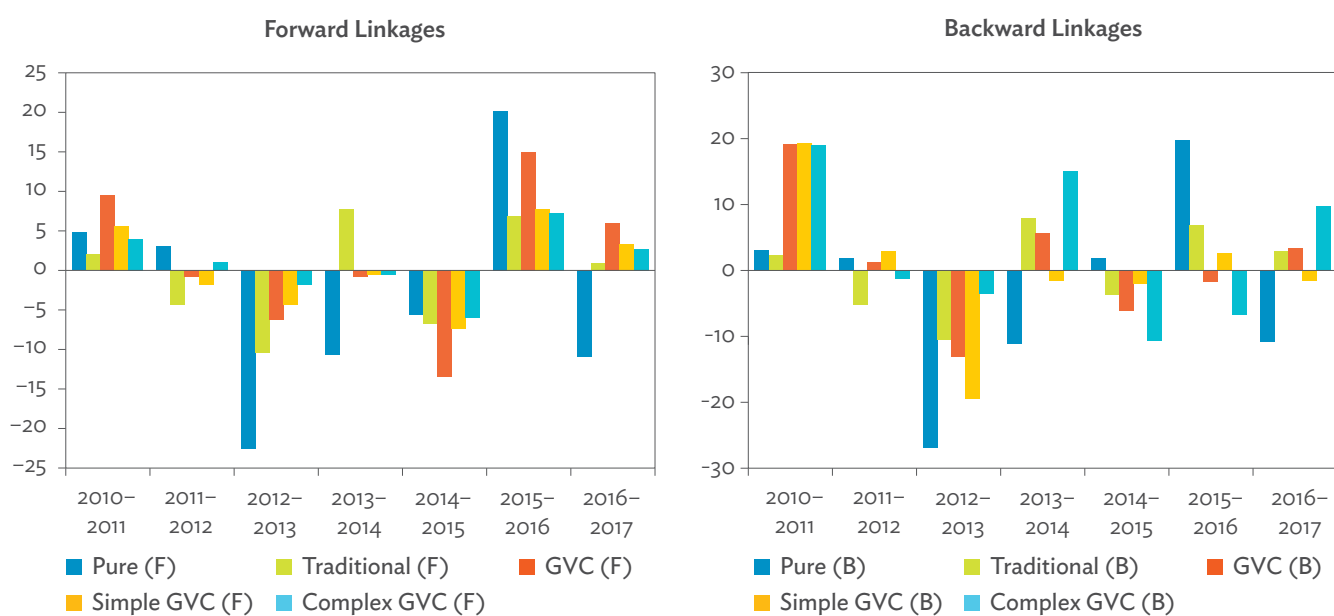


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 2.4.11: Nominal Growth Rates of Different Value-Added Activities in the Manufacturing Sector, 2010–2017 (%)**



GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input-Output Database.

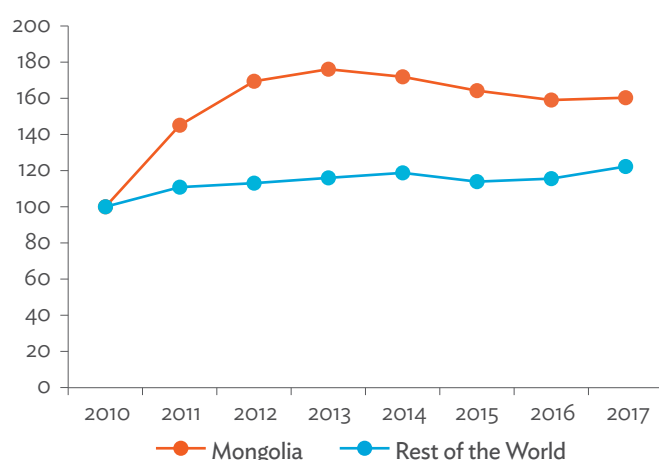
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# OVERVIEW OF PRODUCTION AND DEMAND STRUCTURES

# 3.1

## Mongolia

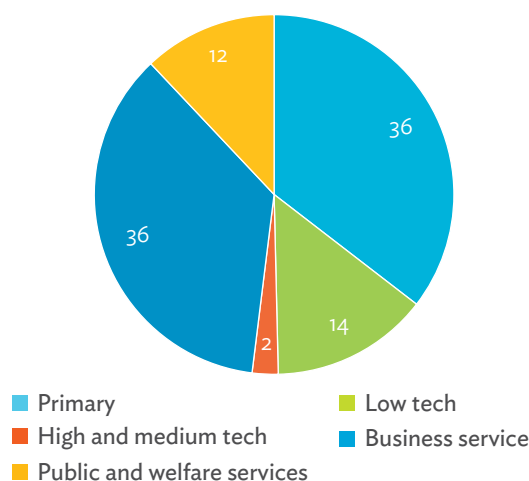
**Figure 3.1.1a: Gross Domestic Product Scaled to 2010 Levels in Comparison with the Rest of the World, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

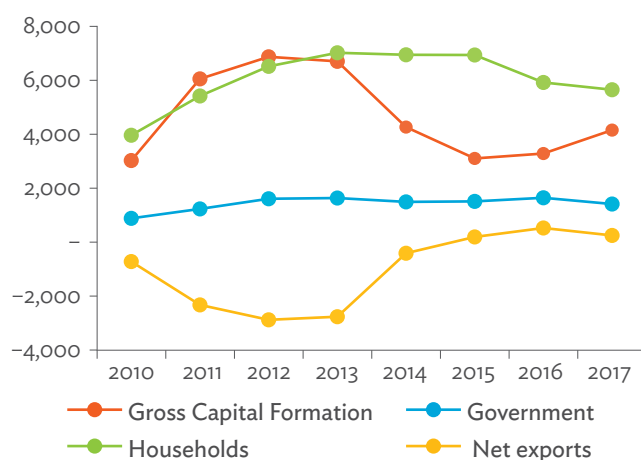
**Figure 3.1.1b: Gross Domestic Product Share by 5-Sector Aggregation, 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.1.2a: Gross Domestic Product Trend by Final Consumption Expenditure Components, 2010–2017 (\$ million)**

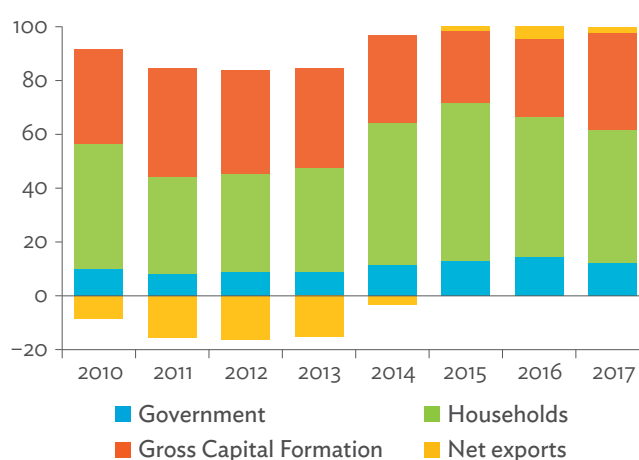


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

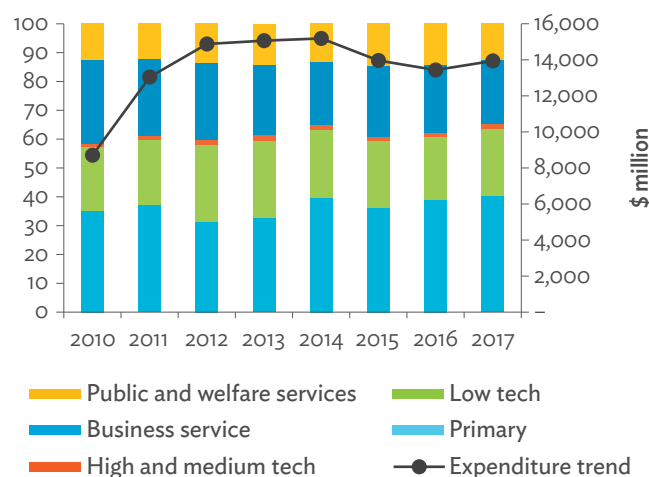
**Figure 3.1.2b: Share of Consumption Expenditure by Final Consumption Expenditure Components, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.1.2c: Final Consumption Expenditure Total Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

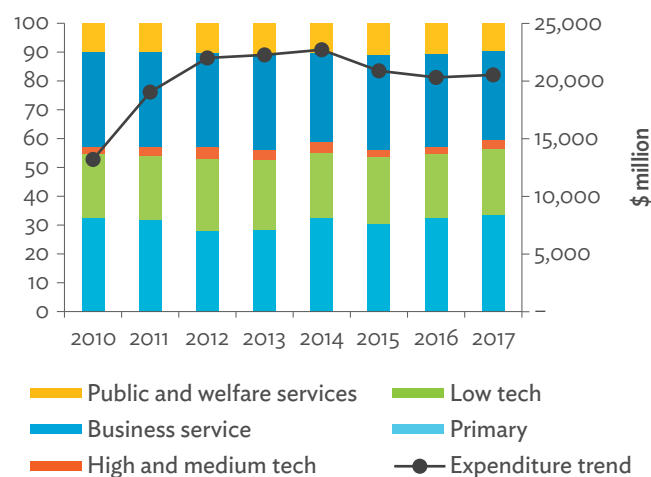


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.1.3a: Gross Total Output Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

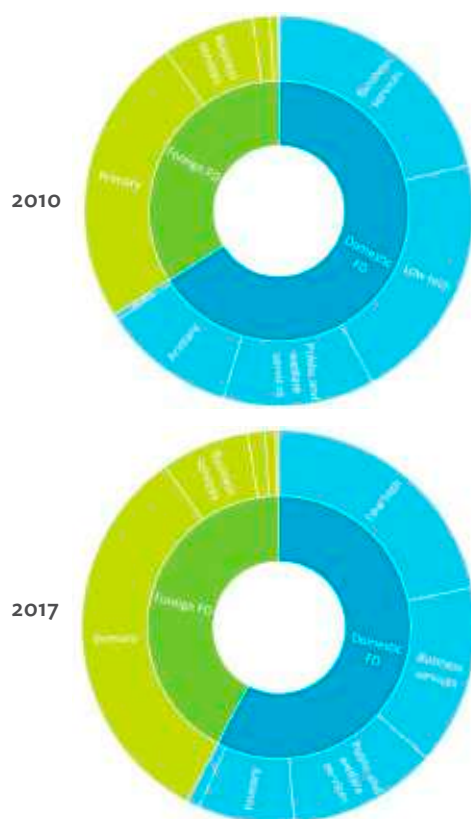


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.1.3b: Shares by 5-Sector Aggregation Attributed to Foreign and Domestic Final Demand, 2010 and 2017 (%)**

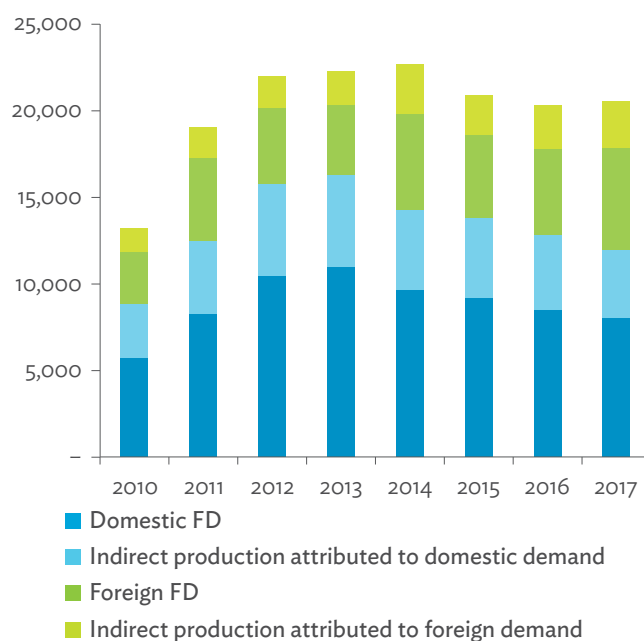


FD=final demand.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.1.3c: Gross Output by Production Attributed to Foreign and Domestic Demand, 2010–2017 (\$ million)**

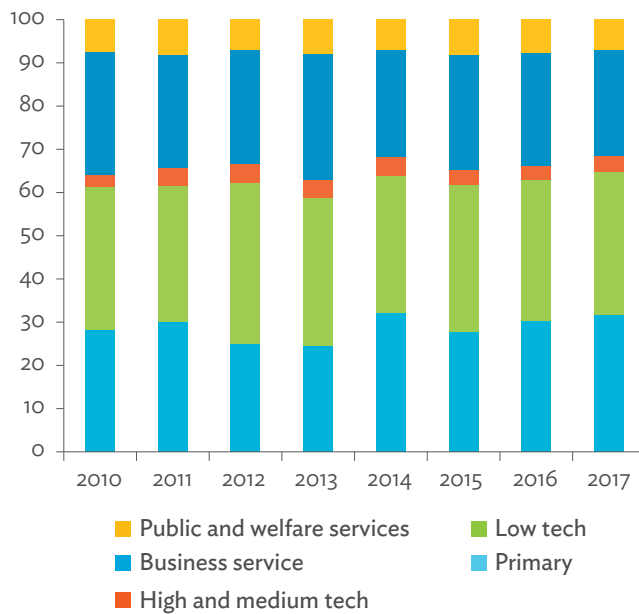


\$ = United States dollar, FD = final demand.

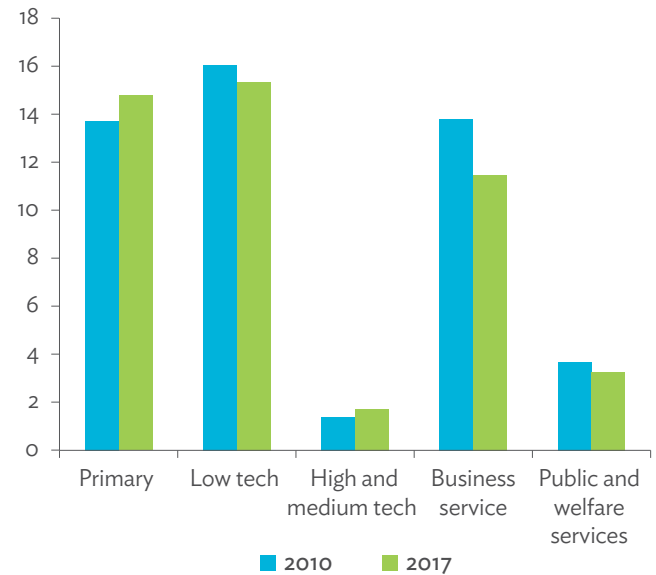
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

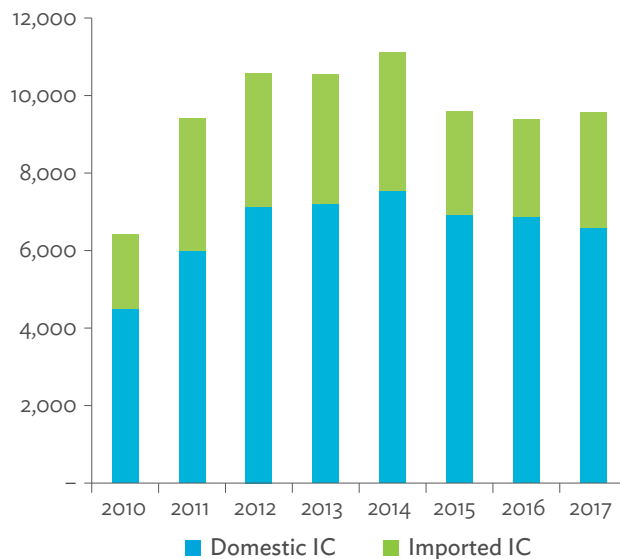


**Figure 3.1.4a: Intermediate Consumption Shares by 5-Sector Aggregation, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

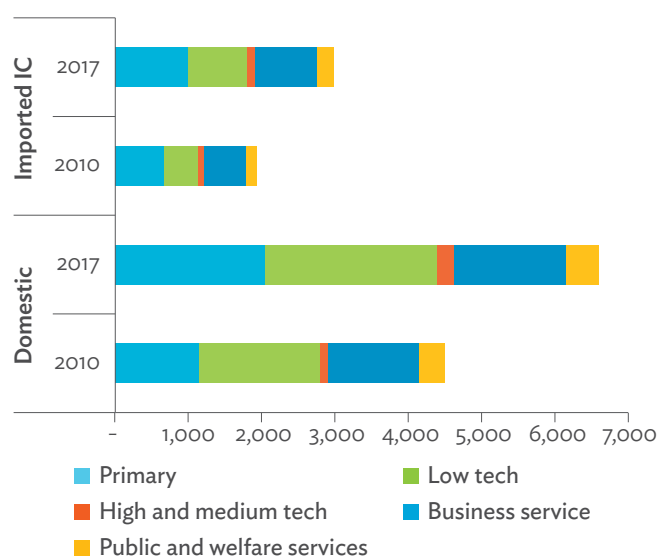
[Click here for figure data](#)**Figure 3.1.4b: Intermediate Consumption Ratio to Output by 5-Sector Aggregation, 2010 and 2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 3.1.4c: Shares of Domestic and Imported Intermediate Consumption, 2010–2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

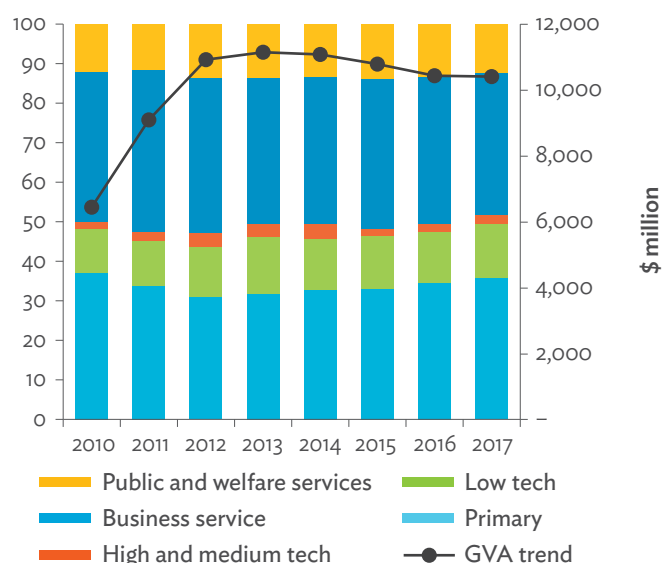
[Click here for figure data](#)**Figure 3.1.4d: Shares of Domestic and Imported Intermediate Consumption by 5-Sector Aggregation, 2010 and 2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.1.5a: Gross Value Added Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

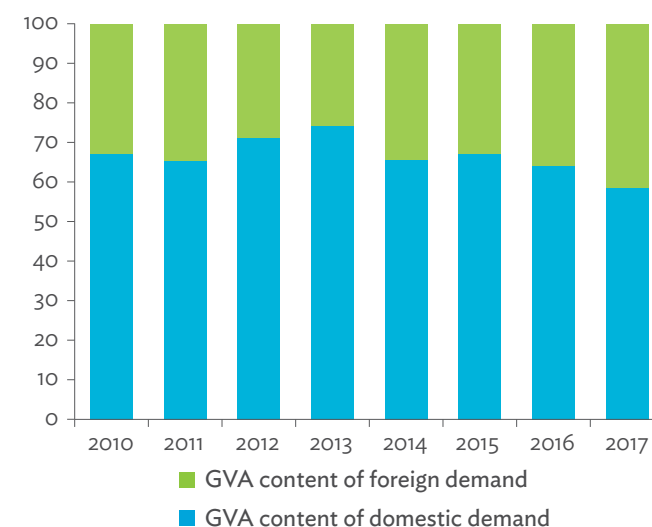


\$ = United States dollar, GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.1.5b: Gross Value Added Share Attributed to Foreign and Domestic Final Demand, 2010–2017 (%)**

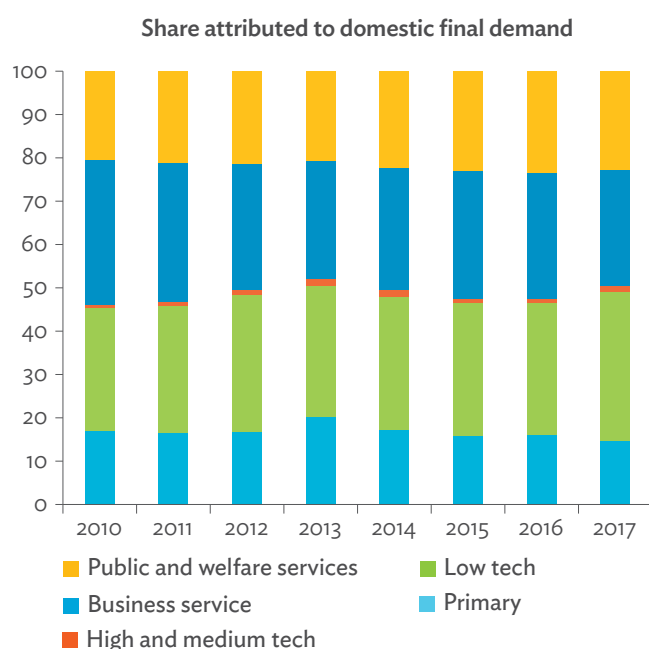


GVA = gross value added.

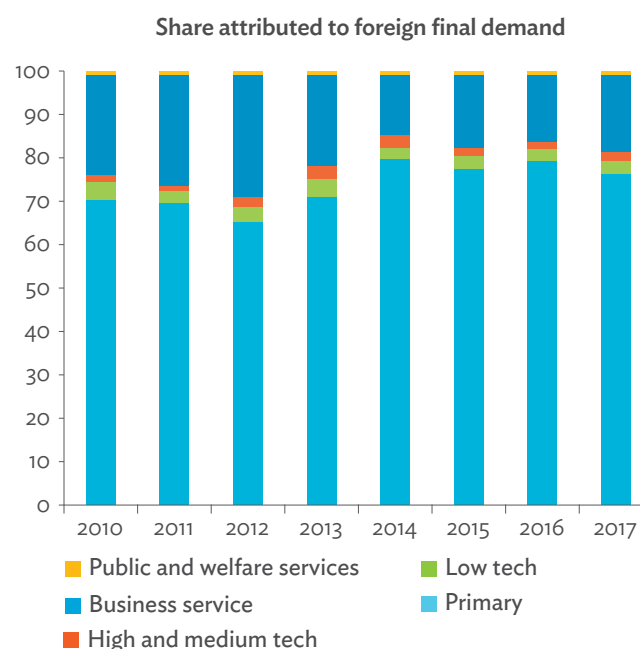
Source: Asian Development Bank Multi-Regional Input-Output Database.

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**Figure 3.1.5c: Sectoral Shares of Gross Value Added Content in Domestic and Foreign Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.



[Click here for figure data](#)

**Table 3.1.1: Gross Value Added Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.844	0.855	0.890	0.907	0.887	0.886	0.884	0.867
Mining and quarrying	0.701	0.610	0.668	0.685	0.656	0.730	0.747	0.719
Food, beverages, and tobacco	0.784	0.770	0.786	0.822	0.795	0.827	0.812	0.778
Textiles and textile products	0.741	0.703	0.745	0.787	0.778	0.732	0.722	0.690
Leather, leather products, and footwear	0.792	0.743	0.798	0.818	0.766	0.807	0.780	0.738
Wood and products of wood and cork	0.683	0.700	0.796	0.648	0.617	0.723	0.702	0.660
Pulp, paper, paper products, printing, and publishing	0.590	0.585	0.610	0.626	0.579	0.646	0.647	0.613
Coke, refined petroleum, and nuclear fuel	0.372	0.594	0.757	0.815	0.802	0.763	0.754	0.723
Chemicals and chemical products	0.538	0.502	0.485	0.512	0.581	0.591	0.603	0.573
Rubber and plastics	0.339	0.356	0.388	0.467	0.419	0.525	0.551	0.507
Other nonmetallic minerals	0.694	0.610	0.637	0.635	0.636	0.676	0.689	0.658
Basic metals and fabricated metal	0.589	0.520	0.544	0.576	0.669	0.692	0.731	0.705
Machinery, nec	0.624	0.523	0.551	0.558	0.564	0.566	0.575	0.539
Electrical and optical equipment	0.407	0.604	0.432	0.510	0.615	0.588	0.610	0.587
Transport equipment	0.091	0.639	0.665	0.735	0.682	0.672	0.713	0.683
Manufacturing, nec; recycling	0.677	0.626	0.662	0.630	0.654	0.685	0.686	0.658
Electricity, gas, and water supply	0.769	0.757	0.742	0.762	0.657	0.677	0.730	0.691
Construction	0.529	0.460	0.535	0.528	0.534	0.597	0.620	0.572
Sale, maintenance, and repair	0.732	0.815	0.868	0.845	0.826	0.850	0.851	0.833
Wholesale trade and commission trade	0.806	0.860	0.841	0.869	0.817	0.810	0.814	0.795
Retail trade	0.805	0.855	0.893	0.847	0.846	0.868	0.869	0.854
Hotels and restaurants	0.658	0.671	0.737	0.741	0.734	0.770	0.767	0.735
Inland transport	0.645	0.580	0.612	0.550	0.608	0.588	0.586	0.557
Water transport	0.641	0.819	0.801	0.867	0.745	0.774	0.780	0.750
Air transport	0.581	0.595	0.546	0.551	0.615	0.737	0.739	0.714
Other supporting and auxiliary transport activities	0.680	0.700	0.755	0.532	0.674	0.679	0.680	0.651
Post and telecommunications	0.785	0.793	0.795	0.743	0.718	0.736	0.755	0.733
Financial intermediation	0.861	0.816	0.913	0.892	0.903	0.907	0.908	0.896
Real estate activities	0.915	0.928	0.907	0.921	0.911	0.920	0.921	0.911
Renting of M&Eq and other business activities	0.719	0.685	0.762	0.705	0.717	0.736	0.741	0.709
Public administration and defense; compulsory social security	0.795	0.789	0.785	0.800	0.796	0.831	0.835	0.814
Education	0.856	0.860	0.895	0.866	0.888	0.883	0.883	0.868
Health and social work	0.754	0.727	0.797	0.759	0.743	0.740	0.746	0.724
Other community, social, and personal services	0.779	0.700	0.805	0.810	0.789	0.800	0.794	0.768
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.999

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 3.1.2: Import Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.133	0.126	0.096	0.078	0.098	0.097	0.097	0.111
Mining and quarrying	0.255	0.340	0.292	0.274	0.304	0.231	0.217	0.243
Food, beverages, and tobacco	0.178	0.191	0.175	0.138	0.169	0.141	0.153	0.186
Textiles and textile products	0.232	0.265	0.225	0.182	0.194	0.243	0.251	0.284
Leather, leather products, and footwear	0.182	0.223	0.168	0.148	0.202	0.162	0.188	0.229
Wood and products of wood and cork	0.275	0.260	0.175	0.296	0.332	0.237	0.256	0.298
Pulp, paper, paper products, printing, and publishing	0.355	0.365	0.338	0.319	0.371	0.300	0.296	0.332
Coke, refined petroleum, and nuclear fuel	0.513	0.354	0.215	0.160	0.175	0.203	0.213	0.244
Chemicals and chemical products	0.401	0.432	0.445	0.417	0.371	0.350	0.334	0.367
Rubber and plastics	0.573	0.562	0.532	0.455	0.515	0.412	0.380	0.427
Other nonmetallic minerals	0.264	0.342	0.316	0.308	0.319	0.272	0.255	0.288
Basic metals and fabricated metal	0.355	0.417	0.397	0.359	0.293	0.260	0.216	0.244
Machinery, nec	0.325	0.408	0.388	0.379	0.381	0.364	0.349	0.389
Electrical and optical equipment	0.513	0.346	0.498	0.427	0.345	0.356	0.329	0.355
Transport equipment	0.743	0.318	0.296	0.227	0.276	0.280	0.235	0.265
Manufacturing, nec; recycling	0.279	0.324	0.291	0.313	0.304	0.268	0.265	0.294
Electricity, gas, and water supply	0.262	0.267	0.258	0.242	0.326	0.287	0.235	0.271
Construction	0.399	0.449	0.403	0.403	0.408	0.344	0.316	0.354
Sale, maintenance, and repair	0.230	0.164	0.118	0.132	0.152	0.125	0.124	0.139
Wholesale trade and commission trade	0.163	0.124	0.140	0.112	0.160	0.160	0.154	0.171
Retail trade	0.167	0.127	0.095	0.130	0.134	0.109	0.108	0.120
Hotels and restaurants	0.271	0.266	0.212	0.202	0.213	0.180	0.180	0.203
Inland transport	0.292	0.363	0.351	0.388	0.346	0.325	0.323	0.338
Water transport	0.308	0.156	0.183	0.120	0.224	0.198	0.191	0.218
Air transport	0.360	0.350	0.406	0.387	0.335	0.213	0.208	0.226
Other supporting and auxiliary transport activities	0.270	0.275	0.224	0.403	0.287	0.259	0.255	0.274
Post and telecommunications	0.189	0.182	0.180	0.225	0.252	0.230	0.218	0.236
Financial intermediation	0.123	0.160	0.075	0.092	0.084	0.078	0.077	0.086
Real estate activities	0.074	0.061	0.079	0.066	0.076	0.067	0.065	0.074
Renting of M&Eq and other business activities	0.245	0.276	0.208	0.252	0.247	0.225	0.218	0.244
Public administration and defense; compulsory social security	0.177	0.186	0.187	0.173	0.178	0.142	0.137	0.154
Education	0.123	0.120	0.089	0.111	0.095	0.098	0.097	0.109
Health and social work	0.213	0.235	0.175	0.205	0.227	0.221	0.213	0.228
Other community, social, and personal services	0.195	0.263	0.171	0.162	0.182	0.171	0.176	0.198
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 3.1.3: Output Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.339	1.347	1.281	1.275	1.285	1.313	1.313	1.286
Mining and quarrying	1.435	1.355	1.401	1.472	1.549	1.502	1.534	1.474
Food, beverages, and tobacco	1.852	1.788	1.860	1.712	1.788	1.849	1.834	1.795
Textiles and textile products	2.042	1.995	1.864	1.750	1.575	1.557	1.544	1.493
Leather, leather products, and footwear	1.920	2.042	2.030	1.889	1.898	1.966	1.923	1.866
Wood and products of wood and cork	1.701	2.004	1.735	1.620	1.792	1.749	1.714	1.653
Pulp, paper, paper products, printing, and publishing	1.606	1.480	1.530	1.465	1.501	1.539	1.538	1.476
Coke, refined petroleum, and nuclear fuel	1.337	1.445	1.352	1.587	1.653	2.117	2.099	2.032
Chemicals and chemical products	1.379	1.393	1.427	1.478	1.378	1.377	1.401	1.343
Rubber and plastics	1.373	1.329	1.369	1.452	1.438	1.557	1.614	1.528
Other nonmetallic minerals	1.467	1.603	1.571	1.550	1.549	1.589	1.626	1.565
Basic metals and fabricated metal	1.587	1.527	1.537	1.523	1.450	1.449	1.534	1.479
Machinery, nec	1.556	1.335	1.418	1.480	1.459	1.502	1.525	1.450
Electrical and optical equipment	1.378	1.253	1.322	1.305	1.286	1.311	1.360	1.313
Transport equipment	1.164	1.709	1.487	1.508	1.644	1.747	1.834	1.775
Manufacturing, nec; recycling	1.645	1.693	1.697	1.604	1.456	1.501	1.502	1.451
Electricity, gas, and water supply	2.215	2.149	2.107	2.184	1.663	1.707	1.830	1.748
Construction	1.732	1.636	1.649	1.604	1.697	1.780	1.829	1.716
Sale, maintenance, and repair	1.581	1.393	1.332	1.360	1.389	1.383	1.384	1.352
Wholesale trade and commission trade	1.372	1.262	1.313	1.260	1.328	1.380	1.389	1.355
Retail trade	1.455	1.283	1.282	1.353	1.355	1.345	1.345	1.319
Hotels and restaurants	1.908	1.883	1.711	1.628	1.669	1.717	1.716	1.680
Inland transport	1.279	1.318	1.455	1.425	1.407	1.344	1.343	1.301
Water transport	1.492	1.244	1.191	1.263	1.478	1.542	1.553	1.495
Air transport	1.605	1.753	1.769	1.834	1.608	1.510	1.516	1.474
Other supporting and auxiliary transport activities	1.730	1.567	1.631	1.462	1.370	1.364	1.367	1.320
Post and telecommunications	1.449	1.434	1.388	1.331	1.295	1.336	1.364	1.327
Financial intermediation	1.427	1.381	1.261	1.282	1.215	1.236	1.236	1.218
Real estate activities	1.292	1.121	1.261	1.259	1.289	1.244	1.244	1.218
Renting of M&Eq and other business activities	1.603	1.677	1.466	1.659	1.503	1.570	1.581	1.524
Public administration and defense; compulsory social security	1.430	1.565	1.419	1.509	1.401	1.398	1.404	1.366
Education	1.396	1.359	1.284	1.319	1.247	1.290	1.290	1.267
Health and social work	1.428	1.422	1.310	1.286	1.264	1.262	1.276	1.242
Other community, social, and personal services	1.513	1.768	1.390	1.472	1.539	1.556	1.542	1.495
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.002	1.002	1.002

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

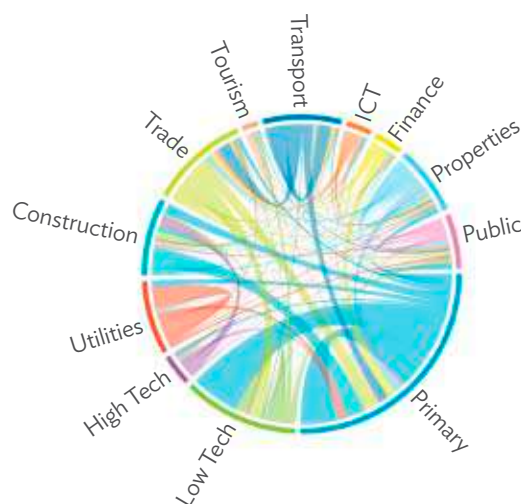
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 3.2

## DOMESTIC INTERINDUSTRY LINKAGES

### Mongolia

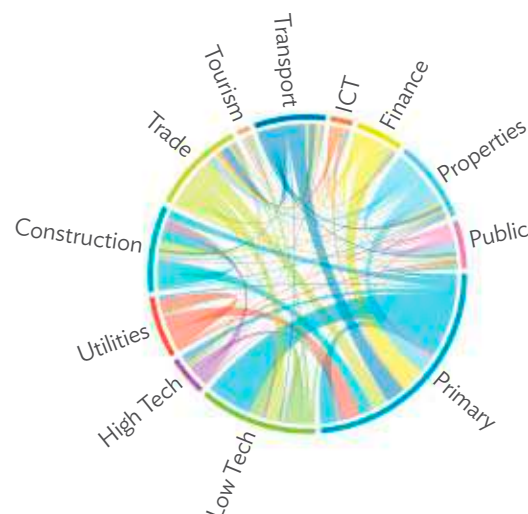
**Figure 3.2.1a: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2010**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

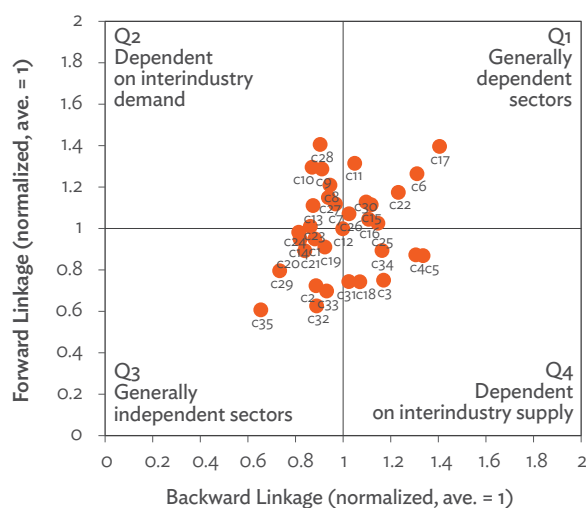
**Figure 3.2.1b: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2017**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

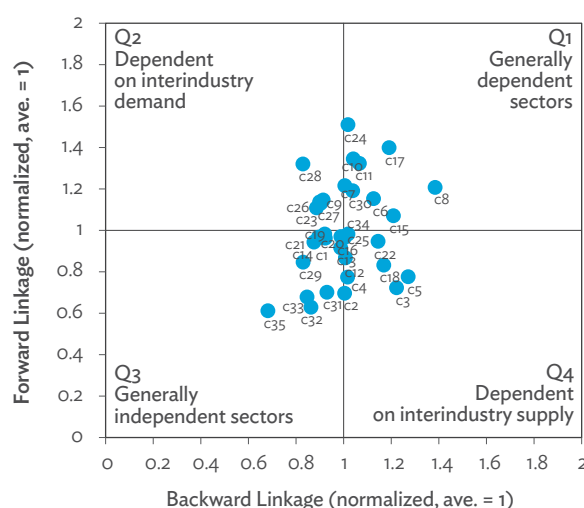
**Figure 3.2.2a: Backward and Forward Linkages by Industry, 2011**



Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.2.2b: Backward and Forward Linkages by Industry, 2017**

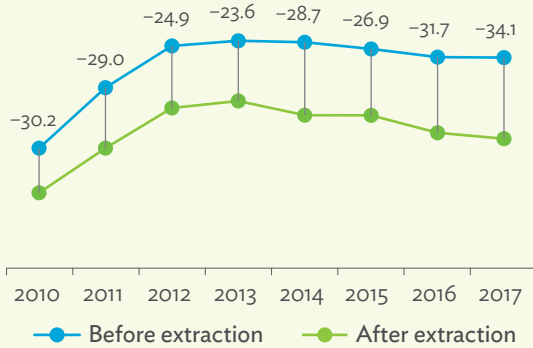


Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

### Box 3: Hypothetical Extraction of Mining and Quarrying Industry in Mongolia

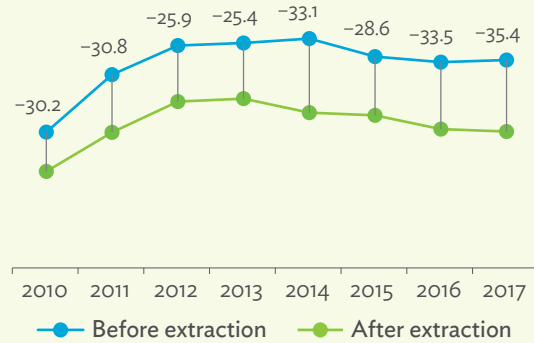
**Figure 3.2.3a: Potential Decline in Gross Value Added, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

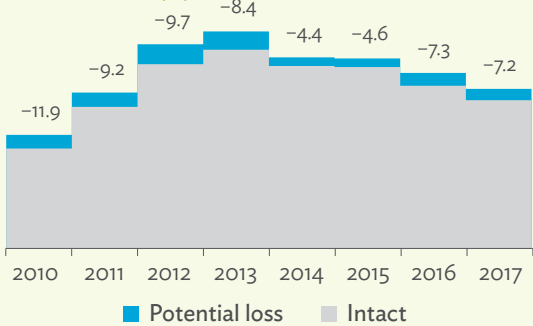
**Figure 3.2.4a: Potential Decline in Gross Output, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

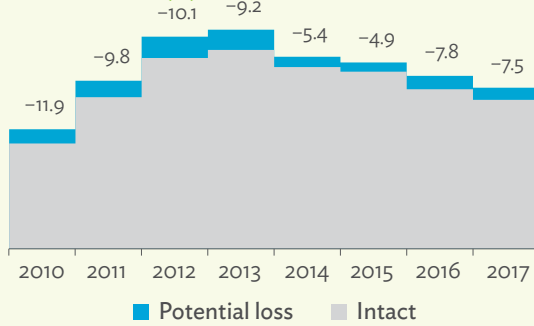
**Figure 3.2.3b: Potential Decline in Gross Value Added Attributed to Domestic Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

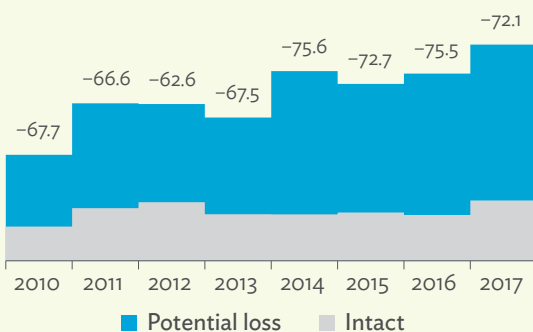
**Figure 3.2.4b: Potential Decline in Gross Output Attributed to Domestic Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

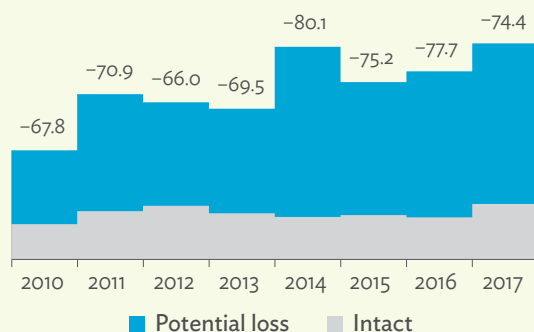
**Figure 3.2.3c: Potential Decline in Gross Value Added Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.2.4c: Potential Decline in Gross Output Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



**Table 3.2.1: Input-Output Backward Linkage**

Industry	2011	2012	2013	2014	2015	2016	2017	
Agriculture, hunting, forestry, and fishing	0.881	0.861	0.855	0.875	0.874	0.866	0.876	
Mining and quarrying	0.886	0.941	0.987	1.054	0.999	1.011	1.004	
Food, beverages, and tobacco	1.170	1.250	1.149	1.217	1.231	1.209	1.222	
Textiles and textile products	1.305	1.252	1.174	1.072	1.036	1.018	1.017	
Leather, leather products, and footwear	1.335	1.364	1.267	1.292	1.308	1.267	1.271	
Wood and products of wood and cork	1.310	1.166	1.087	1.220	1.164	1.129	1.126	
Pulp, paper, paper products, printing, and publishing	0.968	1.028	0.983	1.022	1.024	1.013	1.005	
Coke, refined petroleum, and nuclear fuel	0.945	0.908	1.065	1.125	1.409	1.383	1.383	
Chemicals and chemical products	0.911	0.959	0.992	0.938	0.917	0.923	0.914	
Rubber and plastics	0.869	0.920	0.974	0.979	1.036	1.064	1.040	
Other nonmetallic minerals	1.048	1.055	1.040	1.054	1.057	1.072	1.066	
Basic metals and fabricated metal	0.999	1.032	1.022	0.987	0.965	1.011	1.007	
Machinery, nec	0.873	0.952	0.993	0.993	1.000	1.005	0.987	
Electrical and optical equipment	0.819	0.888	0.875	0.875	0.872	0.897	0.894	
Transport equipment	1.118	0.999	1.012	1.119	1.163	1.209	1.209	
Manufacturing, nec; recycling	1.107	1.140	1.076	0.991	0.999	0.990	0.988	
Electricity, gas, and water supply	1.405	1.415	1.465	1.132	1.136	1.206	1.191	
Construction	1.070	1.108	1.077	1.155	1.185	1.205	1.168	
Sale, maintenance, and repair	0.911	0.895	0.912	0.946	0.921	0.912	0.921	
Wholesale trade and commission trade	0.825	0.882	0.846	0.904	0.918	0.915	0.923	
Retail trade	0.839	0.862	0.908	0.922	0.895	0.886	0.898	
Hotels and restaurants	1.232	1.149	1.092	1.136	1.143	1.131	1.144	
Inland transport	0.862	0.977	0.956	0.958	0.895	0.885	0.886	
Water transport	0.813	0.800	0.847	1.006	1.026	1.024	1.018	
Air transport	1.146	1.188	1.230	1.095	1.005	0.999	1.003	
Other supporting and auxiliary transport activities	1.025	1.096	0.981	0.933	0.908	0.901	0.899	
Post and telecommunications	0.938	0.932	0.893	0.882	0.889	0.899	0.903	
Financial intermediation	0.903	0.847	0.861	0.827	0.822	0.815	0.829	
Real estate activities	0.733	0.847	0.845	0.878	0.828	0.820	0.830	
Renting of M&Eq and other business activities	1.097	0.985	1.113	1.023	1.045	1.042	1.038	
Public administration and defense; compulsory social security	1.023	0.954	1.013	0.954	0.930	0.925	0.930	
Education	0.889	0.863	0.885	0.849	0.859	0.850	0.863	
Health and social work	0.930	0.880	0.863	0.861	0.840	0.841	0.846	
Other community, social, and personal services	1.157	0.934	0.988	1.047	1.036	1.016	1.018	
Private households with employed persons	0.654	0.672	0.671	0.681	0.667	0.660	0.682	
	lowest linkage	<div><div></div><div></div><div></div></div>			<div><div></div><div></div><div></div></div>			highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

Source: Asian Development Bank Multi-Regional Input-Output Database.

Table 3.2.2: Input-Output Forward Linkage

Industry	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.948	0.966	0.866	0.842	0.881	0.887	0.942
Mining and quarrying	0.715	0.760	0.728	0.692	0.683	0.701	0.689
Food, beverages, and tobacco	0.743	0.716	0.685	0.689	0.684	0.686	0.716
Textiles and textile products	0.868	0.924	0.817	0.794	0.760	0.749	0.768
Leather, leather products, and footwear	0.865	0.803	0.802	0.777	0.746	0.747	0.770
Wood and products of wood and cork	1.271	1.275	1.185	1.275	1.261	1.205	1.157
Pulp, paper, paper products, printing, and publishing	1.122	1.163	1.051	1.091	1.144	1.163	1.222
Coke, refined petroleum, and nuclear fuel	1.215	1.159	1.160	1.183	1.374	1.379	1.213
Chemicals and chemical products	1.295	1.264	1.130	1.199	1.135	1.134	1.150
Rubber and plastics	1.304	1.234	1.168	1.295	1.331	1.336	1.355
Other nonmetallic minerals	1.324	1.438	1.254	1.294	1.326	1.363	1.332
Basic metals and fabricated metal	0.999	1.089	1.060	0.963	0.928	0.943	0.864
Machinery, nec	1.113	1.055	1.176	1.166	1.171	0.956	0.914
Electrical and optical equipment	0.947	0.967	0.973	1.064	1.049	1.024	0.966
Transport equipment	1.118	1.083	1.196	1.124	1.109	1.069	1.073
Manufacturing, nec; recycling	1.045	1.052	1.019	1.018	1.015	1.000	0.969
Electricity, gas, and water supply	1.407	1.364	1.488	1.309	1.324	1.387	1.410
Construction	0.735	0.784	0.746	0.798	0.863	0.878	0.828
Sale, maintenance, and repair	0.904	0.945	0.956	0.980	0.968	0.988	0.982
Wholesale trade and commission trade	0.888	0.932	0.929	0.952	0.950	0.966	0.962
Retail trade	0.889	0.936	0.933	0.954	0.952	0.970	0.966
Hotels and restaurants	1.179	0.966	1.012	0.970	0.917	0.936	0.945
Inland transport	1.010	1.107	1.075	1.102	1.097	1.109	1.111
Water transport	0.981	1.081	1.505	1.472	1.507	1.513	1.524
Air transport	1.026	0.865	0.971	1.010	0.956	0.971	0.964
Other supporting and auxiliary transport activities	1.072	1.079	1.130	1.108	1.086	1.116	1.141
Post and telecommunications	1.154	1.171	1.099	1.041	1.062	1.094	1.134
Financial intermediation	1.417	1.397	1.352	1.301	1.285	1.302	1.329
Real estate activities	0.790	0.833	0.828	0.880	0.795	0.813	0.843
Renting of M&Eq and other business activities	1.131	1.078	1.218	1.200	1.192	1.198	1.196
Public administration and defense; compulsory social security	0.736	0.728	0.715	0.685	0.677	0.652	0.693
Education	0.615	0.632	0.618	0.611	0.602	0.599	0.619
Health and social work	0.689	0.672	0.658	0.651	0.646	0.639	0.670
Other community, social, and personal services	0.891	0.870	0.895	0.920	0.936	0.939	0.981
Private households with employed persons	0.595	0.612	0.599	0.586	0.587	0.585	0.602
	lowest linkage				highest linkage		

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

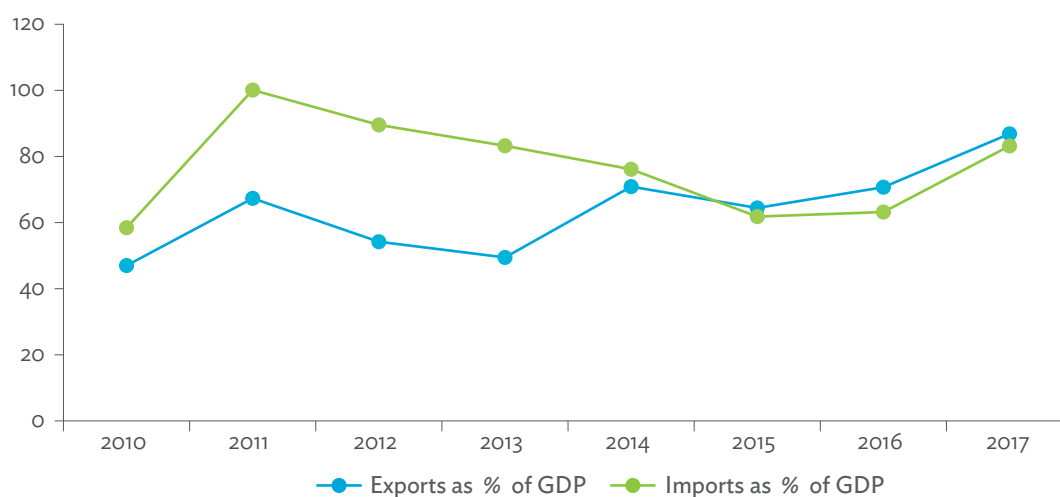
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 3.3

## INTERNATIONAL TRADE AND PRODUCTION LINKAGES

### Mongolia

**Figure 3.3.1: Exports and Imports as a Share of Gross Domestic Product, 2010–2017 (%)**

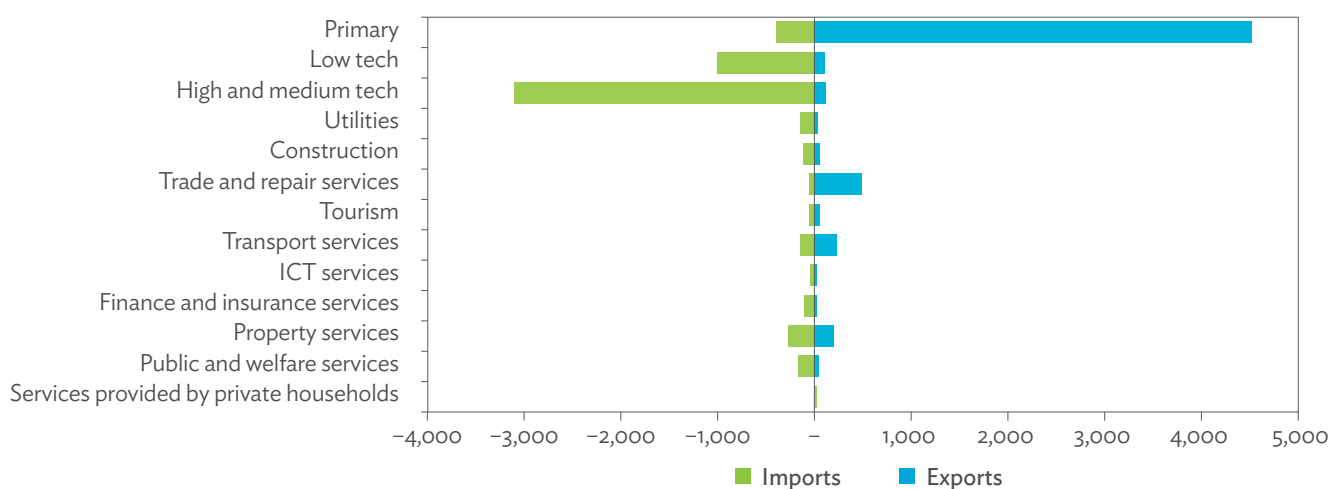


GDP = gross domestic product.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.2: Total Foreign Trade by Sector, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

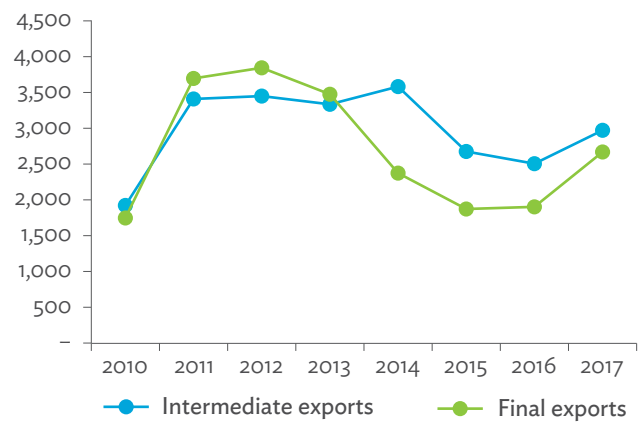
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.3: Trend of Export Activity by End-Use Category, 2010–2017 (\$ million)**

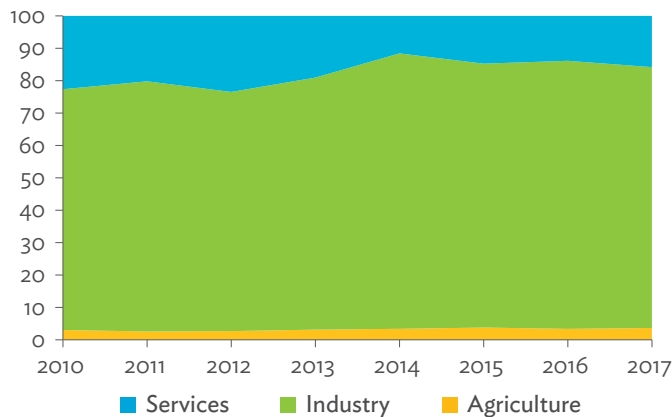
\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

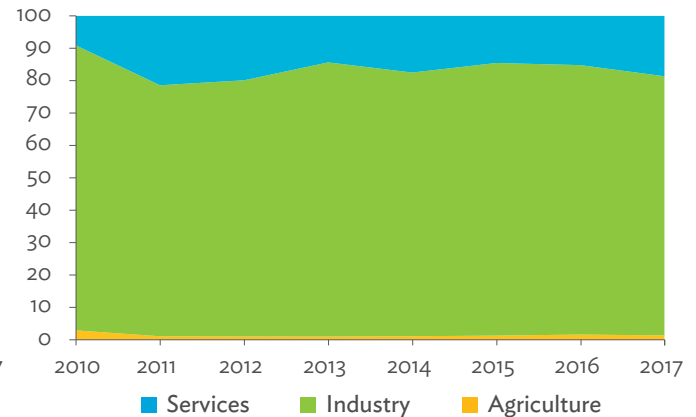
[Click here for figure data](#)**Figure 3.3.6: Trend of Import Activity by End-Use Category, 2010–2017 (\$ million)**

\$ = United States dollar.

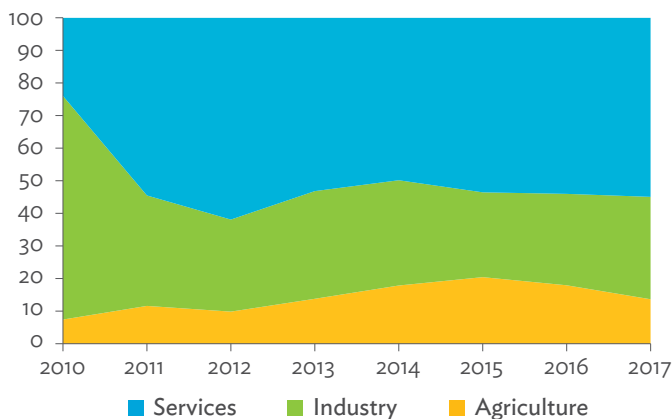
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 3.3.4: Shares of Sectors to Total Intermediate Exports, 2010–2017 (%)**

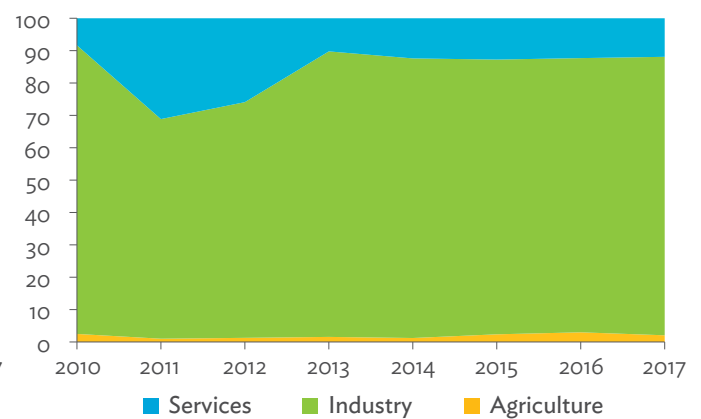
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 3.3.7: Shares of Sectors to Total Intermediate Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 3.3.5: Shares of Sectors to Total Final Exports, 2010–2017 (%)**

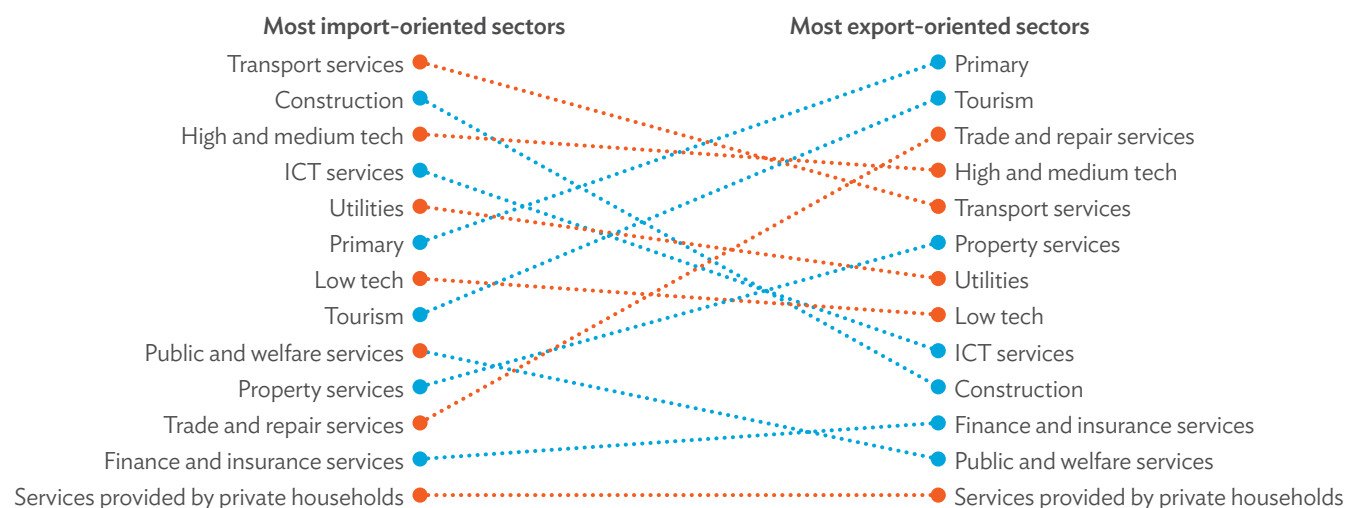
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 3.3.8: Shares of Sectors to Total Final Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.3.9: Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios, 2017**

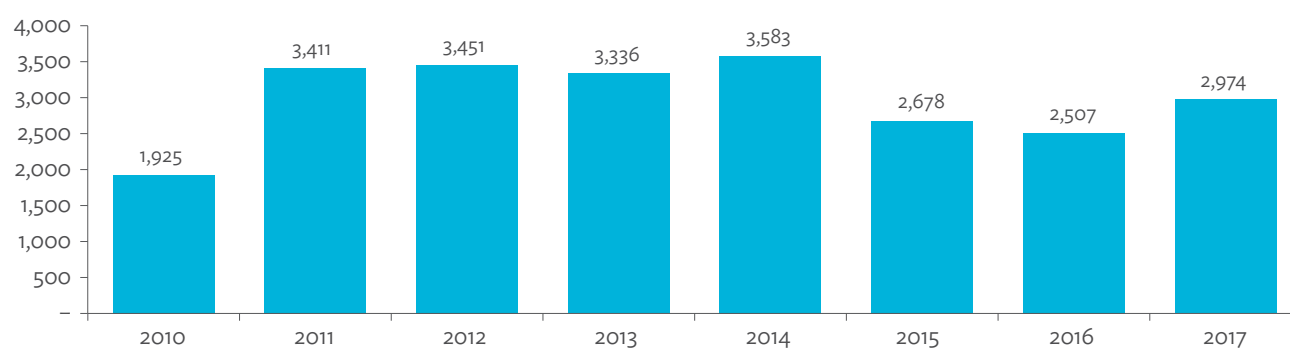


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.10: Total Foreign-Traded Input, 2010–2017 (\$ million)**

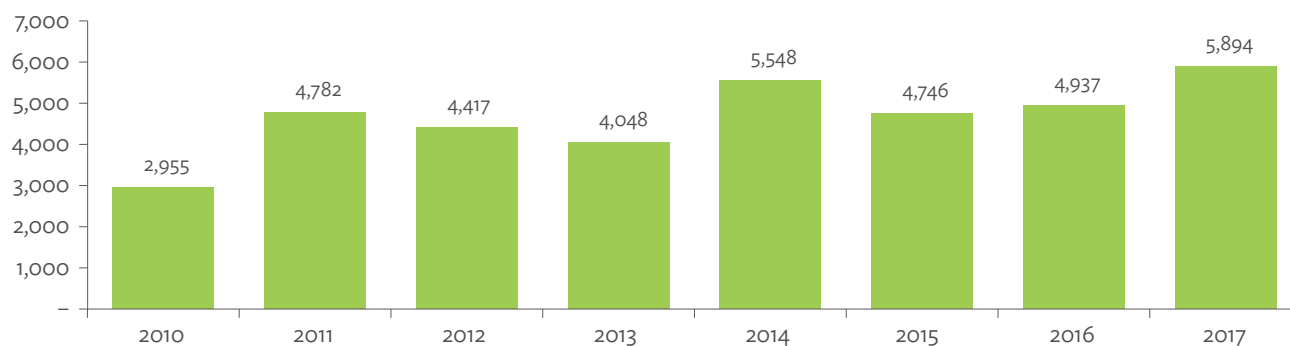


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.11: Total Foreign-Traded Output, 2010–2017 (\$ million)**

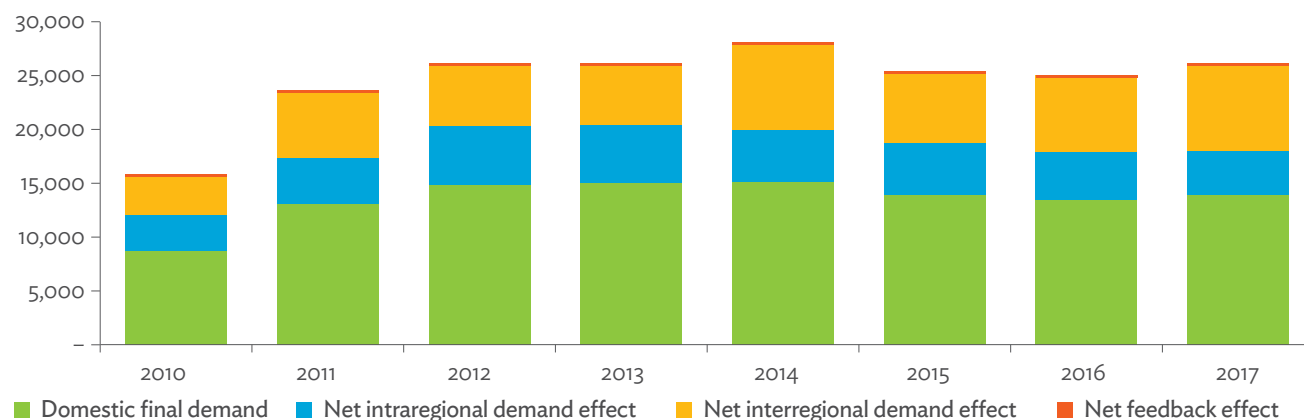


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.12: Decomposition of Total Production Attributable to Domestic and Interregional Demand, 2010–2017 (\$ million)**

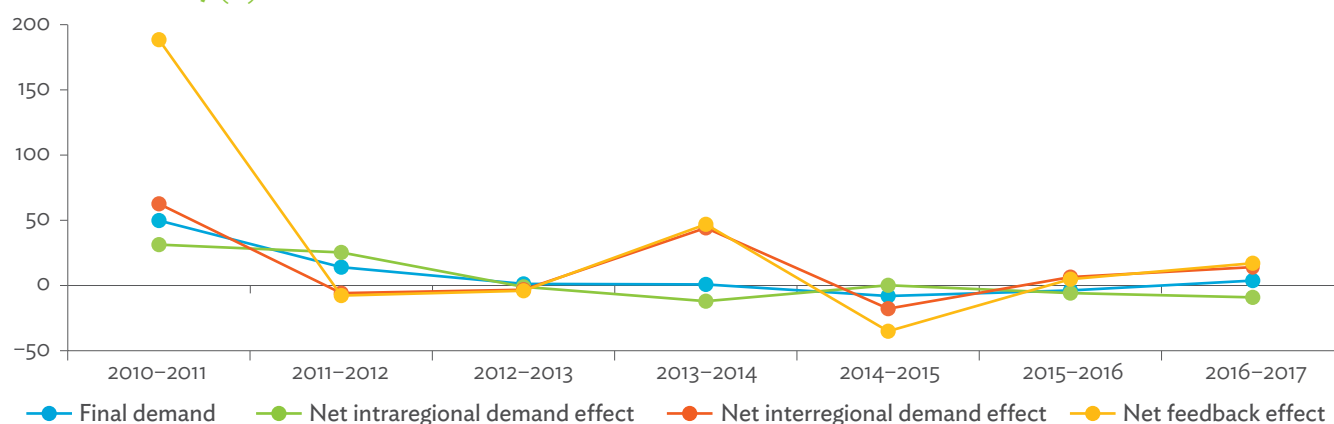


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

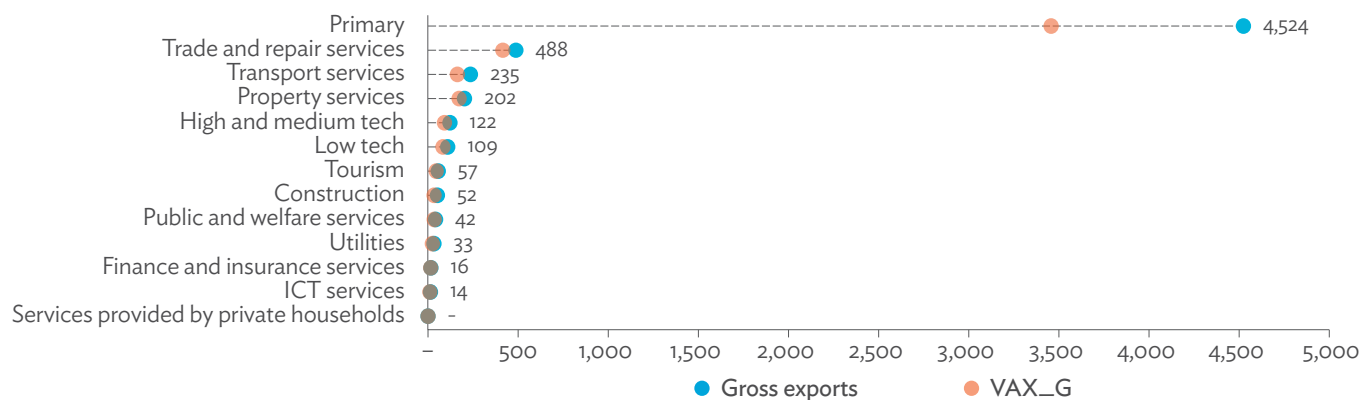
**Figure 3.3.13: Growth Rates of Production Components Based on Two-Region Input-Output Table, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.14: Gross Exports versus Value-Added Exports by Sector, 2017 (\$ million)**

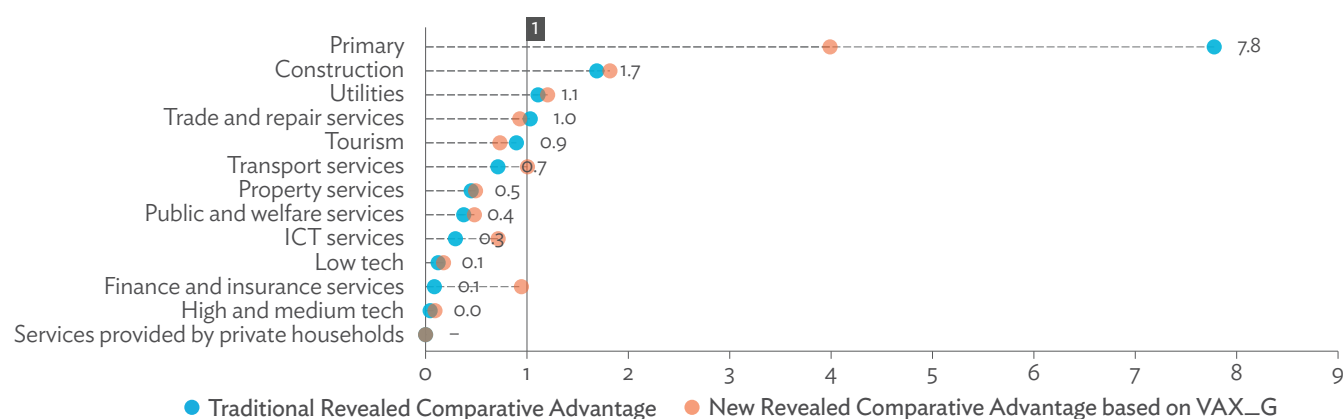


\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.3.15: Comparison of Traditional and New Revealed Comparative Advantage by Sector, 2017**

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Table 3.3.1: Production Attributable to Domestic Linkages by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Final demand								
Primary	3,053	4,835	4,658	4,935	6,012	5,039	5,217	5,628
Low tech	1,936	2,968	3,971	4,014	3,557	3,268	2,960	3,226
High and medium tech	101	180	272	296	315	203	187	268
Business service	2,517	3,459	3,952	3,691	3,290	3,415	3,151	3,074
Personal service	1,100	1,602	2,026	2,125	2,012	2,037	1,918	1,744
Intraregional effects (M1)								
Primary	1,002	1,053	1,311	1,145	1,073	1,106	1,064	1,005
Low tech	690	928	1,154	1,041	898	1,013	961	860
High and medium tech	153	301	470	406	376	240	211	216
Business service	1,316	1,867	2,324	2,597	2,206	2,203	2,087	1,832
Personal service	148	196	189	202	189	189	151	155

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 3.3.2: Production Attributable to Linkages with the Rest of the World by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Interregional effects (M2)								
Primary	2,169	3,687	3,212	3,084	4,789	3,864	4,187	4,758
Low tech	355	373	469	471	736	653	718	743
High and medium tech	107	185	241	222	369	212	188	239
Business service	1,126	1,878	1,835	1,780	2,116	1,862	1,935	2,264
Personal service	46	62	66	77	114	89	83	110
Feedback effects (M3)								
Primary	0.13	0.39	0.34	0.33	0.49	0.32	0.34	0.39
Low tech	0.02	0.03	0.04	0.04	0.07	0.05	0.05	0.06
High and medium tech	0.01	0.02	0.02	0.02	0.03	0.01	0.01	0.02
Business service	0.05	0.17	0.16	0.15	0.19	0.13	0.13	0.16
Personal service	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.



**Table 3.3.3: Net Intraregional Multipliers (M1), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.3392	0.3474	0.2812	0.2746	0.2854	0.3128	0.3133	0.2858
Mining and quarrying	0.4351	0.3554	0.4011	0.4717	0.5489	0.5018	0.5339	0.4742
Food, beverages, and tobacco	0.8520	0.7884	0.8600	0.7124	0.7878	0.8493	0.8342	0.7948
Textiles and textile products	1.0418	0.9953	0.8640	0.7500	0.5746	0.5570	0.5440	0.4932
Leather, leather products, and footwear	0.9199	1.0419	1.0301	0.8888	0.8982	0.9659	0.9230	0.8659
Wood and products of wood and cork	0.7006	1.0037	0.7352	0.6200	0.7919	0.7489	0.7136	0.6529
Pulp, paper, paper products, printing, and publishing	0.6055	0.4800	0.5302	0.4651	0.5011	0.5390	0.5376	0.4762
Coke, refined petroleum, and nuclear fuel	0.3374	0.4448	0.3522	0.5873	0.6533	1.1168	1.0991	1.0315
Chemicals and chemical products	0.3790	0.3930	0.4272	0.4783	0.3778	0.3774	0.4012	0.3427
Rubber and plastics	0.3726	0.3294	0.3691	0.4519	0.4383	0.5572	0.6143	0.5276
Other nonmetallic minerals	0.4673	0.6027	0.5705	0.5505	0.5487	0.5889	0.6263	0.5649
Basic metals and fabricated metal	0.5873	0.5268	0.5366	0.5232	0.4497	0.4493	0.5340	0.4795
Machinery, nec	0.5559	0.3354	0.4175	0.4801	0.4586	0.5022	0.5245	0.4500
Electrical and optical equipment	0.3783	0.2526	0.3217	0.3047	0.2858	0.3105	0.3604	0.3129
Transport equipment	0.1645	0.7089	0.4868	0.5075	0.6436	0.7472	0.8341	0.7750
Manufacturing, nec; recycling	0.6451	0.6929	0.6971	0.6042	0.4560	0.5010	0.5024	0.4509
Electricity, gas, and water supply	1.2147	1.1486	1.1066	1.1837	0.6630	0.7068	0.8302	0.7484
Construction	0.7316	0.6362	0.6493	0.6045	0.6970	0.7804	0.8291	0.7159
Sale, maintenance, and repair	0.5815	0.3928	0.3322	0.3599	0.3894	0.3833	0.3838	0.3522
Wholesale trade and commission trade	0.3724	0.2616	0.3134	0.2603	0.3275	0.3795	0.3887	0.3552
Retail trade	0.4546	0.2831	0.2825	0.3534	0.3549	0.3446	0.3447	0.3192
Hotels and restaurants	0.9084	0.8833	0.7105	0.6281	0.6691	0.7172	0.7161	0.6802
Inland transport	0.2785	0.3182	0.4547	0.4255	0.4072	0.3444	0.3426	0.3007
Water transport	0.4919	0.2437	0.1907	0.2627	0.4777	0.5424	0.5533	0.4954
Air transport	0.6047	0.7525	0.7688	0.8337	0.6084	0.5097	0.5161	0.4735
Other supporting and auxiliary transport activities	0.7301	0.5668	0.6315	0.4624	0.3700	0.3638	0.3667	0.3204
Post and telecommunications	0.4491	0.4343	0.3879	0.3314	0.2950	0.3357	0.3644	0.3266
Financial intermediation	0.4268	0.3813	0.2611	0.2825	0.2151	0.2357	0.2364	0.2176
Real estate activities	0.2920	0.1214	0.2609	0.2594	0.2893	0.2443	0.2444	0.2185
Renting of M&Eq and other business activities	0.6032	0.6766	0.4662	0.6587	0.5031	0.5698	0.5809	0.5240
Public administration and defense; compulsory social security	0.4296	0.5649	0.4195	0.5094	0.4008	0.3975	0.4036	0.3659
Education	0.3964	0.3591	0.2843	0.3189	0.2467	0.2903	0.2903	0.2671
Health and social work	0.4283	0.4224	0.3105	0.2855	0.2641	0.2622	0.2762	0.2425
Other community, social, and personal services	0.5128	0.7684	0.3901	0.4723	0.5388	0.5561	0.5418	0.4945
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0016	0.0016	0.0016

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 3.3.4: Net Interregional Multipliers (M2), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.3269	0.3080	0.2294	0.1907	0.2373	0.2452	0.2464	0.2732
Mining and quarrying	0.6571	0.8683	0.7436	0.7100	0.7746	0.6046	0.5776	0.6261
Food, beverages, and tobacco	0.4378	0.4786	0.4358	0.3510	0.4256	0.3605	0.3852	0.4724
Textiles and textile products	0.5915	0.6877	0.5943	0.4896	0.5198	0.6732	0.6954	0.7771
Leather, leather products, and footwear	0.4512	0.5781	0.4341	0.3840	0.5236	0.4293	0.4933	0.6012
Wood and products of wood and cork	0.7019	0.6368	0.4291	0.7762	0.8608	0.6283	0.6793	0.7824
Pulp, paper, paper products, printing, and publishing	0.8756	0.9110	0.8407	0.8019	0.9340	0.7719	0.7680	0.8413
Coke, refined petroleum, and nuclear fuel	1.3233	0.9326	0.5680	0.4178	0.4468	0.5263	0.5478	0.6314
Chemicals and chemical products	1.0286	1.1089	1.1446	1.0474	0.9669	0.9394	0.9115	0.9713
Rubber and plastics	1.4957	1.4903	1.4061	1.2087	1.3727	1.0875	1.0189	1.1469
Other nonmetallic minerals	0.6734	0.8631	0.8032	0.8091	0.8295	0.7187	0.6799	0.7565
Basic metals and fabricated metal	0.8643	0.9984	0.9578	0.8747	0.7244	0.6690	0.5892	0.6138
Machinery, nec	0.8520	0.9828	0.9677	1.0314	1.0240	1.0071	0.9804	1.0614
Electrical and optical equipment	1.3377	0.9072	1.3064	1.1607	0.9317	0.9947	0.9392	0.9770
Transport equipment	2.1786	0.7804	0.7269	0.5654	0.6532	0.6881	0.6093	0.6412
Manufacturing, nec; recycling	0.7067	0.8127	0.7279	0.8117	0.7906	0.7106	0.7095	0.7747
Electricity, gas, and water supply	0.6633	0.6653	0.6426	0.6212	0.8295	0.7466	0.6178	0.6960
Construction	1.0047	1.1184	1.0073	1.0513	1.0494	0.9042	0.8524	0.9216
Sale, maintenance, and repair	0.5832	0.3902	0.2825	0.3411	0.3840	0.3240	0.3228	0.3549
Wholesale trade and commission trade	0.4152	0.3032	0.3457	0.2899	0.4101	0.4211	0.4096	0.4434
Retail trade	0.4215	0.3039	0.2298	0.3368	0.3408	0.2829	0.2815	0.3100
Hotels and restaurants	0.6826	0.6626	0.5296	0.5182	0.5411	0.4661	0.4666	0.5204
Inland transport	0.7593	0.8997	0.8849	1.0533	0.9341	0.9076	0.9093	0.9376
Water transport	0.8352	0.3469	0.4743	0.2858	0.5438	0.4979	0.4871	0.5329
Air transport	0.9172	0.8924	1.0334	1.0089	0.8828	0.5624	0.5553	0.6052
Other supporting and auxiliary transport activities	0.6660	0.6598	0.5438	1.1115	0.7734	0.7169	0.7137	0.7557
Post and telecommunications	0.4868	0.4637	0.4684	0.6037	0.6769	0.6299	0.6048	0.6411
Financial intermediation	0.3005	0.3975	0.1806	0.2261	0.2059	0.1957	0.1951	0.2128
Real estate activities	0.1850	0.1493	0.1959	0.1680	0.1898	0.1737	0.1719	0.1832
Renting of M&Eq and other business activities	0.6166	0.6711	0.5201	0.6377	0.6195	0.5820	0.5692	0.6180
Public administration and defense; compulsory social security	0.4473	0.4488	0.4558	0.4224	0.4302	0.3558	0.3487	0.3760
Education	0.3067	0.2943	0.2232	0.2849	0.2416	0.2534	0.2555	0.2787
Health and social work	0.5494	0.5926	0.4480	0.5264	0.5989	0.6023	0.5895	0.6131
Other community, social, and personal services	0.4898	0.6533	0.4388	0.4142	0.4567	0.4450	0.4588	0.5006
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0010	0.0010	0.0009

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 3.3.5: Net Feedback Multipliers (M<sub>3</sub>), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mining and quarrying	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Food, beverages, and tobacco	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Textiles and textile products	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
Leather, leather products, and footwear	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wood and products of wood and cork	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001
Pulp, paper, paper products, printing, and publishing	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
Coke, refined petroleum, and nuclear fuel	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
Chemicals and chemical products	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Rubber and plastics	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Other nonmetallic minerals	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Basic metals and fabricated metal	0.0001	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Machinery, nec	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Electrical and optical equipment	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Transport equipment	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Manufacturing, nec; recycling	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Electricity, gas, and water supply	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Construction	0.0001	0.0002	0.0001	0.0001	0.0002	0.0001	0.0001	0.0001
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
Retail trade	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hotels and restaurants	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Inland transport	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Water transport	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001
Air transport	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Other supporting and auxiliary transport activities	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
Post and telecommunications	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
Financial intermediation	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Real estate activities	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Renting of M&Eq and other business activities	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001
Public administration and defense; compulsory social security	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Education	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health and social work	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
Other community, social, and personal services	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 3.3.6: Comparison of Exports in Gross and Value-Added Terms, 2010–2017 (\$ million)**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	2,098	1,575	3,530	2,360	3,015	2,161	2,918	2,149	4,530	3,198	3,704	2,877	3,938	3,108	4,524	3,457
Low tech	103	82	85	64	65	51	90	73	78	62	69	55	65	51	109	83
High and medium tech	58	38	66	41	108	80	111	85	156	116	105	77	81	63	122	91
Utilities	9	6	24	18	33	24	36	27	20	14	25	18	24	18	33	24
Construction	14	8	25	14	55	33	45	27	41	24	51	33	51	35	52	34
Trade and repair services	424	353	653	569	599	528	366	322	384	327	376	325	363	315	488	415
Tourism	57	42	42	31	80	63	33	26	29	23	42	35	43	35	57	45
Transport services	152	103	218	141	261	169	254	155	158	104	175	124	176	124	235	163
ICT services	6	5	7	6	13	10	7	5	7	5	6	5	9	7	14	10
Finance and insurance services	12	11	11	10	22	20	9	8	12	11	13	12	12	11	16	15
Property services	16	12	103	85	143	121	152	119	105	86	151	129	149	129	202	172
Public and welfare services	6	5	19	15	24	20	28	23	28	24	29	24	26	22	42	35
Services provided by private households	-	-	0	(0)	-	-	-	-	-	-	-	-	-	-	-	-

() = negative, \$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 3.3.7: Comparison of Revealed Comparative Advantage Measures in Gross and Value-Added Terms, 2010–2017**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	6.530	3.832	6.074	3.196	5.611	3.013	6.253	3.238	7.529	3.462	8.060	3.906	8.441	4.100	7.779	3.989
Low tech	0.242	0.212	0.125	0.151	0.105	0.136	0.152	0.199	0.095	0.173	0.097	0.146	0.088	0.134	0.124	0.177
High and medium tech	0.042	0.074	0.029	0.091	0.053	0.158	0.060	0.146	0.061	0.175	0.048	0.099	0.036	0.083	0.045	0.093
Utilities	0.649	0.539	1.139	0.453	1.624	0.544	1.900	0.733	0.771	0.965	1.076	1.108	0.806	1.257	1.109	1.204
Construction	1.203	2.062	1.339	1.036	3.044	2.214	2.049	1.984	1.433	2.570	2.008	2.581	1.699	2.429	1.689	1.818
Trade and repair services	1.834	1.328	1.765	1.636	1.703	1.470	1.156	1.122	0.880	0.977	0.989	0.918	0.912	0.878	1.032	0.929
Tourism	1.834	0.863	0.824	0.783	1.749	1.409	0.769	1.197	0.484	0.708	0.823	0.717	0.702	0.657	0.896	0.733
Transport services	0.862	1.080	0.819	1.077	1.045	0.996	1.133	1.043	0.510	0.937	0.653	0.989	0.637	0.988	0.713	1.005
ICT services	0.319	0.861	0.230	1.173	0.410	0.929	0.244	0.735	0.187	0.643	0.188	0.591	0.260	0.810	0.294	0.716
Finance and insurance services	0.135	0.502	0.083	0.531	0.172	0.693	0.076	0.846	0.073	1.015	0.085	1.030	0.076	0.997	0.087	0.946
Property services	0.082	0.223	0.335	0.361	0.507	0.490	0.554	0.535	0.268	0.546	0.433	0.494	0.398	0.472	0.450	0.493
Public and welfare services	0.103	0.422	0.227	0.334	0.301	0.468	0.355	0.534	0.269	0.537	0.303	0.458	0.249	0.385	0.376	0.482
Services provided by private households	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

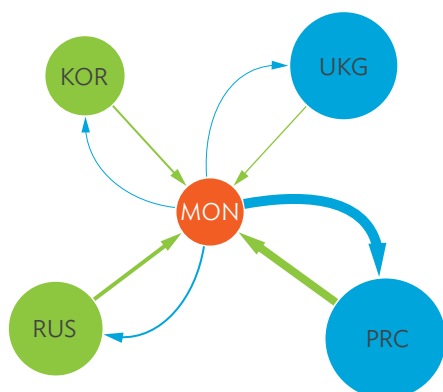
Source: Asian Development Bank Multi-Regional Input-Output Database.

# GLOBAL VALUE CHAIN INDICATORS

# 3.4

## Mongolia

**Figure 3.4.1a: Trade in Value-Added Flow with Top Trading Partners, 2010**

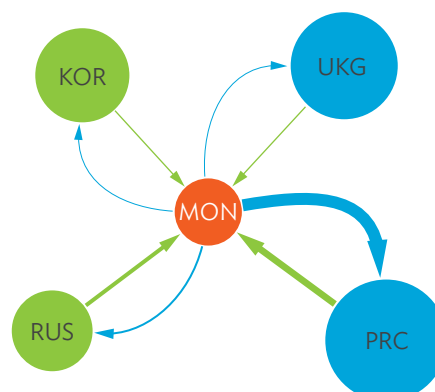


● Economy in focus ● Import partner ● Export partner

KOR = Republic of Korea, MON = Mongolia, PRC = People's Republic of China, RUS = Russian Federation, UKG = United Kingdom.  
Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 3.4.1b: Trade in Value-Added Flow with Top Trading Partners, 2017**

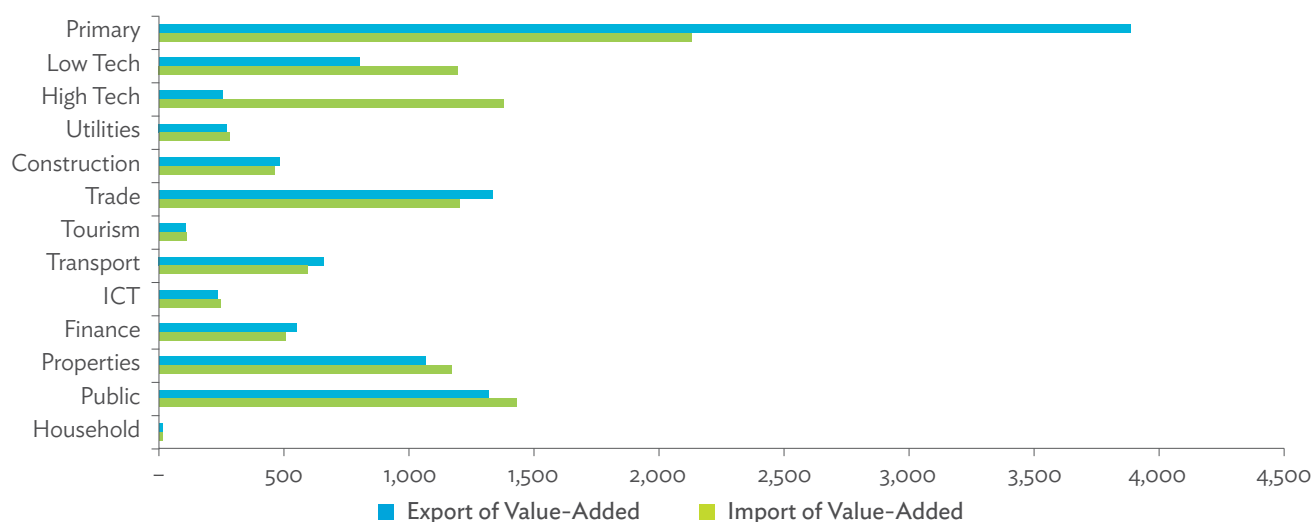


● Economy in focus ● Import partner ● Export partner

KOR = Republic of Korea, MON = Mongolia, PRC = People's Republic of China, RUS = Russian Federation, UKG = United Kingdom.  
Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

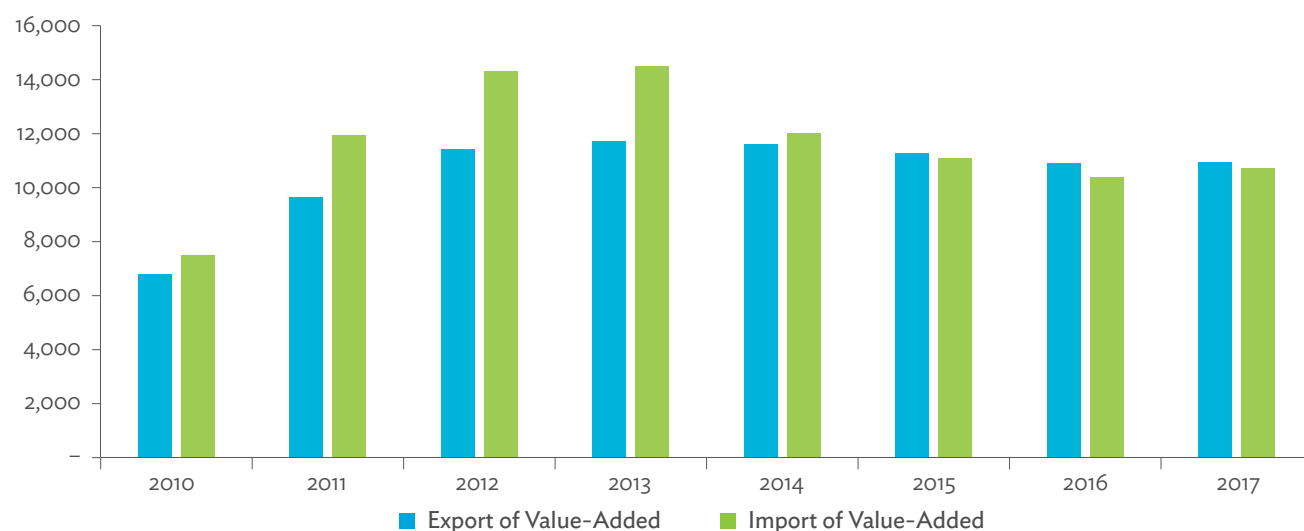
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**Figure 3.4.2: Trade in Value-Added by Industry, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

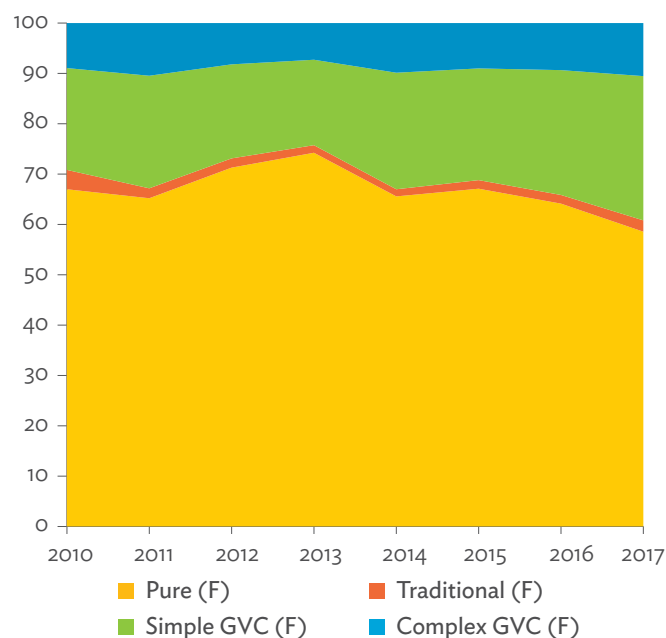
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**Figure 3.4.3: Trade in Value-Added, 2010–2017 (\$ million)**

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

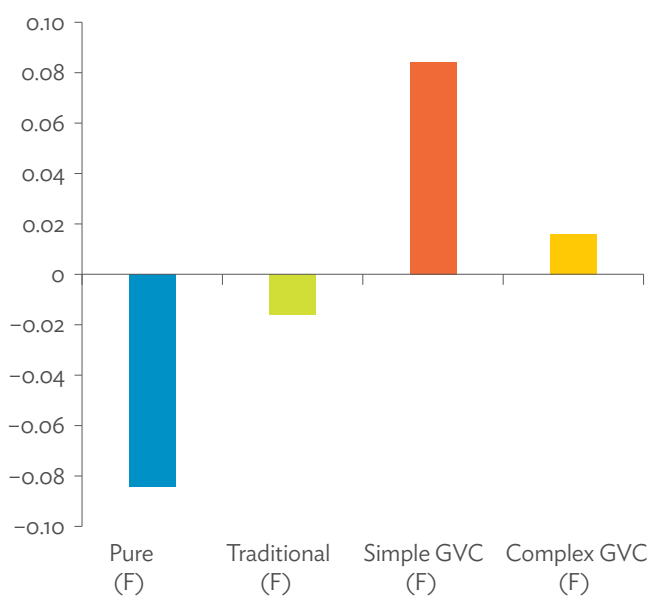
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**Figure 3.4.4: Trends in Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Forward Linkages, 2010–2017 (%)**

GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.4.5: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Forward Linkages (%)**

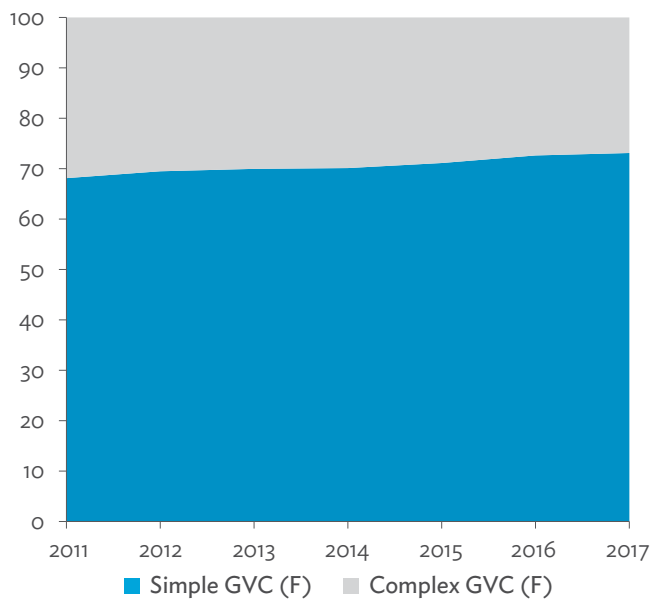
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.4.6: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Forward Linkages, 2010–2017 (%)**

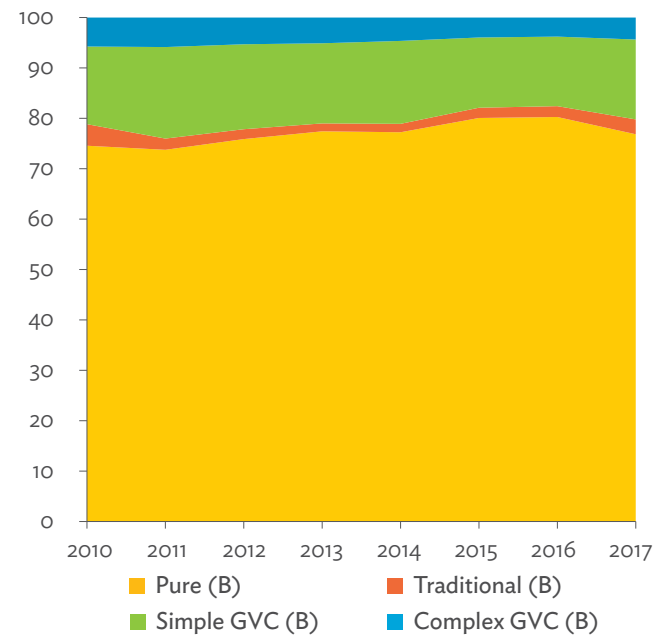


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.4.7: Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Backward Linkages, 2010–2017 (%)**

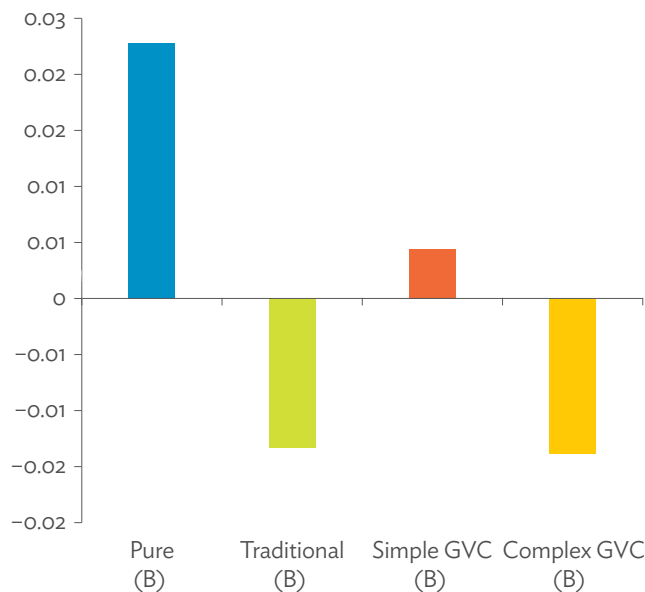


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.4.8: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Backward Linkages (%)**



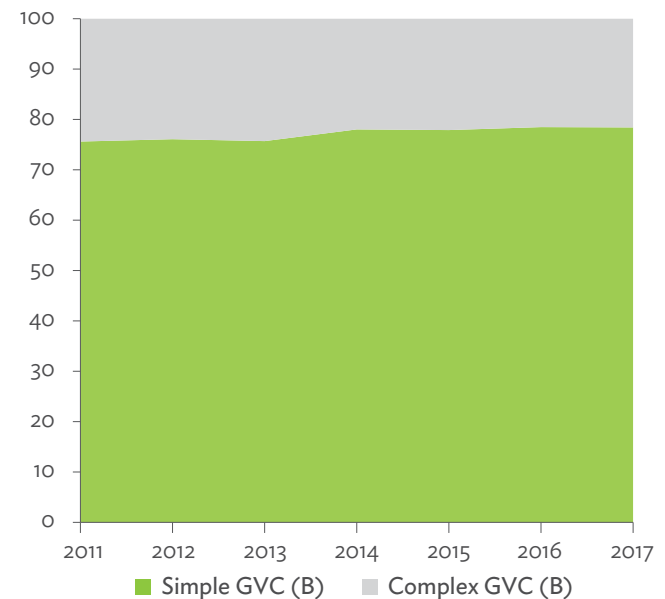
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 3.4.9: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Backward Linkages (%)**

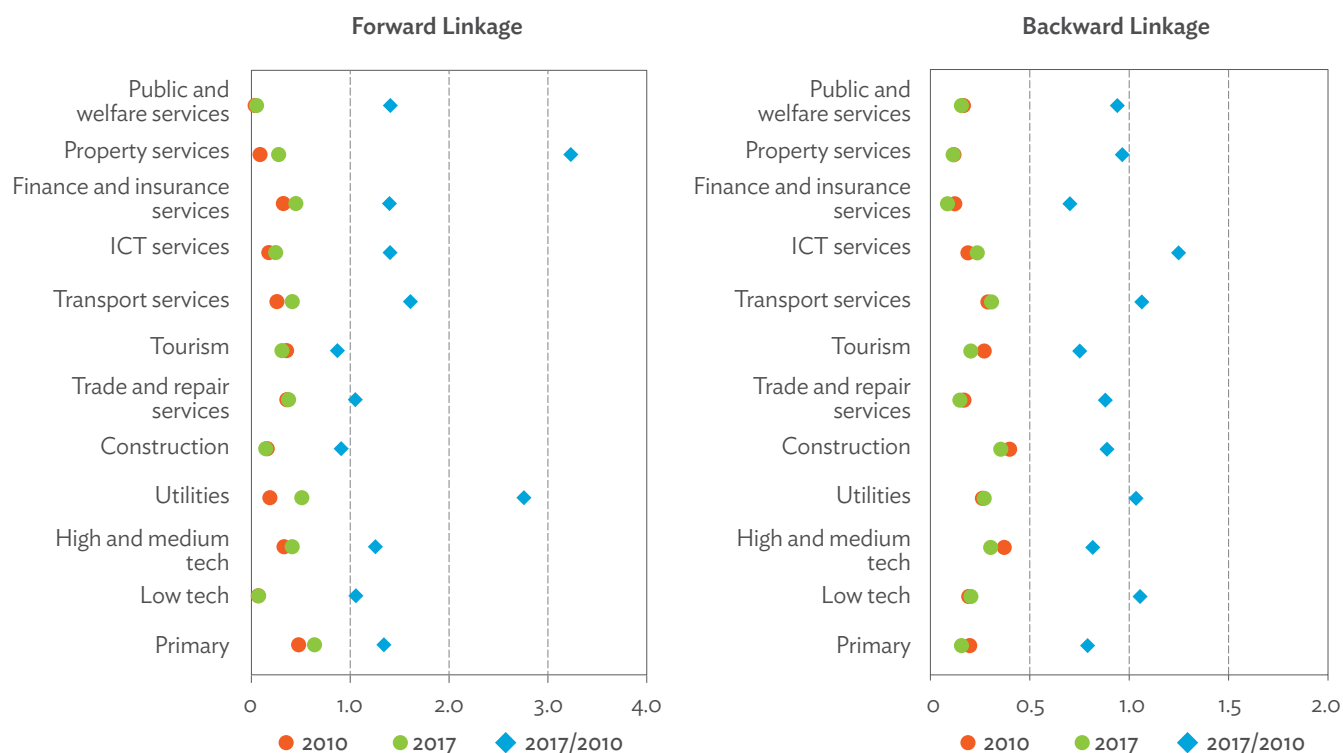


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

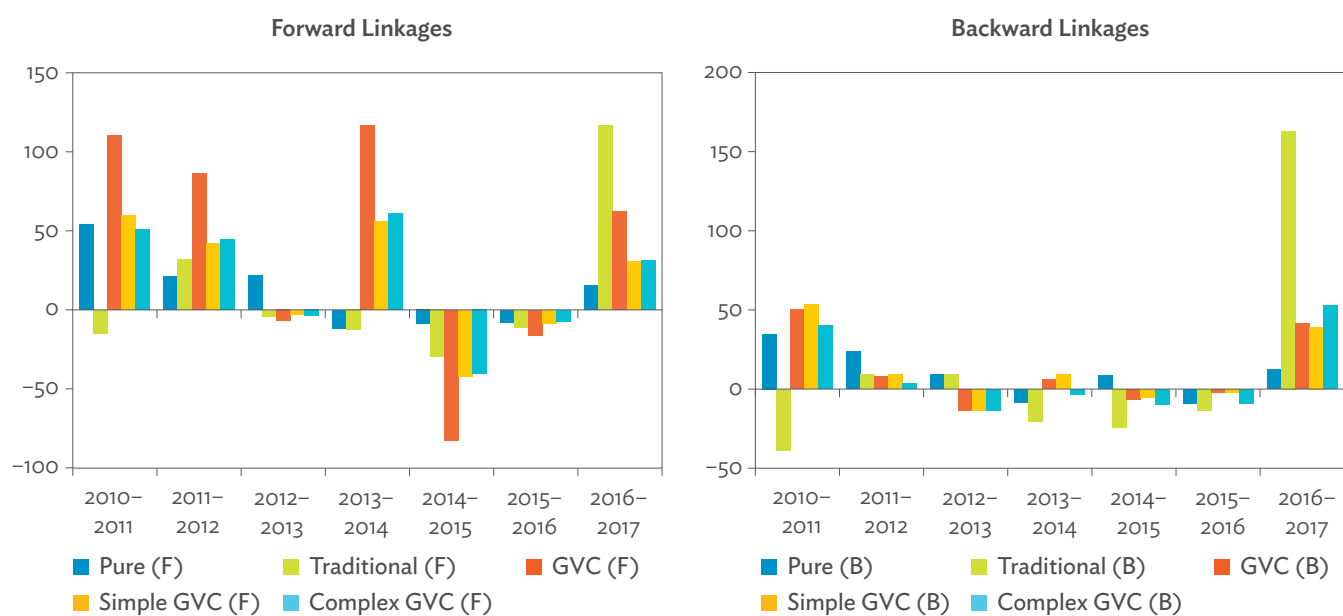
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**Figure 3.4.10: Global Value Chain Participation Based on Forward and Backward Linkages at the Sectoral Level, 2010 and 2017**



[Click here for figure data](#)

**Figure 3.4.11: Nominal Growth Rates of Different Value-Added Activities in the Manufacturing Sector, 2010–2017 (%)**



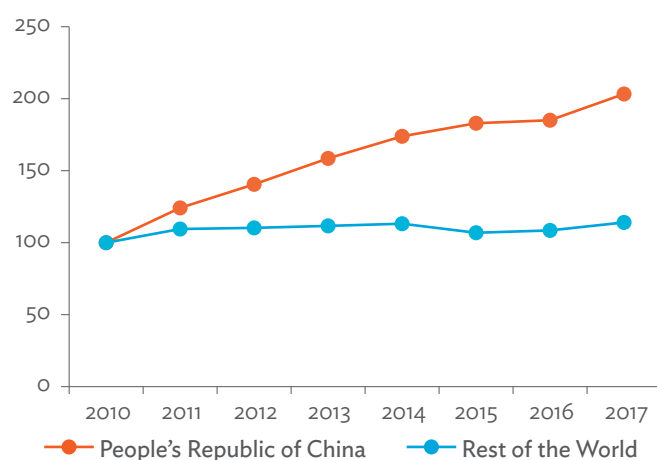
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# OVERVIEW OF PRODUCTION AND DEMAND STRUCTURES

## 4.1

### People's Republic of China

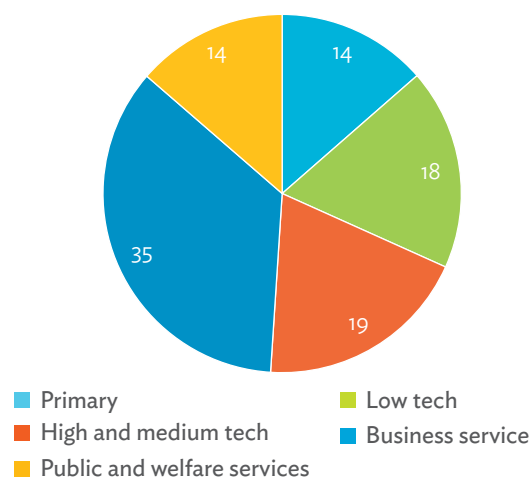
**Figure 4.1.1a: Gross Domestic Product Scaled to 2010 Levels in Comparison with the Rest of the World, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

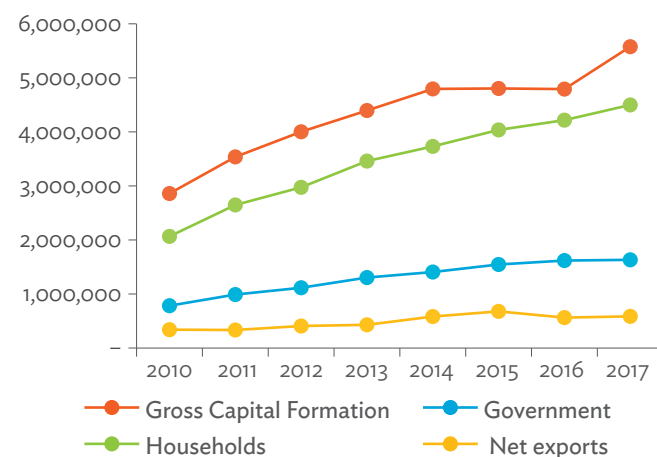
**Figure 4.1.1b: Gross Domestic Product Share by 5-Sector Aggregation, 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.1.2a: Gross Domestic Product Trend by Final Consumption Expenditure Components, 2010–2017 (\$ million)**

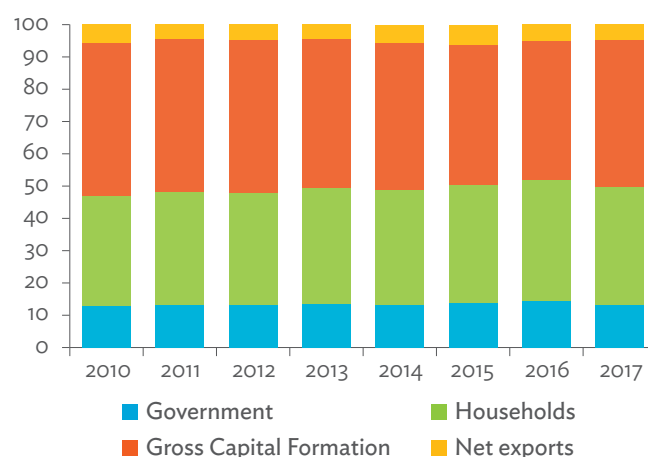


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.1.2b: Share of Consumption Expenditure by Final Consumption Expenditure Components, 2010–2017 (%)**

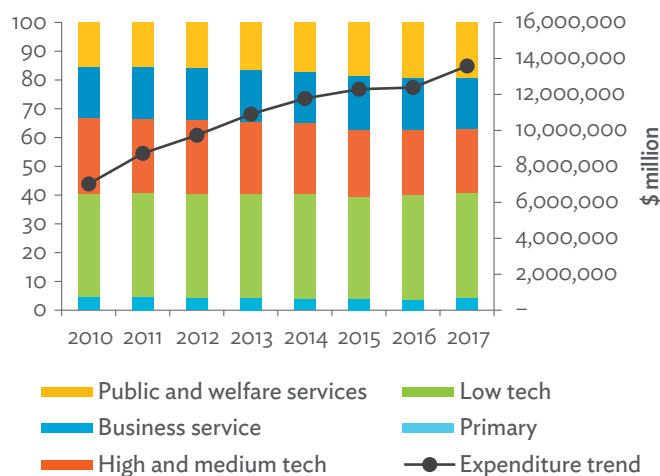


Source: Asian Development Bank Multi-Regional Input–Output Database.

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**Figure 4.1.2c: Final Consumption Expenditure Total Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

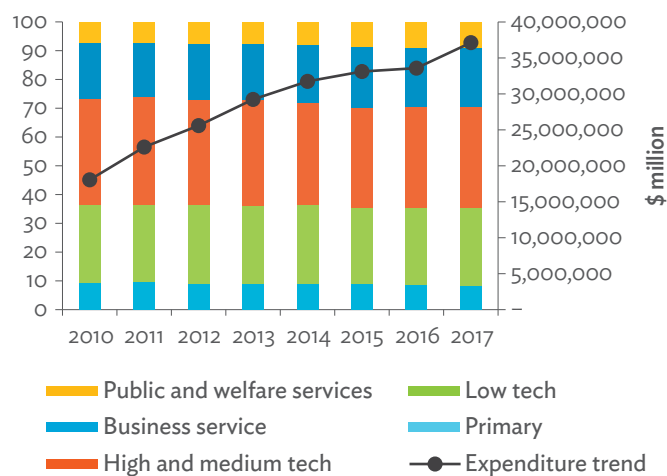


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.1.3a: Gross Total Output Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

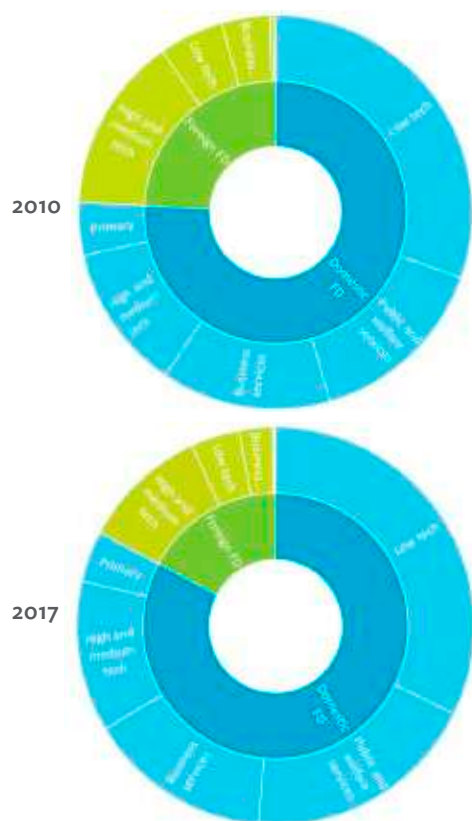


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.1.3b: Shares by 5-Sector Aggregation Attributed to Foreign and Domestic Final Demand, 2010 and 2017 (%)**

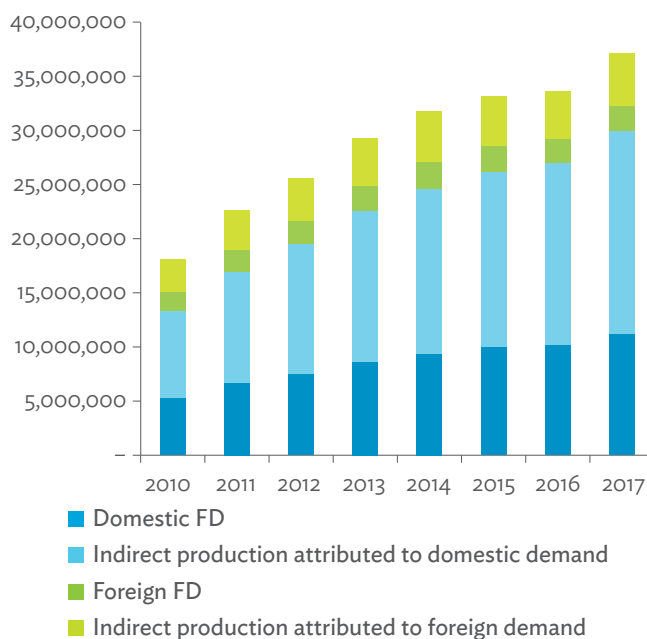


FD=final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

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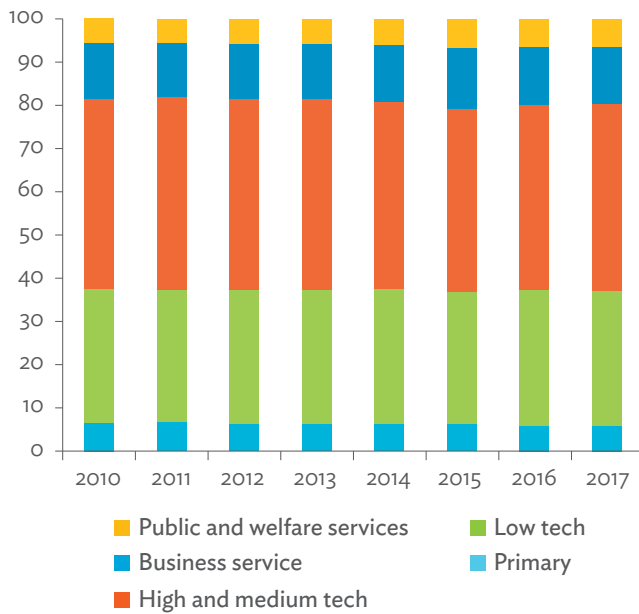
**Figure 4.1.3c: Gross Output by Production Attributed to Foreign and Domestic Demand, 2010–2017 (\$ million)**



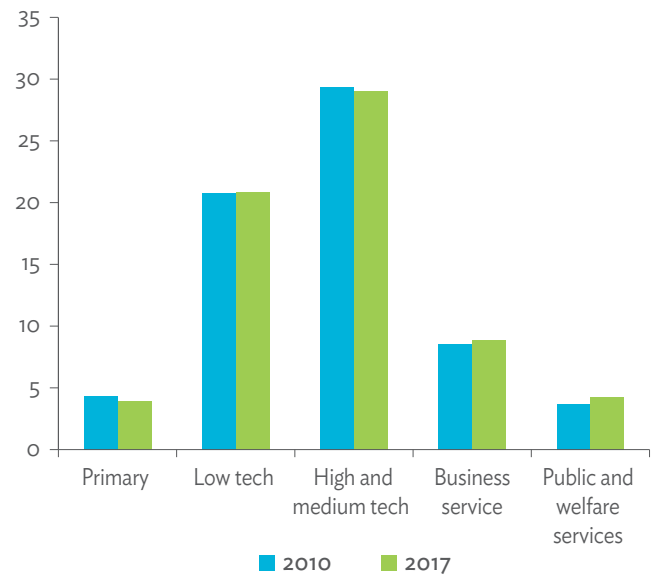
\$ = United States dollar, FD = final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

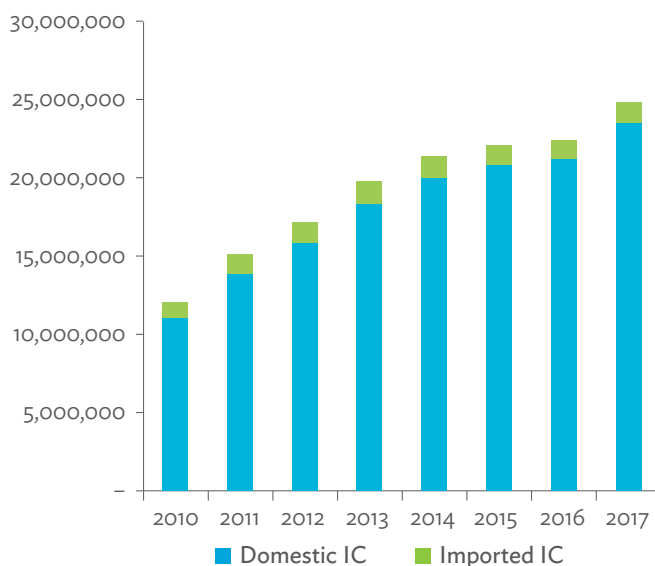
[Click here for figure data](#)

**Figure 4.1.4a: Intermediate Consumption Shares by 5-Sector Aggregation, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

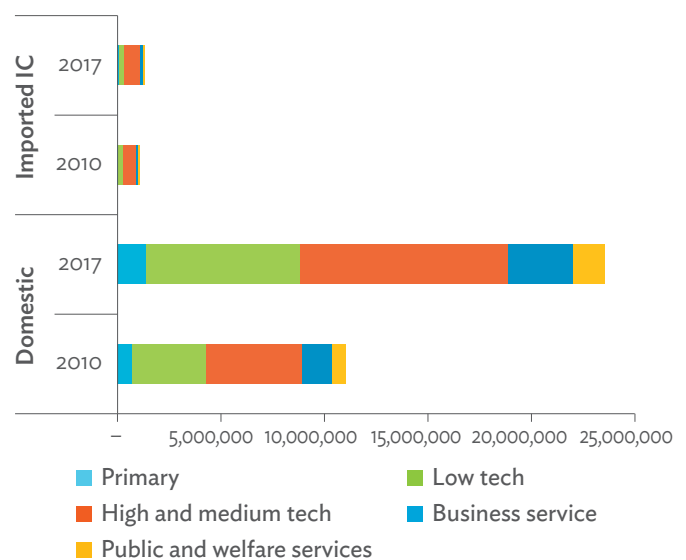
[Click here for figure data](#)**Figure 4.1.4b: Intermediate Consumption Ratio to Output by 5-Sector Aggregation, 2010 and 2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.1.4c: Shares of Domestic and Imported Intermediate Consumption, 2010–2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

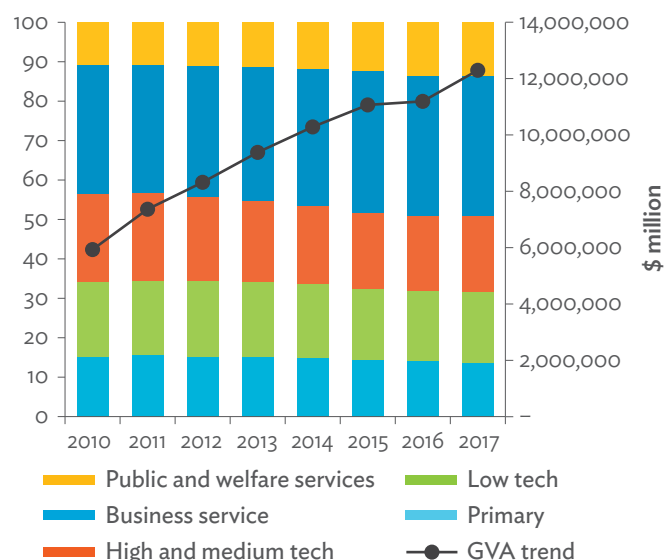
[Click here for figure data](#)**Figure 4.1.4d: Shares of Domestic and Imported Intermediate Consumption by 5-Sector Aggregation, 2010 and 2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.1.5a: Gross Value Added Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

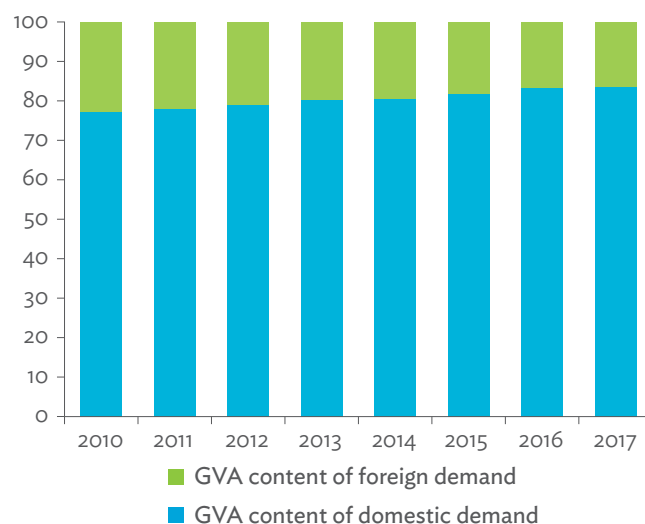


\$ = United States dollar, GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.1.5b: Gross Value Added Share Attributed to Foreign and Domestic Final Demand, 2010–2017 (%)**

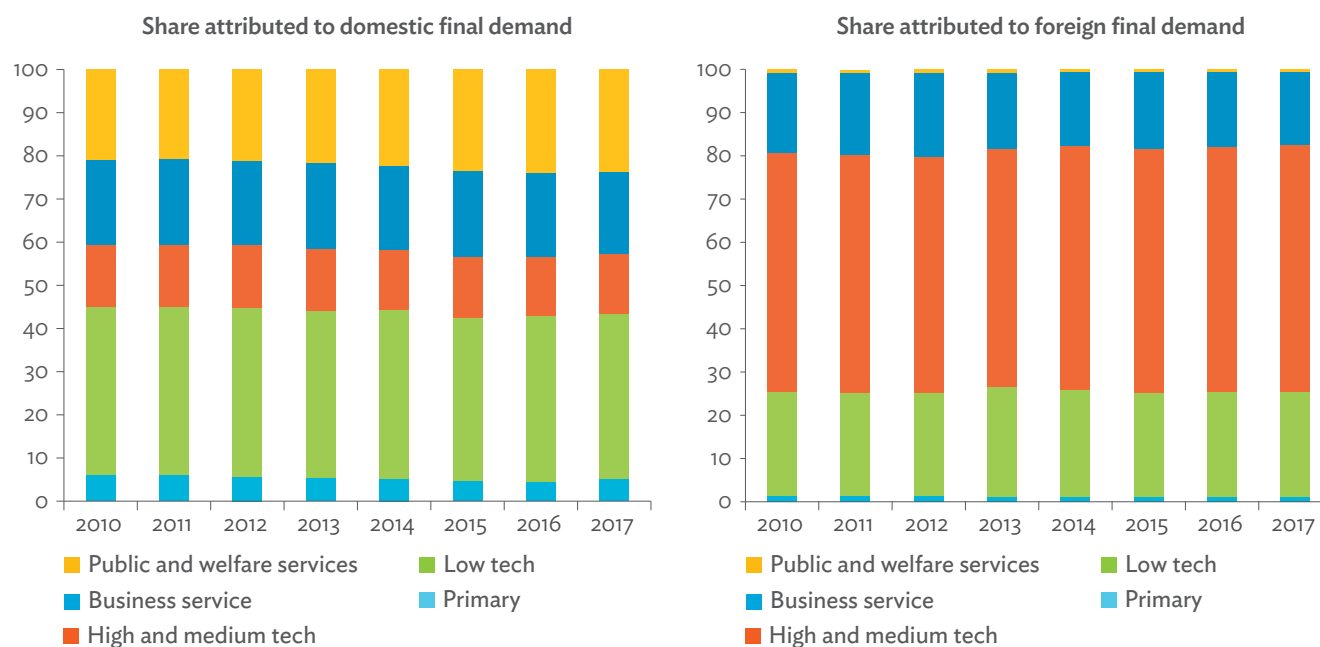


GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.1.5c: Sectoral Shares of Gross Value Added Content in Domestic and Foreign Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Table 4.1.1: Gross Value Added Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.926	0.924	0.930	0.935	0.941	0.953	0.955	0.954
Mining and quarrying	0.853	0.847	0.856	0.864	0.878	0.903	0.906	0.908
Food, beverages, and tobacco	0.899	0.896	0.905	0.910	0.919	0.935	0.937	0.937
Textiles and textile products	0.866	0.865	0.882	0.885	0.896	0.917	0.920	0.919
Leather, leather products, and footwear	0.838	0.842	0.859	0.866	0.879	0.903	0.905	0.905
Wood and products of wood and cork	0.852	0.848	0.867	0.865	0.868	0.895	0.898	0.897
Pulp, paper, paper products, printing, and publishing	0.814	0.815	0.835	0.841	0.849	0.880	0.883	0.884
Coke, refined petroleum, and nuclear fuel	0.705	0.675	0.683	0.707	0.738	0.792	0.795	0.800
Chemicals and chemical products	0.781	0.775	0.792	0.804	0.822	0.858	0.862	0.863
Rubber and plastics	0.776	0.777	0.802	0.812	0.827	0.862	0.866	0.868
Other nonmetallic minerals	0.813	0.809	0.819	0.826	0.843	0.875	0.877	0.879
Basic metals and fabricated metal	0.766	0.756	0.762	0.762	0.788	0.830	0.833	0.836
Machinery, nec	0.781	0.783	0.796	0.798	0.818	0.854	0.857	0.859
Electrical and optical equipment	0.694	0.702	0.719	0.721	0.745	0.794	0.797	0.800
Transport equipment	0.798	0.796	0.810	0.816	0.833	0.865	0.867	0.869
Manufacturing, nec; recycling	0.870	0.867	0.880	0.877	0.883	0.907	0.910	0.910
Electricity, gas, and water supply	0.783	0.773	0.783	0.796	0.817	0.855	0.857	0.860
Construction	0.824	0.820	0.831	0.835	0.853	0.882	0.883	0.886
Sale, maintenance, and repair	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wholesale trade and commission trade	0.937	0.938	0.944	0.946	0.950	0.959	0.961	0.962
Retail trade	0.937	0.938	0.944	0.946	0.950	0.959	0.961	0.962
Hotels and restaurants	0.921	0.920	0.928	0.933	0.939	0.951	0.953	0.953
Inland transport	0.900	0.895	0.903	0.910	0.920	0.937	0.939	0.940
Water transport	0.866	0.862	0.876	0.886	0.899	0.920	0.925	0.926
Air transport	0.796	0.781	0.790	0.806	0.823	0.855	0.860	0.862
Other supporting and auxiliary transport activities	0.870	0.863	0.874	0.883	0.895	0.916	0.920	0.920
Post and telecommunications	0.913	0.917	0.924	0.926	0.933	0.946	0.947	0.948
Financial intermediation	0.956	0.956	0.959	0.961	0.962	0.969	0.970	0.971
Real estate activities	0.977	0.978	0.980	0.981	0.982	0.986	0.987	0.987
Renting of M&Eq and other business activities	0.853	0.852	0.862	0.868	0.879	0.903	0.907	0.908
Public administration and defense; compulsory social security	0.918	0.916	0.923	0.927	0.932	0.945	0.947	0.948
Education	0.913	0.913	0.923	0.926	0.932	0.945	0.952	0.953
Health and social work	0.866	0.864	0.876	0.883	0.894	0.916	0.921	0.922
Other community, social, and personal services	0.882	0.884	0.893	0.898	0.906	0.924	0.935	0.936
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 4.1.2: Import Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.068	0.071	0.064	0.060	0.054	0.047	0.045	0.046
Mining and quarrying	0.135	0.141	0.132	0.126	0.112	0.097	0.094	0.092
Food, beverages, and tobacco	0.094	0.097	0.088	0.084	0.075	0.065	0.063	0.063
Textiles and textile products	0.123	0.125	0.109	0.106	0.096	0.083	0.080	0.081
Leather, leather products, and footwear	0.150	0.148	0.131	0.125	0.112	0.097	0.095	0.095
Wood and products of wood and cork	0.135	0.140	0.122	0.124	0.121	0.105	0.102	0.103
Pulp, paper, paper products, printing, and publishing	0.172	0.170	0.152	0.147	0.139	0.120	0.117	0.116
Coke, refined petroleum, and nuclear fuel	0.267	0.297	0.286	0.267	0.237	0.208	0.205	0.200
Chemicals and chemical products	0.200	0.207	0.191	0.181	0.163	0.142	0.138	0.137
Rubber and plastics	0.205	0.205	0.182	0.173	0.158	0.138	0.134	0.132
Other nonmetallic minerals	0.171	0.176	0.166	0.160	0.144	0.125	0.123	0.121
Basic metals and fabricated metal	0.214	0.226	0.219	0.221	0.195	0.170	0.167	0.164
Machinery, nec	0.202	0.203	0.191	0.189	0.168	0.146	0.143	0.141
Electrical and optical equipment	0.285	0.280	0.264	0.261	0.235	0.206	0.203	0.200
Transport equipment	0.187	0.190	0.177	0.172	0.155	0.135	0.133	0.131
Manufacturing, nec; recycling	0.120	0.123	0.111	0.115	0.107	0.093	0.090	0.090
Electricity, gas, and water supply	0.198	0.209	0.199	0.188	0.166	0.145	0.143	0.140
Construction	0.162	0.167	0.156	0.153	0.136	0.118	0.117	0.114
Sale, maintenance, and repair	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wholesale trade and commission trade	0.059	0.058	0.053	0.051	0.047	0.041	0.039	0.038
Retail trade	0.059	0.058	0.053	0.051	0.047	0.041	0.039	0.038
Hotels and restaurants	0.073	0.074	0.067	0.063	0.056	0.049	0.047	0.047
Inland transport	0.092	0.097	0.090	0.084	0.074	0.063	0.061	0.060
Water transport	0.123	0.128	0.114	0.105	0.093	0.080	0.075	0.074
Air transport	0.190	0.206	0.197	0.183	0.166	0.145	0.140	0.138
Other supporting and auxiliary transport activities	0.120	0.127	0.117	0.109	0.098	0.084	0.080	0.080
Post and telecommunications	0.081	0.079	0.072	0.070	0.062	0.054	0.053	0.052
Financial intermediation	0.042	0.042	0.039	0.038	0.036	0.031	0.030	0.029
Real estate activities	0.021	0.021	0.019	0.018	0.017	0.014	0.013	0.013
Renting of M&Eq and other business activities	0.137	0.139	0.129	0.124	0.113	0.097	0.093	0.092
Public administration and defense; compulsory social security	0.077	0.079	0.072	0.069	0.064	0.055	0.053	0.052
Education	0.081	0.082	0.073	0.070	0.063	0.055	0.048	0.047
Health and social work	0.123	0.126	0.114	0.109	0.098	0.084	0.079	0.078
Other community, social, and personal services	0.110	0.109	0.100	0.095	0.087	0.076	0.065	0.064
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 4.1.3: Output Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.900	1.915	1.938	1.966	1.974	1.979	1.977	2.010
Mining and quarrying	2.218	2.210	2.242	2.278	2.302	2.323	2.341	2.362
Food, beverages, and tobacco	2.594	2.612	2.632	2.712	2.724	2.727	2.734	2.782
Textiles and textile products	3.063	3.006	3.045	3.157	3.172	3.182	3.206	3.259
Leather, leather products, and footwear	2.943	3.111	3.157	3.267	3.287	3.304	3.345	3.402
Wood and products of wood and cork	2.842	2.844	2.907	3.008	2.996	3.017	3.045	3.103
Pulp, paper, paper products, printing, and publishing	2.800	2.832	2.878	2.961	2.961	2.983	3.016	3.055
Coke, refined petroleum, and nuclear fuel	2.468	2.549	2.610	2.660	2.727	2.790	2.859	2.889
Chemicals and chemical products	2.832	2.886	2.994	3.075	3.106	3.138	3.181	3.219
Rubber and plastics	2.990	3.025	3.094	3.179	3.202	3.235	3.276	3.314
Other nonmetallic minerals	2.688	2.690	2.784	2.874	2.899	2.929	2.983	3.011
Basic metals and fabricated metal	2.873	2.864	2.986	3.079	3.129	3.177	3.238	3.272
Machinery, nec	2.919	2.947	3.007	3.095	3.131	3.168	3.213	3.246
Electrical and optical equipment	2.886	2.969	3.016	3.090	3.136	3.202	3.276	3.313
Transport equipment	3.180	3.218	3.263	3.328	3.351	3.378	3.450	3.490
Manufacturing, nec; recycling	2.435	2.446	2.485	2.614	2.615	2.636	2.654	2.685
Electricity, gas, and water supply	2.858	2.835	2.867	2.912	2.956	2.990	3.048	3.075
Construction	2.922	2.940	3.001	3.054	3.079	3.102	3.166	3.184
Sale, maintenance, and repair	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Wholesale trade and commission trade	1.828	1.830	1.835	1.846	1.849	1.855	1.843	1.852
Retail trade	1.828	1.830	1.835	1.846	1.849	1.855	1.843	1.852
Hotels and restaurants	2.419	2.430	2.448	2.488	2.496	2.496	2.493	2.522
Inland transport	2.150	2.167	2.184	2.209	2.219	2.220	2.222	2.241
Water transport	2.370	2.382	2.389	2.422	2.437	2.443	2.420	2.440
Air transport	2.664	2.671	2.691	2.749	2.777	2.809	2.847	2.878
Other supporting and auxiliary transport activities	2.359	2.378	2.398	2.429	2.442	2.452	2.447	2.471
Post and telecommunications	1.817	1.834	1.838	1.855	1.859	1.871	1.887	1.898
Financial intermediation	1.618	1.622	1.628	1.635	1.635	1.637	1.637	1.644
Real estate activities	1.335	1.336	1.338	1.343	1.344	1.341	1.326	1.331
Renting of M&Eq and other business activities	2.385	2.413	2.442	2.475	2.482	2.498	2.491	2.513
Public administration and defense; compulsory social security	2.014	2.018	2.030	2.051	2.054	2.060	2.066	2.076
Education	1.956	1.954	1.959	1.978	1.980	1.984	1.894	1.901
Health and social work	2.668	2.693	2.742	2.789	2.796	2.807	2.759	2.781
Other community, social, and personal services	2.252	2.269	2.289	2.321	2.326	2.337	2.198	2.215
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

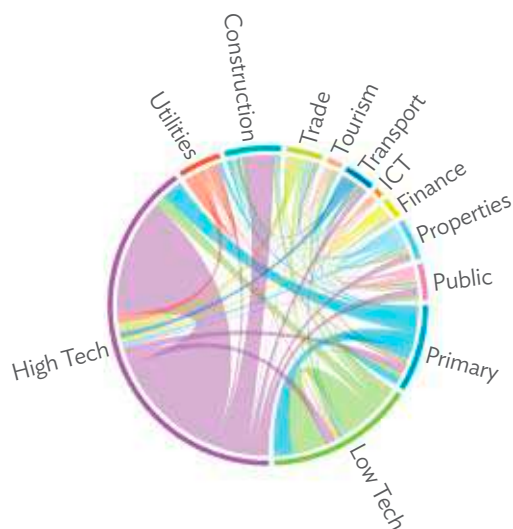
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 4.2

## DOMESTIC INTERINDUSTRY LINKAGES

### People's Republic of China

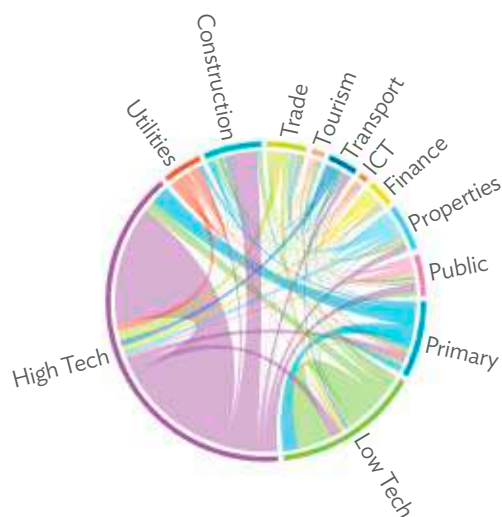
**Figure 4.2.1a: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2010**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

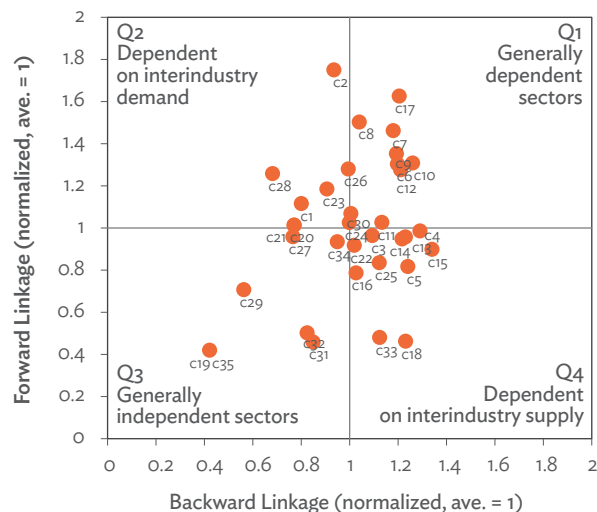
**Figure 4.2.1b: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2017**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

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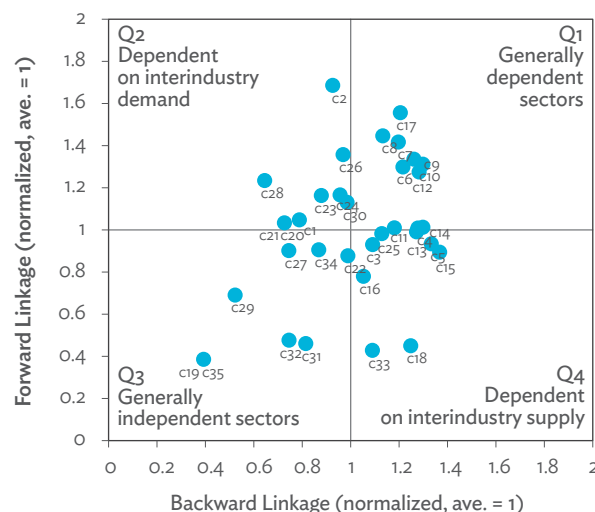
**Figure 4.2.2a: Backward and Forward Linkages by Industry, 2010**



Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

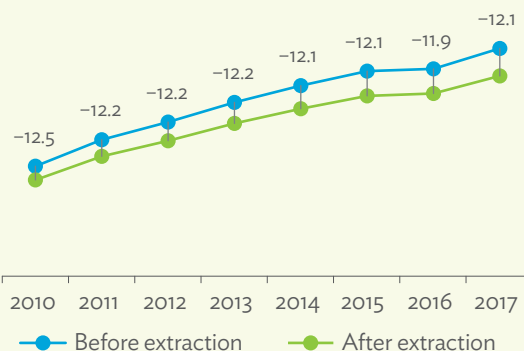
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**Figure 4.2.2b: Backward and Forward Linkages by Industry, 2017**

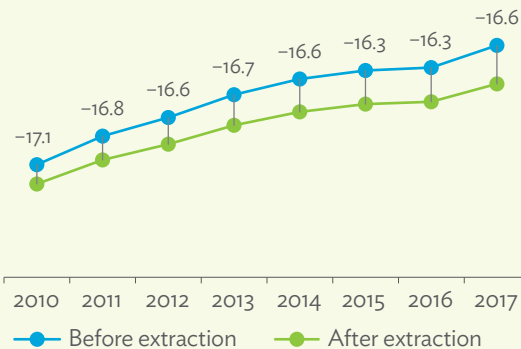


Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

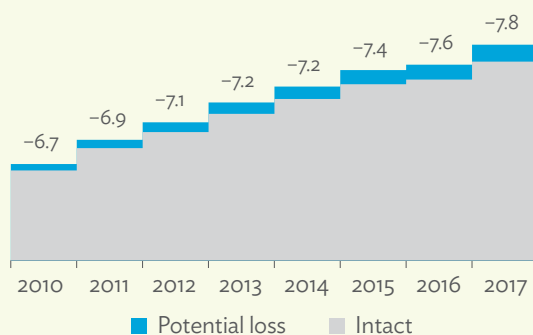
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**Box 4: Hypothetical Extraction of Electrical and Optical Equipment Industry in the People's Republic of China****Figure 4.2.3a: Potential Decline in Gross Value Added, 2010–2017 (%)**

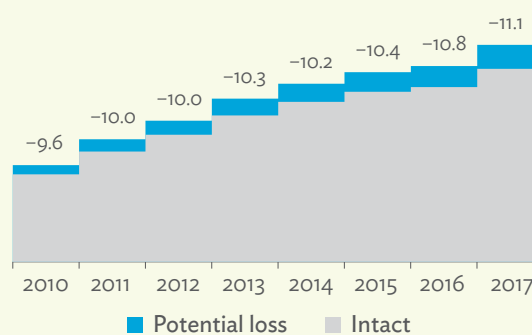
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.2.4a: Potential Decline in Gross Output, 2010–2017 (%)**

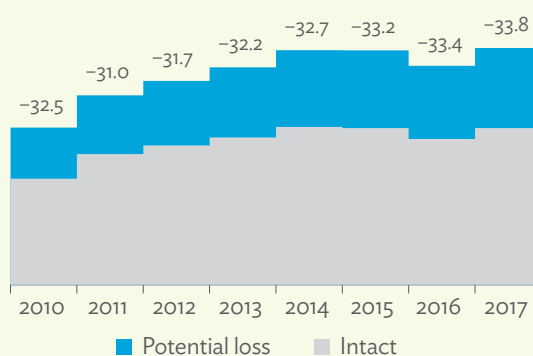
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.2.3b: Potential Decline in Gross Value Added Attributed to Domestic Final Demand, 2010–2017 (%)**

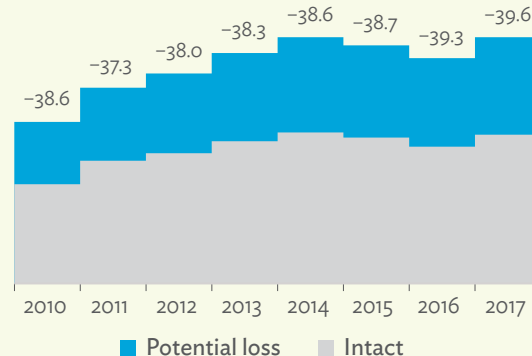
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.2.4b: Potential Decline in Gross Output Attributed to Domestic Final Demand, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.2.3c: Potential Decline in Gross Value Added Attributed to Exports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.2.4c: Potential Decline in Gross Output Attributed to Exports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



**Table 4.2.1: Input-Output Backward Linkage**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.801	0.801	0.798	0.793	0.792	0.788	0.783	0.788
Mining and quarrying	0.935	0.924	0.924	0.919	0.923	0.925	0.927	0.926
Food, beverages, and tobacco	1.093	1.092	1.084	1.094	1.092	1.085	1.083	1.090
Textiles and textile products	1.290	1.257	1.254	1.274	1.272	1.267	1.270	1.278
Leather, leather products, and footwear	1.240	1.301	1.301	1.318	1.318	1.315	1.325	1.334
Wood and products of wood and cork	1.197	1.189	1.198	1.213	1.201	1.201	1.206	1.216
Pulp, paper, paper products, printing, and publishing	1.180	1.184	1.186	1.195	1.187	1.187	1.194	1.198
Coke, refined petroleum, and nuclear fuel	1.040	1.065	1.075	1.073	1.093	1.111	1.132	1.132
Chemicals and chemical products	1.193	1.206	1.233	1.241	1.245	1.249	1.260	1.262
Rubber and plastics	1.260	1.265	1.275	1.282	1.284	1.288	1.297	1.299
Other nonmetallic minerals	1.133	1.124	1.147	1.160	1.162	1.166	1.181	1.180
Basic metals and fabricated metal	1.210	1.197	1.230	1.242	1.255	1.264	1.282	1.283
Machinery, nec	1.230	1.232	1.239	1.249	1.255	1.261	1.272	1.272
Electrical and optical equipment	1.216	1.241	1.243	1.247	1.258	1.275	1.297	1.299
Transport equipment	1.340	1.345	1.345	1.343	1.343	1.345	1.366	1.368
Manufacturing, nec; recycling	1.026	1.022	1.024	1.055	1.049	1.049	1.051	1.053
Electricity, gas, and water supply	1.204	1.185	1.181	1.175	1.185	1.190	1.207	1.205
Construction	1.231	1.229	1.236	1.232	1.234	1.235	1.254	1.248
Sale, maintenance, and repair	0.421	0.418	0.412	0.403	0.401	0.398	0.396	0.392
Wholesale trade and commission trade	0.770	0.765	0.756	0.745	0.742	0.739	0.730	0.726
Retail trade	0.770	0.765	0.756	0.745	0.742	0.739	0.730	0.726
Hotels and restaurants	1.019	1.016	1.009	1.004	1.001	0.993	0.987	0.989
Inland transport	0.906	0.906	0.900	0.891	0.890	0.884	0.880	0.878
Water transport	0.998	0.996	0.984	0.977	0.977	0.973	0.958	0.956
Air transport	1.122	1.117	1.109	1.109	1.114	1.118	1.127	1.128
Other supporting and auxiliary transport activities	0.994	0.994	0.988	0.980	0.979	0.976	0.969	0.969
Post and telecommunications	0.766	0.767	0.757	0.749	0.745	0.745	0.747	0.744
Financial intermediation	0.682	0.678	0.671	0.660	0.656	0.652	0.648	0.644
Real estate activities	0.562	0.559	0.551	0.542	0.539	0.534	0.525	0.522
Renting of M&Eq and other business activities	1.005	1.009	1.006	0.999	0.995	0.994	0.987	0.985
Public administration and defense; compulsory social security	0.849	0.844	0.836	0.828	0.823	0.820	0.818	0.814
Education	0.824	0.817	0.807	0.798	0.794	0.790	0.750	0.745
Health and social work	1.124	1.126	1.130	1.125	1.121	1.118	1.093	1.090
Other community, social, and personal services	0.949	0.949	0.943	0.936	0.933	0.930	0.871	0.868
Private households with employed persons	0.421	0.418	0.412	0.403	0.401	0.398	0.396	0.392
	lowest linkage	<div><div></div><div></div><div></div></div>				<div><div></div><div></div><div></div></div> highest linkage		

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

Source: Asian Development Bank Multi-Regional Input-Output Database.

Table 4.2.2: Input-Output Forward Linkage

	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.118	1.115	1.139	1.136	1.136	1.137	1.117	1.049
Mining and quarrying	1.771	1.776	1.766	1.747	1.735	1.738	1.736	1.707
Food, beverages, and tobacco	0.962	0.957	0.984	0.977	0.981	0.971	0.945	0.928
Textiles and textile products	0.985	0.954	0.994	0.989	0.991	0.997	1.005	1.009
Leather, leather products, and footwear	0.811	0.884	0.921	0.921	0.924	0.925	0.929	0.932
Wood and products of wood and cork	1.311	1.320	1.311	1.325	1.303	1.307	1.303	1.308
Pulp, paper, paper products, printing, and publishing	1.474	1.468	1.454	1.442	1.433	1.431	1.431	1.429
Coke, refined petroleum, and nuclear fuel	1.516	1.515	1.513	1.496	1.485	1.486	1.485	1.460
Chemicals and chemical products	1.362	1.363	1.376	1.364	1.349	1.342	1.348	1.346
Rubber and plastics	1.316	1.316	1.304	1.308	1.300	1.309	1.321	1.322
Other nonmetallic minerals	1.027	1.034	1.020	1.017	1.003	1.003	0.999	1.010
Basic metals and fabricated metal	1.283	1.282	1.272	1.275	1.257	1.261	1.272	1.283
Machinery, nec	0.956	0.961	0.918	0.938	0.931	0.922	0.958	0.990
Electrical and optical equipment	0.946	0.970	0.960	0.966	0.959	0.975	1.003	1.013
Transport equipment	0.895	0.873	0.837	0.857	0.860	0.848	0.867	0.891
Manufacturing, nec; recycling	0.780	0.777	0.746	0.766	0.750	0.785	0.819	0.773
Electricity, gas, and water supply	1.644	1.622	1.609	1.595	1.593	1.580	1.573	1.573
Construction	0.447	0.450	0.441	0.437	0.435	0.430	0.431	0.434
Sale, maintenance, and repair	0.403	0.400	0.391	0.382	0.379	0.377	0.371	0.367
Wholesale trade and commission trade	1.013	1.015	1.021	1.040	1.041	1.039	1.040	1.035
Retail trade	1.013	1.015	1.021	1.040	1.041	1.039	1.040	1.035
Hotels and restaurants	0.914	0.893	0.891	0.882	0.891	0.886	0.865	0.873
Inland transport	1.190	1.175	1.169	1.170	1.175	1.172	1.168	1.168
Water transport	1.025	1.051	1.086	1.114	1.145	1.154	1.168	1.171
Air transport	0.830	0.855	0.894	0.920	0.953	0.962	0.967	0.982
Other supporting and auxiliary transport activities	1.287	1.338	1.378	1.379	1.382	1.381	1.378	1.368
Post and telecommunications	0.957	0.933	0.924	0.911	0.919	0.915	0.894	0.899
Financial intermediation	1.265	1.256	1.257	1.250	1.253	1.245	1.233	1.242
Real estate activities	0.698	0.696	0.694	0.692	0.696	0.690	0.679	0.681
Renting of M&Eq and other business activities	1.070	1.069	1.075	1.084	1.094	1.097	1.104	1.135
Public administration and defense; compulsory social security	0.442	0.438	0.437	0.427	0.433	0.435	0.429	0.444
Education	0.487	0.471	0.463	0.452	0.458	0.461	0.452	0.461
Health and social work	0.465	0.444	0.427	0.418	0.418	0.416	0.410	0.411
Other community, social, and personal services	0.932	0.913	0.913	0.903	0.917	0.908	0.889	0.903
Private households with employed persons	0.403	0.400	0.391	0.382	0.379	0.377	0.371	0.367
	lowest linkage	<div><div></div><div></div><div></div></div>				<div><div></div><div></div><div></div></div> highest linkage		

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

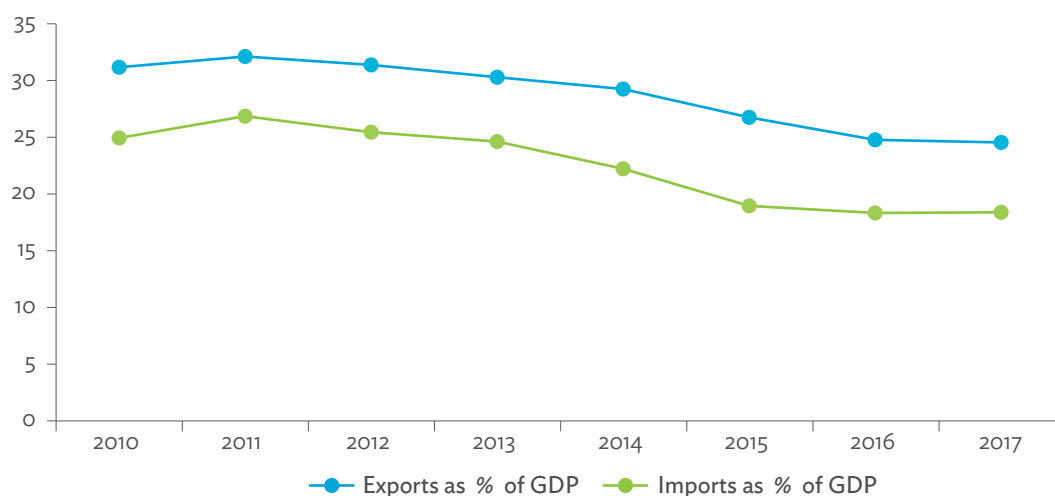
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 4.3

## INTERNATIONAL TRADE AND PRODUCTION LINKAGES

### People's Republic of China

**Figure 4.3.1: Exports and Imports as a Share of Gross Domestic Product, 2010–2017 (%)**

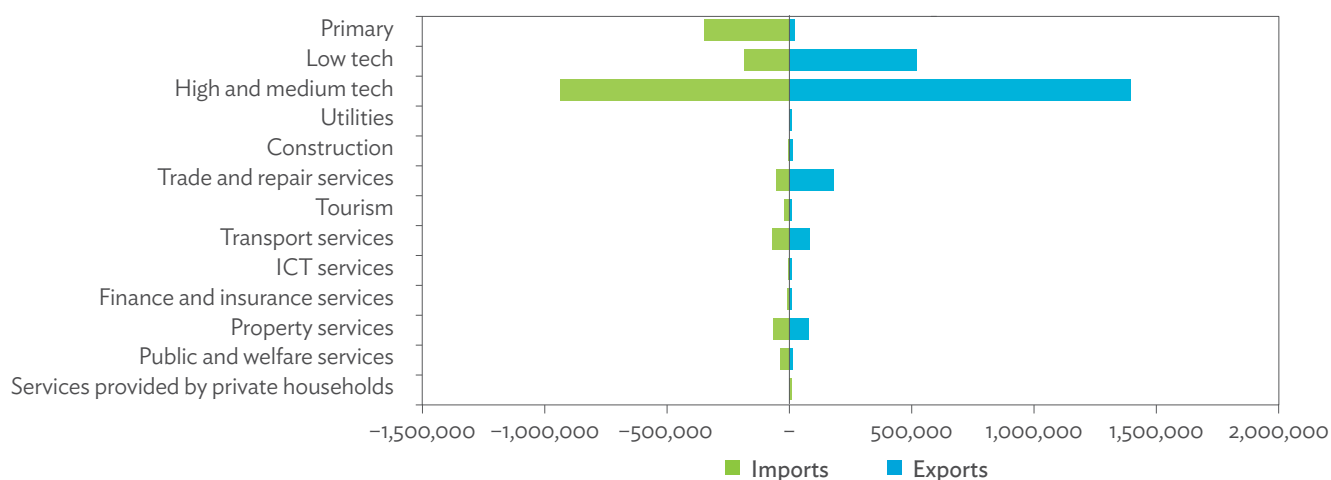


GDP = gross domestic product.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

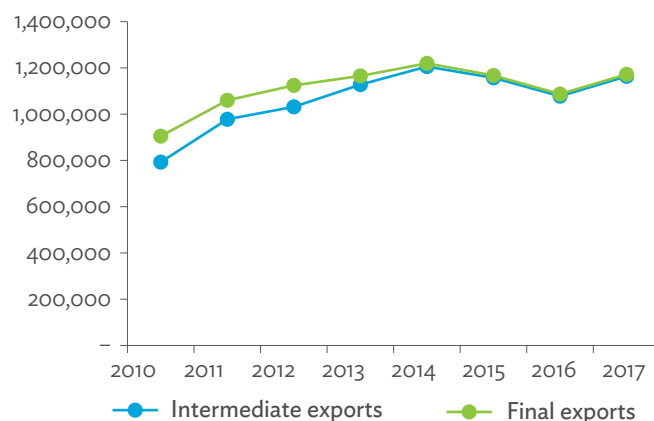
**Figure 4.3.2: Total Foreign Trade by Sector, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

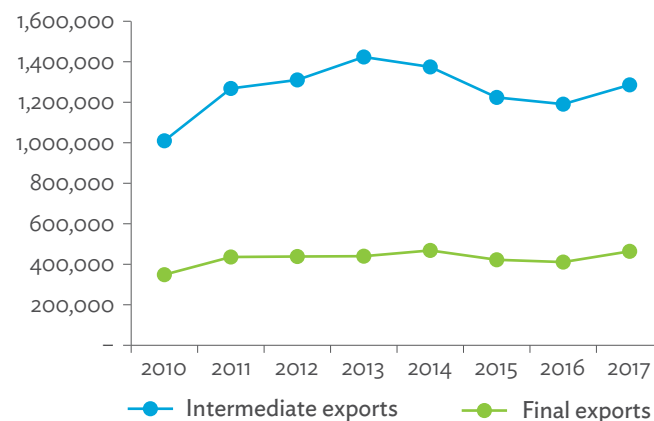
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.3.3: Trend of Export Activity by End-Use Category, 2010–2017 (\$ million)**

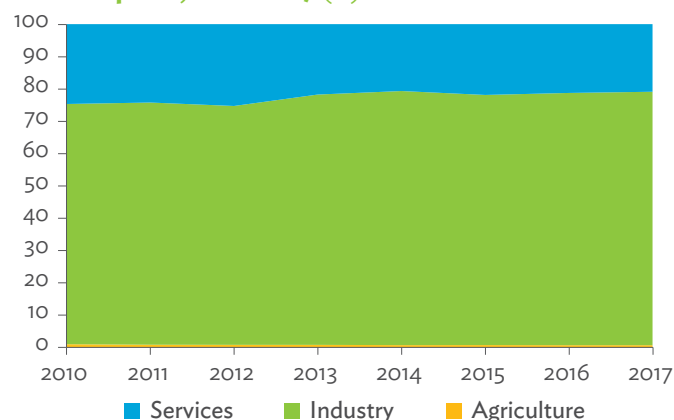
\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

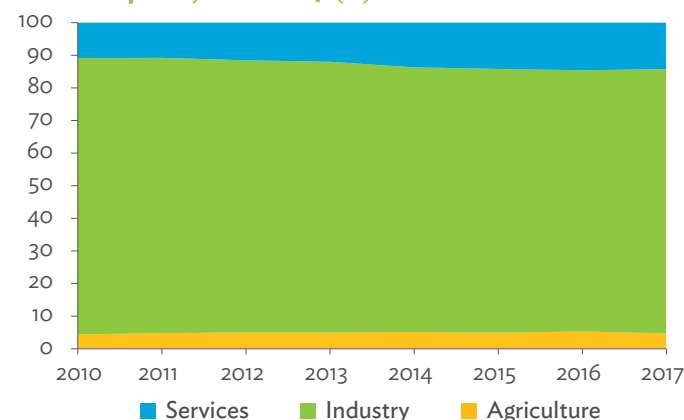
[Click here for figure data](#)**Figure 4.3.6: Trend of Import Activity by End-Use Category, 2010–2017 (\$ million)**

\$ = United States dollar.

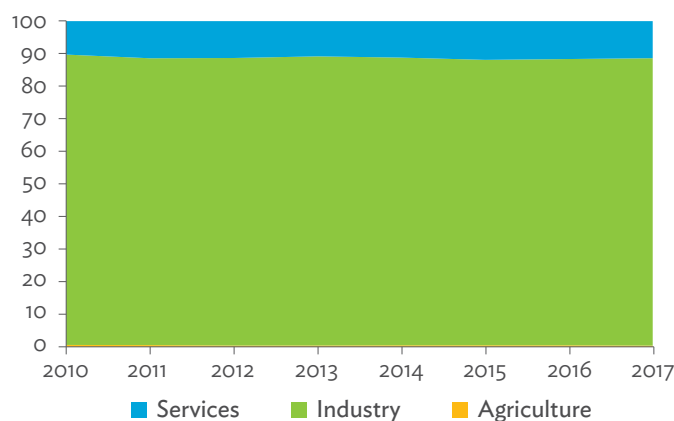
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.3.4: Shares of Sectors to Total Intermediate Exports, 2010–2017 (%)**

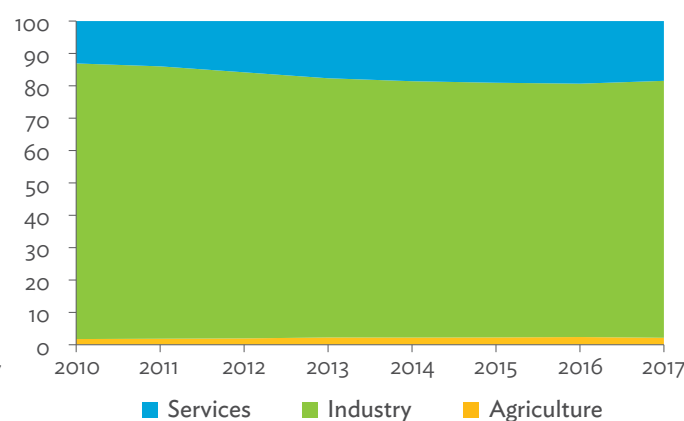
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.3.7: Shares of Sectors to Total Intermediate Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.3.5: Shares of Sectors to Total Final Exports, 2010–2017 (%)**

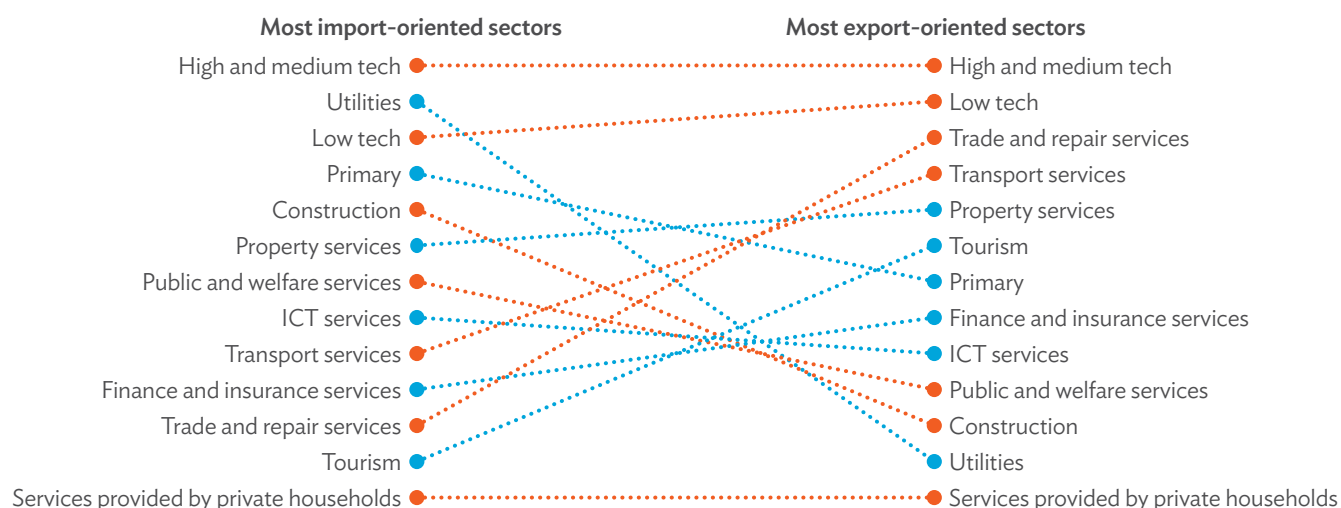
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 4.3.8: Shares of Sectors to Total Final Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.3.9: Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios, 2017**

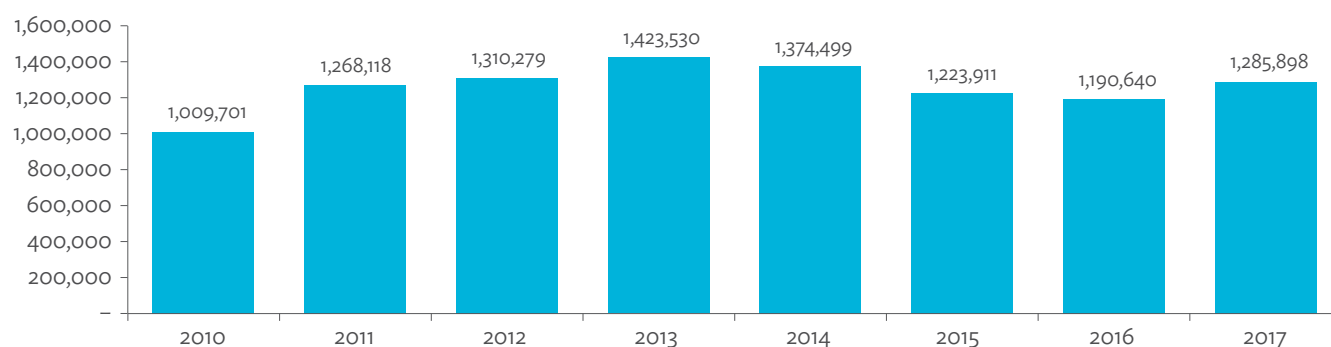


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.3.10: Total Foreign-Traded Input, 2010–2017 (\$ million)**

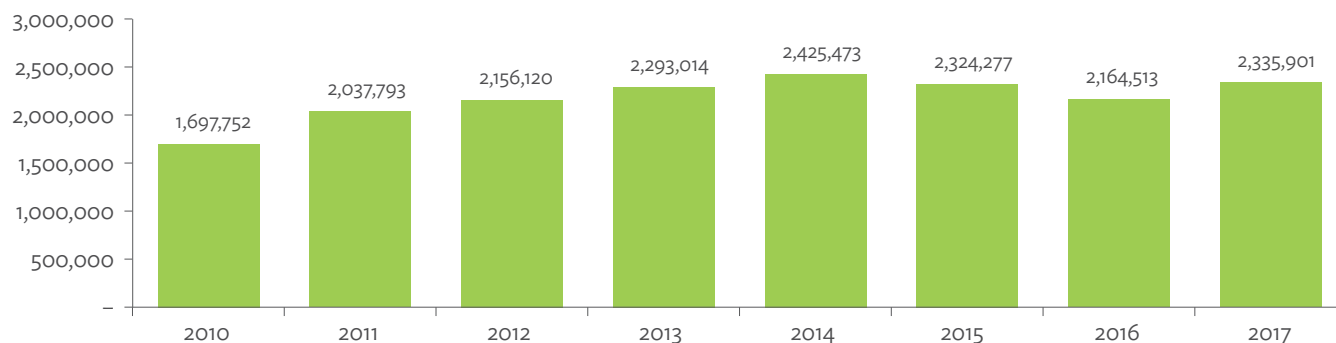


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.3.11: Total Foreign-Traded Output, 2010–2017 (\$ million)**

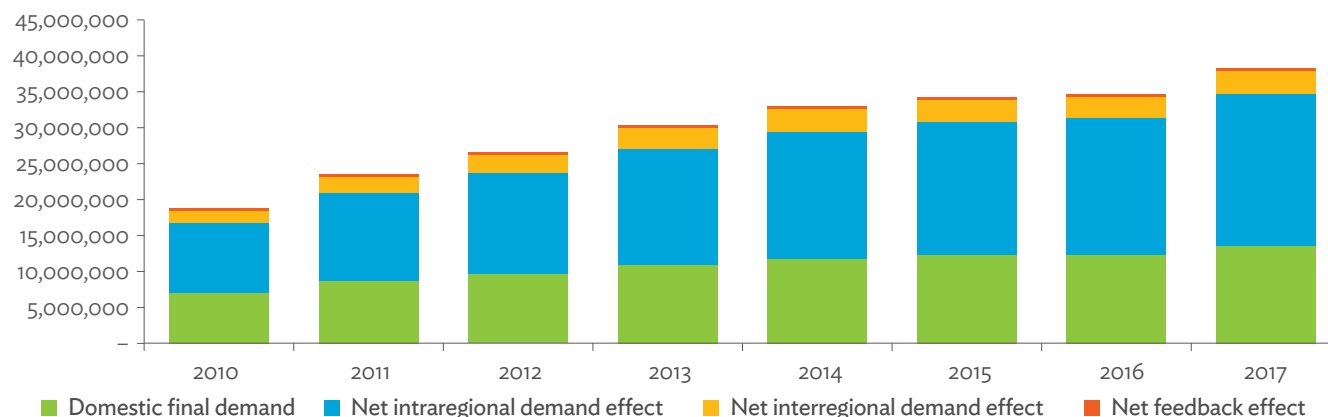


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.3.12: Decomposition of Total Production Attributable to Domestic and Interregional Demand, 2010–2017 (\$ million)**

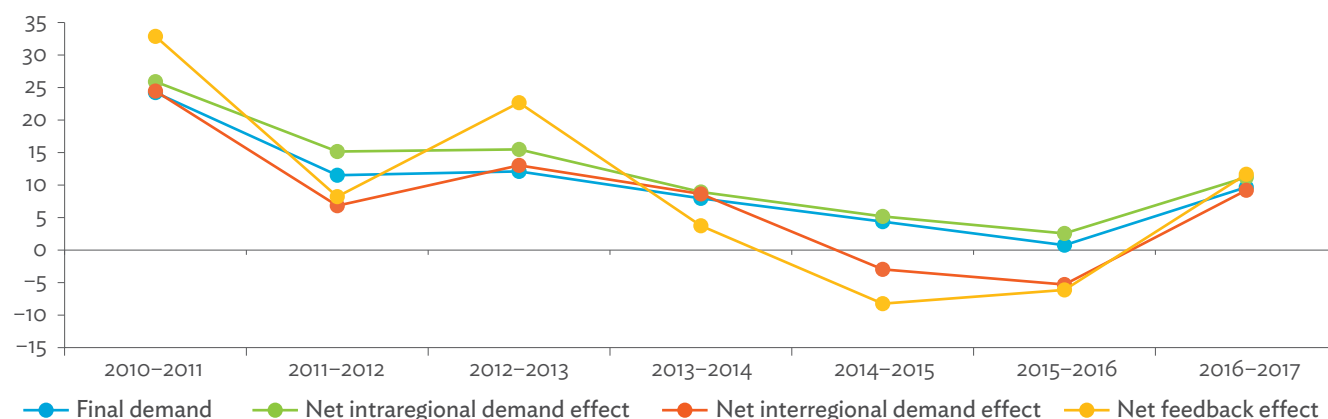


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

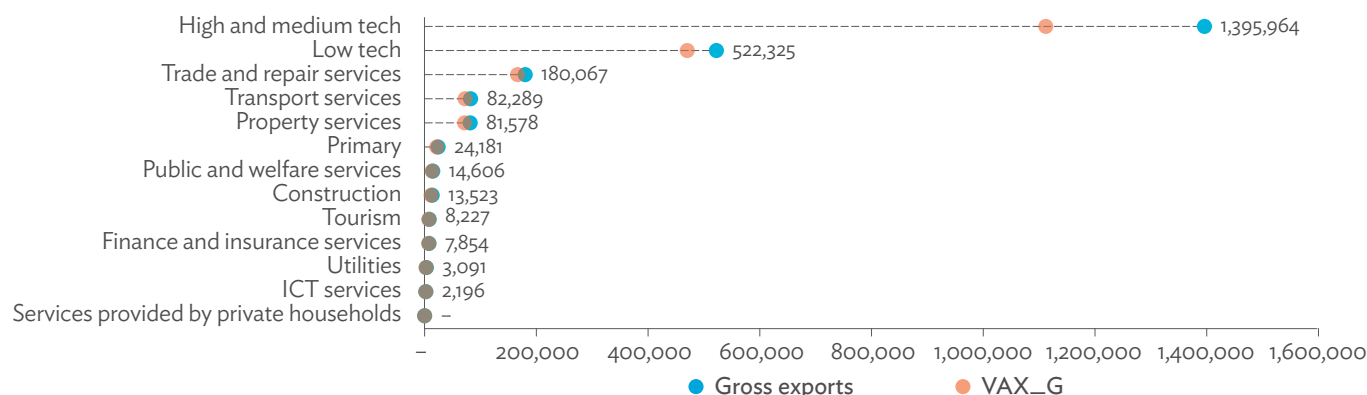
**Figure 4.3.13: Growth Rates of Production Components Based on Two-Region Input-Output Table, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.3.14: Gross Exports versus Value-Added Exports by Sector, 2017 (\$ million)**

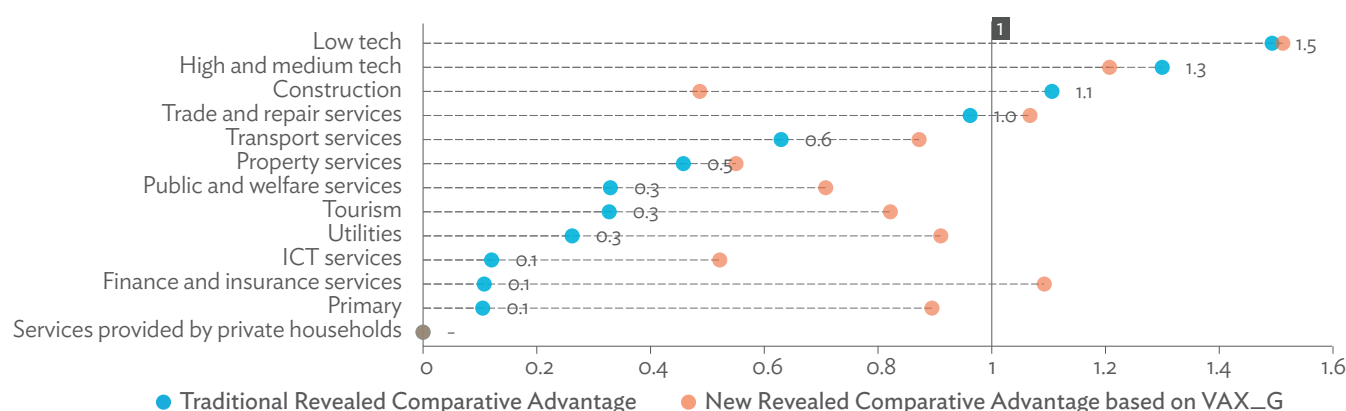


\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.3.15: Comparison of Traditional and New Revealed Comparative Advantage by Sector, 2017**

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Table 4.3.1: Production Attributable to Domestic Linkages by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Final demand								
Primary	328,525	401,232	423,731	455,188	480,140	486,365	475,074	590,621
Low tech	2,508,536	3,140,746	3,528,843	3,972,478	4,299,024	4,347,922	4,489,322	4,919,200
High and medium tech	1,854,805	2,270,857	2,478,900	2,737,321	2,895,367	2,885,172	2,790,814	3,064,678
Business service	1,255,012	1,567,000	1,742,697	1,937,990	2,080,664	2,280,667	2,227,280	2,392,167
Personal service	1,075,264	1,343,549	1,553,776	1,802,391	2,018,023	2,288,469	2,399,175	2,612,583
Intraregional effects (M1)								
Primary	1,210,067	1,564,736	1,718,215	1,958,072	2,153,354	2,248,464	2,221,034	2,283,167
Low tech	2,111,729	2,606,066	3,069,284	3,574,681	3,874,145	3,952,044	4,094,268	4,592,297
High and medium tech	4,195,509	5,362,595	6,086,269	6,972,912	7,374,407	7,571,392	7,955,495	8,984,132
Business service	1,961,468	2,421,143	2,881,605	3,381,393	3,861,882	4,338,014	4,315,342	4,764,387
Personal service	215,422	251,073	300,805	345,950	420,361	490,373	490,848	588,900

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 4.3.2: Production Attributable to Linkages with the Rest of the World by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Interregional effects (M2)								
Primary	165,537	215,050	216,254	244,663	272,285	263,475	239,989	246,161
Low tech	367,324	452,421	494,653	571,569	621,528	591,384	558,836	618,684
High and medium tech	1,058,448	1,325,669	1,388,562	1,602,525	1,726,832	1,641,789	1,588,171	1,747,695
Business service	431,939	528,654	592,847	625,047	683,858	705,971	647,088	697,483
Personal service	27,554	30,581	34,341	38,168	43,643	46,442	43,036	50,354
Feedback effects (M3)								
Primary	5,668.14	8,114.15	8,183.50	10,087.17	10,836.25	9,925.61	8,990.71	9,409.97
Low tech	11,535.72	15,282.11	17,046.01	21,313.38	22,255.69	20,099.36	18,895.77	21,198.02
High and medium tech	47,275.27	62,380.02	66,382.20	82,334.95	84,422.47	75,953.62	72,382.39	81,603.47
Business service	14,024.63	18,619.61	21,297.52	24,781.70	26,049.68	25,612.15	23,291.90	25,626.58
Personal service	864.44	1,060.91	1,219.18	1,485.68	1,680.91	1,691.80	1,560.83	1,878.48

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 4.3.3: Net Intraregional Multipliers (M1), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.9003	0.9154	0.9376	0.9662	0.9745	0.9791	0.9769	1.0101
Mining and quarrying	1.2182	1.2104	1.2417	1.2781	1.3017	1.3228	1.3415	1.3618
Food, beverages, and tobacco	1.5940	1.6121	1.6321	1.7125	1.7240	1.7269	1.7337	1.7817
Textiles and textile products	2.0629	2.0062	2.0448	2.1572	2.1715	2.1822	2.2062	2.2593
Leather, leather products, and footwear	1.9429	2.1114	2.1574	2.2674	2.2872	2.3038	2.3453	2.4019
Wood and products of wood and cork	1.8418	1.8441	1.9074	2.0075	1.9956	2.0169	2.0454	2.1030
Pulp, paper, paper products, printing, and publishing	1.8000	1.8322	1.8780	1.9611	1.9607	1.9827	2.0163	2.0549
Coke, refined petroleum, and nuclear fuel	1.4682	1.5486	1.6101	1.6602	1.7265	1.7902	1.8593	1.8887
Chemicals and chemical products	1.8320	1.8858	1.9935	2.0750	2.1063	2.1379	2.1812	2.2185
Rubber and plastics	1.9895	2.0254	2.0943	2.1787	2.2023	2.2346	2.2765	2.3137
Other nonmetallic minerals	1.6882	1.6898	1.7842	1.8745	1.8992	1.9285	1.9829	2.0113
Basic metals and fabricated metal	1.8727	1.8643	1.9855	2.0788	2.1291	2.1765	2.2377	2.2720
Machinery, nec	1.9195	1.9469	2.0066	2.0952	2.1308	2.1680	2.2129	2.2459
Electrical and optical equipment	1.8857	1.9690	2.0162	2.0902	2.1364	2.2021	2.2756	2.3127
Transport equipment	2.1795	2.2180	2.2634	2.3281	2.3507	2.3776	2.4505	2.4896
Manufacturing, nec; recycling	1.4354	1.4457	1.4851	1.6140	1.6152	1.6364	1.6543	1.6854
Electricity, gas, and water supply	1.8583	1.8354	1.8670	1.9124	1.9564	1.9898	2.0478	2.0750
Construction	1.9219	1.9397	2.0011	2.0544	2.0788	2.1024	2.1665	2.1836
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.8282	0.8303	0.8351	0.8459	0.8495	0.8554	0.8428	0.8521
Retail trade	0.8282	0.8303	0.8351	0.8459	0.8495	0.8554	0.8428	0.8521
Hotels and restaurants	1.4191	1.4298	1.4485	1.4885	1.4960	1.4956	1.4926	1.5222
Inland transport	1.1505	1.1675	1.1837	1.2090	1.2188	1.2196	1.2215	1.2408
Water transport	1.3698	1.3818	1.3893	1.4224	1.4370	1.4435	1.4195	1.4398
Air transport	1.6639	1.6714	1.6914	1.7488	1.7775	1.8092	1.8470	1.8783
Other supporting and auxiliary transport activities	1.3589	1.3778	1.3978	1.4288	1.4423	1.4520	1.4467	1.4712
Post and telecommunications	0.8174	0.8338	0.8381	0.8554	0.8591	0.8713	0.8872	0.8982
Financial intermediation	0.6181	0.6219	0.6276	0.6349	0.6350	0.6374	0.6373	0.6441
Real estate activities	0.3350	0.3364	0.3381	0.3433	0.3439	0.3414	0.3264	0.3314
Renting of M&Eq and other business activities	1.3846	1.4129	1.4415	1.4750	1.4825	1.4982	1.4914	1.5125
Public administration and defense; compulsory social security	1.0145	1.0181	1.0299	1.0515	1.0535	1.0598	1.0661	1.0762
Education	0.9558	0.9541	0.9588	0.9779	0.9800	0.9842	0.8940	0.9013
Health and social work	1.6677	1.6928	1.7416	1.7891	1.7961	1.8074	1.7590	1.7808
Other community, social, and personal services	1.2524	1.2691	1.2892	1.3209	1.3263	1.3371	1.1985	1.2145
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 4.3.4: Net Interregional Multipliers (M2), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.1461	0.1529	0.1390	0.1299	0.1165	0.1012	0.0966	0.0982
Mining and quarrying	0.2822	0.2936	0.2744	0.2626	0.2325	0.2049	0.1991	0.1944
Food, beverages, and tobacco	0.1974	0.2044	0.1867	0.1762	0.1583	0.1374	0.1312	0.1333
Textiles and textile products	0.2722	0.2775	0.2425	0.2367	0.2123	0.1848	0.1783	0.1784
Leather, leather products, and footwear	0.3443	0.3430	0.3021	0.2871	0.2567	0.2236	0.2157	0.2161
Wood and products of wood and cork	0.2887	0.3000	0.2637	0.2654	0.2573	0.2239	0.2150	0.2177
Pulp, paper, paper products, printing, and publishing	0.3787	0.3772	0.3345	0.3241	0.3053	0.2655	0.2573	0.2547
Coke, refined petroleum, and nuclear fuel	0.5136	0.5690	0.5495	0.5189	0.4613	0.4128	0.4082	0.3962
Chemicals and chemical products	0.4345	0.4511	0.4153	0.3952	0.3543	0.3109	0.3037	0.2981
Rubber and plastics	0.4624	0.4668	0.4115	0.3920	0.3560	0.3112	0.3028	0.2977
Other nonmetallic minerals	0.3572	0.3678	0.3473	0.3373	0.3017	0.2660	0.2625	0.2560
Basic metals and fabricated metal	0.4600	0.4832	0.4709	0.4788	0.4187	0.3709	0.3641	0.3549
Machinery, nec	0.4634	0.4665	0.4384	0.4337	0.3812	0.3352	0.3268	0.3196
Electrical and optical equipment	0.6592	0.6514	0.6161	0.6064	0.5404	0.4772	0.4677	0.4574
Transport equipment	0.4370	0.4459	0.4145	0.4005	0.3586	0.3146	0.3097	0.3032
Manufacturing, nec; recycling	0.2667	0.2746	0.2463	0.2557	0.2386	0.2088	0.2009	0.1990
Electricity, gas, and water supply	0.4053	0.4233	0.4035	0.3846	0.3395	0.3004	0.2970	0.2899
Construction	0.3571	0.3687	0.3464	0.3406	0.2993	0.2624	0.2593	0.2525
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.1274	0.1266	0.1151	0.1102	0.1009	0.0878	0.0828	0.0814
Retail trade	0.1274	0.1263	0.1152	0.1102	0.1010	0.0878	0.0828	0.0813
Hotels and restaurants	0.1577	0.1607	0.1451	0.1351	0.1210	0.1051	0.0998	0.1008
Inland transport	0.1968	0.2086	0.1920	0.1806	0.1596	0.1381	0.1328	0.1306
Water transport	0.2616	0.2720	0.2436	0.2269	0.1994	0.1731	0.1637	0.1601
Air transport	0.4141	0.4505	0.4313	0.4037	0.3662	0.3200	0.3098	0.3018
Other supporting and auxiliary transport activities	0.2561	0.2713	0.2495	0.2345	0.2089	0.1812	0.1732	0.1708
Post and telecommunications	0.1833	0.1790	0.1636	0.1576	0.1400	0.1225	0.1197	0.1173
Financial intermediation	0.0894	0.0899	0.0828	0.0802	0.0757	0.0656	0.0627	0.0616
Real estate activities	0.0459	0.0453	0.0406	0.0391	0.0359	0.0306	0.0282	0.0278
Renting of M&Eq and other business activities	0.3065	0.3126	0.2895	0.2782	0.2507	0.2185	0.2082	0.2041
Public administration and defense; compulsory social security	0.1684	0.1752	0.1597	0.1532	0.1397	0.1212	0.1163	0.1140
Education	0.1791	0.1819	0.1615	0.1542	0.1400	0.1212	0.1051	0.1030
Health and social work	0.2698	0.2761	0.2509	0.2395	0.2138	0.1861	0.1735	0.1711
Other community, social, and personal services	0.2464	0.2455	0.2250	0.2150	0.1954	0.1703	0.1461	0.1437
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 4.3-5: Net Feedback Multipliers (M3), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.0041	0.0046	0.0043	0.0045	0.0043	0.0038	0.0035	0.0038
Mining and quarrying	0.0095	0.0102	0.0098	0.0106	0.0102	0.0091	0.0087	0.0088
Food, beverages, and tobacco	0.0052	0.0058	0.0054	0.0058	0.0055	0.0049	0.0045	0.0049
Textiles and textile products	0.0095	0.0106	0.0096	0.0105	0.0098	0.0086	0.0079	0.0084
Leather, leather products, and footwear	0.0109	0.0121	0.0108	0.0113	0.0107	0.0096	0.0089	0.0093
Wood and products of wood and cork	0.0080	0.0090	0.0083	0.0092	0.0094	0.0083	0.0075	0.0081
Pulp, paper, paper products, printing, and publishing	0.0111	0.0120	0.0110	0.0122	0.0122	0.0108	0.0101	0.0104
Coke, refined petroleum, and nuclear fuel	0.0131	0.0154	0.0155	0.0164	0.0160	0.0148	0.0145	0.0144
Chemicals and chemical products	0.0128	0.0144	0.0136	0.0145	0.0141	0.0126	0.0120	0.0121
Rubber and plastics	0.0143	0.0159	0.0143	0.0152	0.0147	0.0130	0.0123	0.0125
Other nonmetallic minerals	0.0109	0.0119	0.0117	0.0128	0.0124	0.0111	0.0108	0.0108
Basic metals and fabricated metal	0.0139	0.0156	0.0158	0.0181	0.0173	0.0156	0.0150	0.0151
Machinery, nec	0.0210	0.0227	0.0221	0.0247	0.0232	0.0205	0.0194	0.0197
Electrical and optical equipment	0.0408	0.0428	0.0421	0.0468	0.0441	0.0389	0.0369	0.0372
Transport equipment	0.0188	0.0207	0.0199	0.0217	0.0207	0.0183	0.0174	0.0177
Manufacturing, nec; recycling	0.0088	0.0097	0.0090	0.0106	0.0106	0.0094	0.0087	0.0090
Electricity, gas, and water supply	0.0154	0.0164	0.0164	0.0177	0.0168	0.0151	0.0148	0.0149
Construction	0.0127	0.0139	0.0135	0.0149	0.0141	0.0125	0.0120	0.0122
Sale, maintenance, and repair	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wholesale trade and commission trade	0.0051	0.0054	0.0051	0.0055	0.0053	0.0047	0.0043	0.0043
Retail trade	0.0050	0.0053	0.0051	0.0055	0.0053	0.0047	0.0042	0.0043
Hotels and restaurants	0.0045	0.0049	0.0045	0.0047	0.0045	0.0040	0.0037	0.0039
Inland transport	0.0064	0.0071	0.0068	0.0073	0.0070	0.0061	0.0057	0.0059
Water transport	0.0082	0.0090	0.0084	0.0089	0.0085	0.0075	0.0070	0.0071
Air transport	0.0121	0.0140	0.0135	0.0144	0.0139	0.0124	0.0118	0.0119
Other supporting and auxiliary transport activities	0.0078	0.0088	0.0083	0.0088	0.0085	0.0075	0.0070	0.0071
Post and telecommunications	0.0105	0.0109	0.0103	0.0111	0.0104	0.0091	0.0086	0.0087
Financial intermediation	0.0031	0.0033	0.0031	0.0034	0.0034	0.0030	0.0027	0.0028
Real estate activities	0.0017	0.0018	0.0016	0.0018	0.0017	0.0015	0.0013	0.0013
Renting of M&Eq and other business activities	0.0146	0.0157	0.0150	0.0163	0.0155	0.0136	0.0125	0.0128
Public administration and defense; compulsory social security	0.0059	0.0065	0.0060	0.0065	0.0063	0.0055	0.0051	0.0052
Education	0.0069	0.0073	0.0065	0.0070	0.0067	0.0059	0.0049	0.0050
Health and social work	0.0091	0.0100	0.0092	0.0099	0.0095	0.0084	0.0075	0.0078
Other community, social, and personal services	0.0105	0.0112	0.0107	0.0115	0.0111	0.0097	0.0081	0.0082
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 4.3.6: Comparison of Exports in Gross and Value-Added Terms, 2010–2017 (\$ million)**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	22,609	19,758	26,779	23,115	24,803	21,554	26,146	22,870	26,998	23,875	26,025	23,340	23,422	21,100	24,181	21,662
Low tech	363,393	312,785	435,484	373,444	465,036	405,366	517,280	451,919	543,628	480,347	514,878	462,298	481,817	433,995	522,325	470,069
High and medium tech	1,012,325	739,465	1,203,579	878,543	1,262,717	937,163	1,358,855	1,010,147	1,451,469	1,112,473	1,374,713	1,089,469	1,287,702	1,024,211	1,395,964	1,111,959
Utilities	2,189	1,714	2,606	2,007	2,791	2,180	2,929	2,311	3,244	2,622	3,072	2,550	2,862	2,382	3,091	2,577
Construction	8,402	6,873	11,342	9,162	12,281	10,026	16,039	13,115	14,052	11,755	13,309	11,394	12,867	11,034	13,523	11,611
Trade and repair services	119,489	107,785	161,670	145,502	186,146	167,935	173,392	156,825	187,613	171,418	186,292	171,948	172,514	159,857	180,067	166,368
Tourism	10,112	9,140	9,643	8,674	8,982	8,134	9,097	8,252	9,129	8,346	9,145	8,447	7,868	7,290	8,227	7,607
Transport services	75,630	63,352	88,492	73,197	89,485	75,080	87,741	74,175	85,240	73,334	85,393	74,888	77,227	68,046	82,289	72,446
ICT services	2,251	2,019	2,840	2,549	2,684	2,428	2,500	2,259	2,180	1,987	2,184	2,011	2,061	1,899	2,196	2,023
Finance and insurance services	3,563	3,296	5,334	4,911	6,512	6,005	6,065	5,592	7,146	6,619	8,299	7,749	7,629	7,142	7,854	7,337
Property services	65,653	55,057	77,434	64,577	80,212	67,675	77,672	65,657	81,018	69,435	86,315	75,319	74,925	65,699	81,578	71,552
Public and welfare services	12,136	10,737	12,591	11,135	14,473	12,933	15,297	13,718	13,756	12,449	14,653	13,432	13,619	12,611	14,606	13,526
Services provided by private households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 4.3.7: Comparison of Revealed Comparative Advantage Measures in Gross and Value-Added Terms, 2010–2017**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	0.122	0.879	0.108	0.807	0.095	0.780	0.099	0.842	0.103	0.908	0.116	0.970	0.115	0.979	0.105	0.895
Low tech	1.484	1.583	1.508	1.634	1.530	1.678	1.547	1.630	1.507	1.542	1.480	1.492	1.491	1.505	1.493	1.512
High and medium tech	1.274	1.291	1.263	1.290	1.263	1.251	1.287	1.236	1.300	1.198	1.276	1.175	1.299	1.178	1.300	1.207
Utilities	0.288	0.977	0.286	0.876	0.284	0.862	0.276	0.912	0.285	0.986	0.272	0.931	0.219	0.906	0.262	0.910
Construction	1.260	0.360	1.451	0.421	1.404	0.424	1.299	0.466	1.127	0.449	1.076	0.429	0.970	0.437	1.106	0.487
Trade and repair services	0.899	0.984	1.026	1.059	1.084	1.108	0.966	1.091	0.985	1.104	0.999	1.079	0.988	1.100	0.962	1.067
Tourism	0.564	1.054	0.448	0.956	0.402	0.966	0.374	0.928	0.347	0.921	0.365	0.903	0.295	0.774	0.327	0.822
Transport services	0.747	0.871	0.779	0.909	0.733	0.902	0.692	0.889	0.631	0.871	0.649	0.872	0.639	0.887	0.630	0.872
ICT services	0.198	0.641	0.221	0.632	0.180	0.623	0.159	0.629	0.129	0.647	0.134	0.636	0.129	0.588	0.120	0.522
Finance and insurance services	0.068	0.835	0.090	0.888	0.104	0.922	0.088	0.955	0.097	0.986	0.114	1.102	0.108	1.091	0.108	1.092
Property services	0.591	0.506	0.594	0.514	0.582	0.530	0.499	0.521	0.473	0.523	0.505	0.538	0.457	0.520	0.458	0.550
Public and welfare services	0.383	0.539	0.354	0.516	0.373	0.546	0.348	0.538	0.298	0.557	0.316	0.579	0.297	0.618	0.329	0.708
Services provided by private households	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

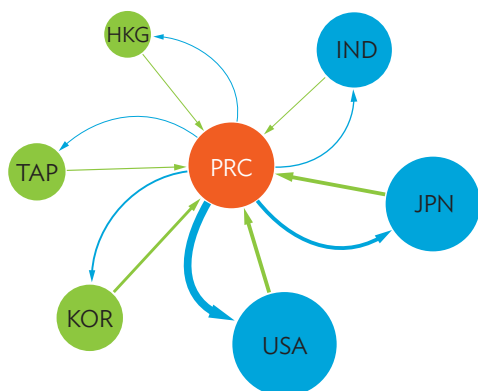
Source: Asian Development Bank Multi-Regional Input-Output Database.

# GLOBAL VALUE CHAIN INDICATORS

## 4.4

### People's Republic of China

**Figure 4.4.1a: Trade in Value-Added Flow with Top Trading Partners, 2010**

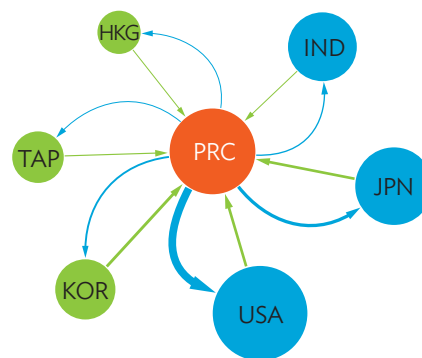


● Economy in focus ● Import partner ● Export partner

HKG = Hong Kong, China; IND = India; JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; TAP = Taipei, China; USA = United States.  
Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.4.1b: Trade in Value-Added Flow with Top Trading Partners, 2017**

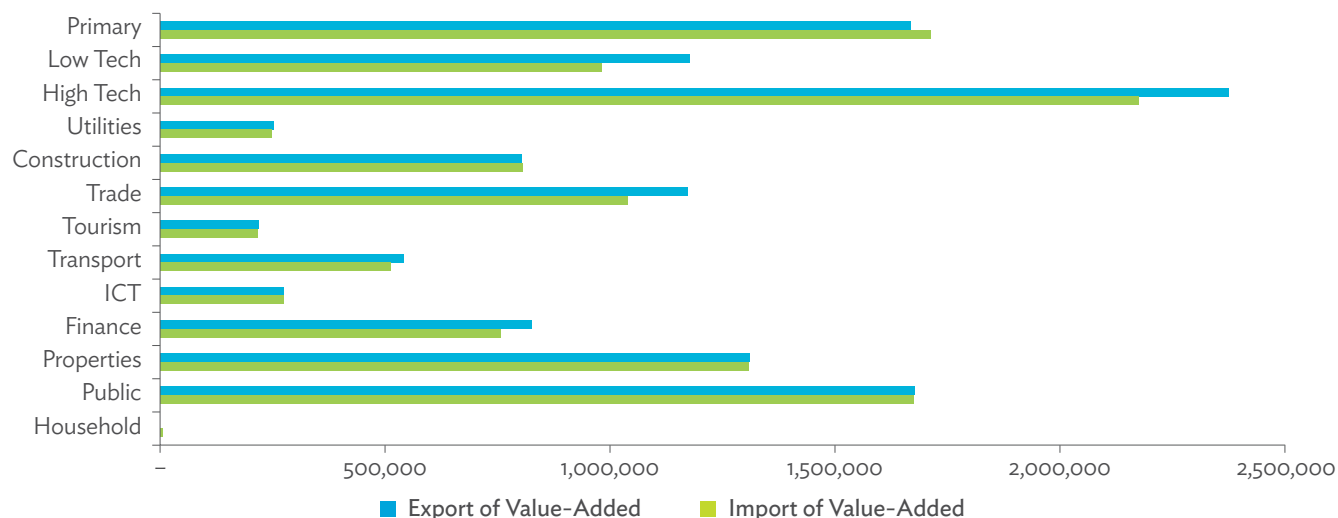


● Economy in focus ● Import partner ● Export partner

HKG = Hong Kong, China; IND = India; JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; TAP = Taipei, China; USA = United States.  
Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 4.4.2: Trade in Value-Added by Industry, 2017 (\$ million)**

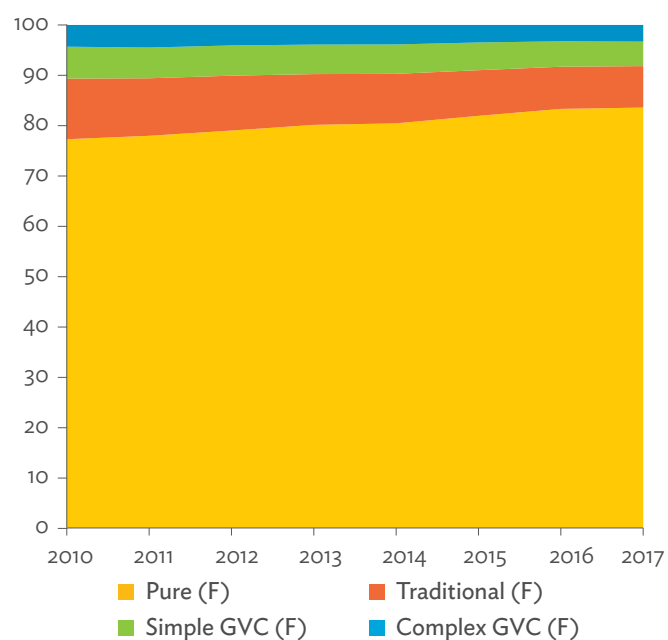


\$ = United States dollar, ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input-Output Database.

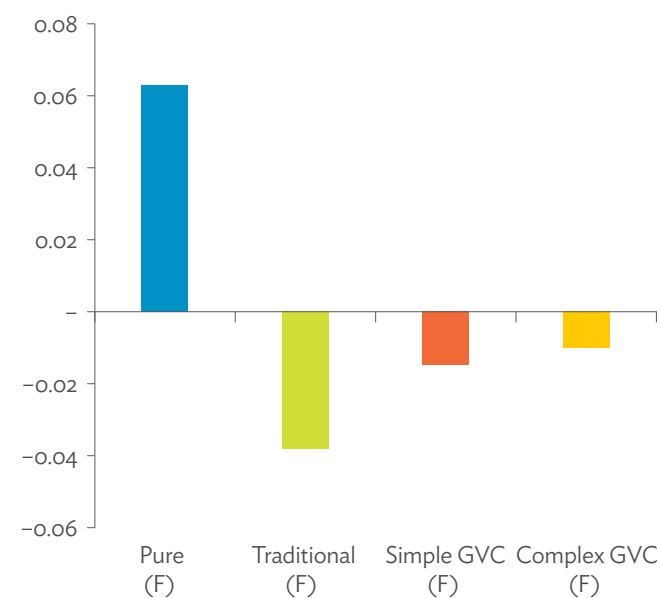
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**Figure 4.4.3: Trade in Value-Added, 2010–2017 (\$ million)**

[Click here for figure data](#)

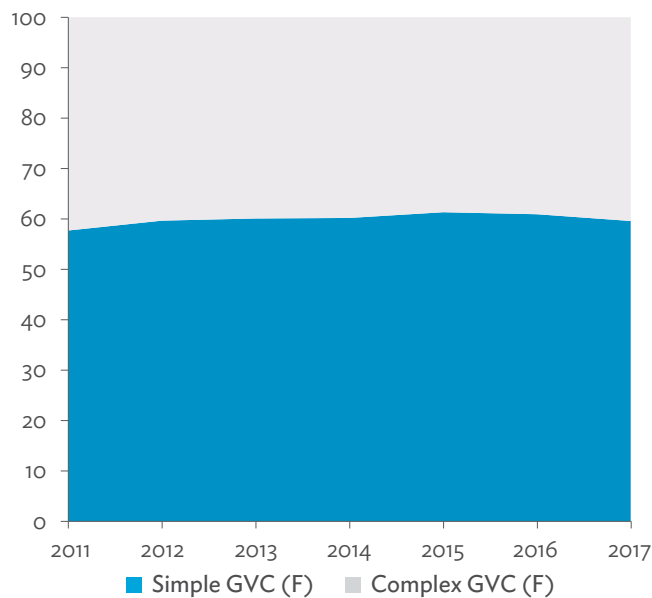
**Figure 4.4.4: Trends in Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Forward Linkages, 2010–2017 (%)**

[Click here for figure data](#)

**Figure 4.4.5: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Forward Linkages (%)**

[Click here for figure data](#)

**Figure 4.4.6: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Forward Linkages, 2010–2017 (%)**

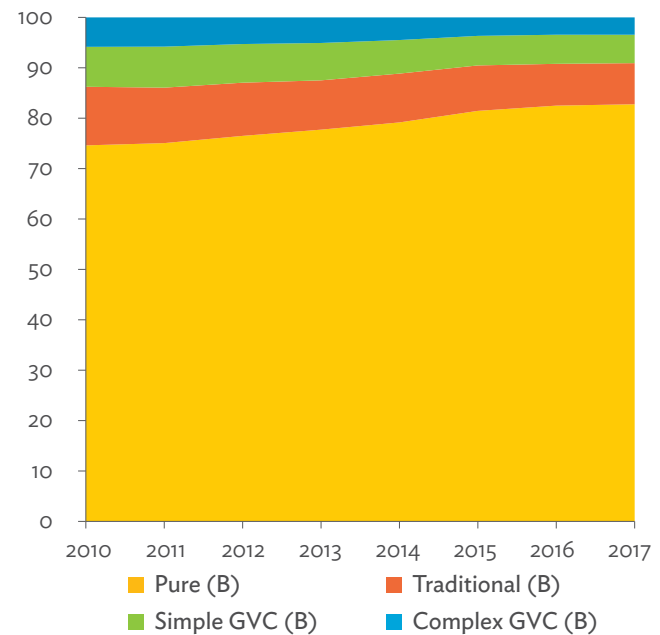


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.4.7: Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Backward Linkages, 2010–2017 (%)**

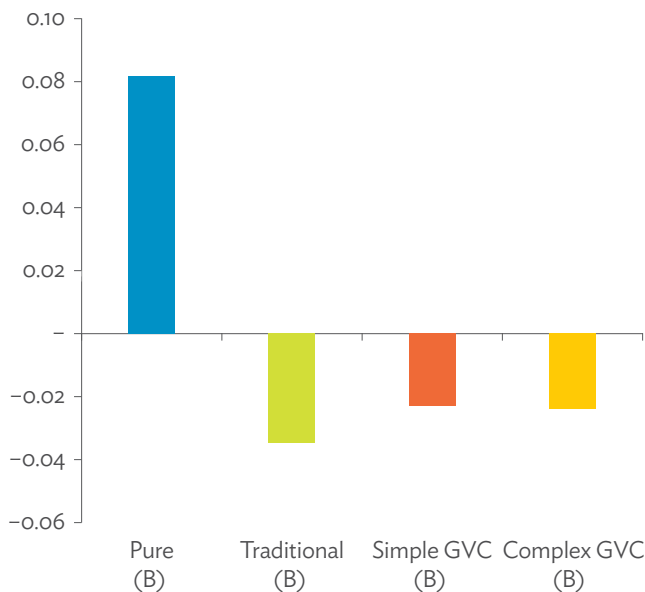


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.4.8: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Backward Linkages (%)**



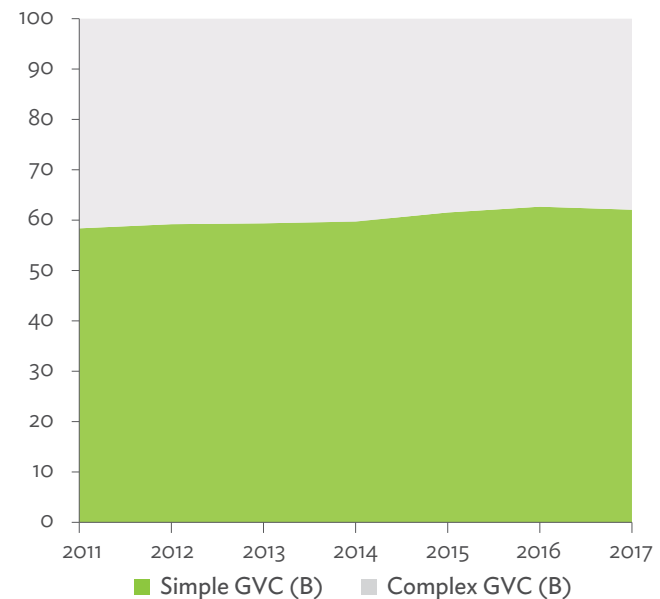
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.4.9: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Backward Linkages (%)**

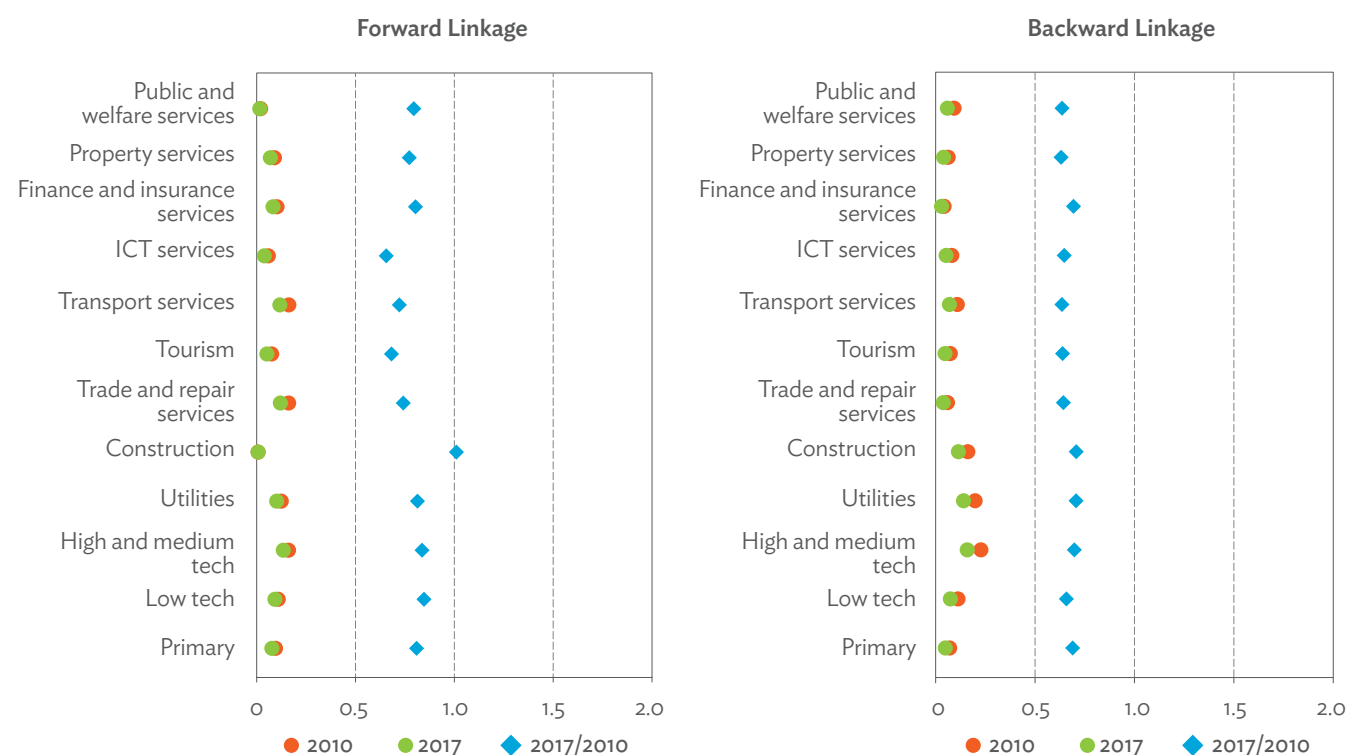


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 4.4.10: Global Value Chain Participation Based on Forward and Backward Linkages at the Sectoral Level, 2010 and 2017**

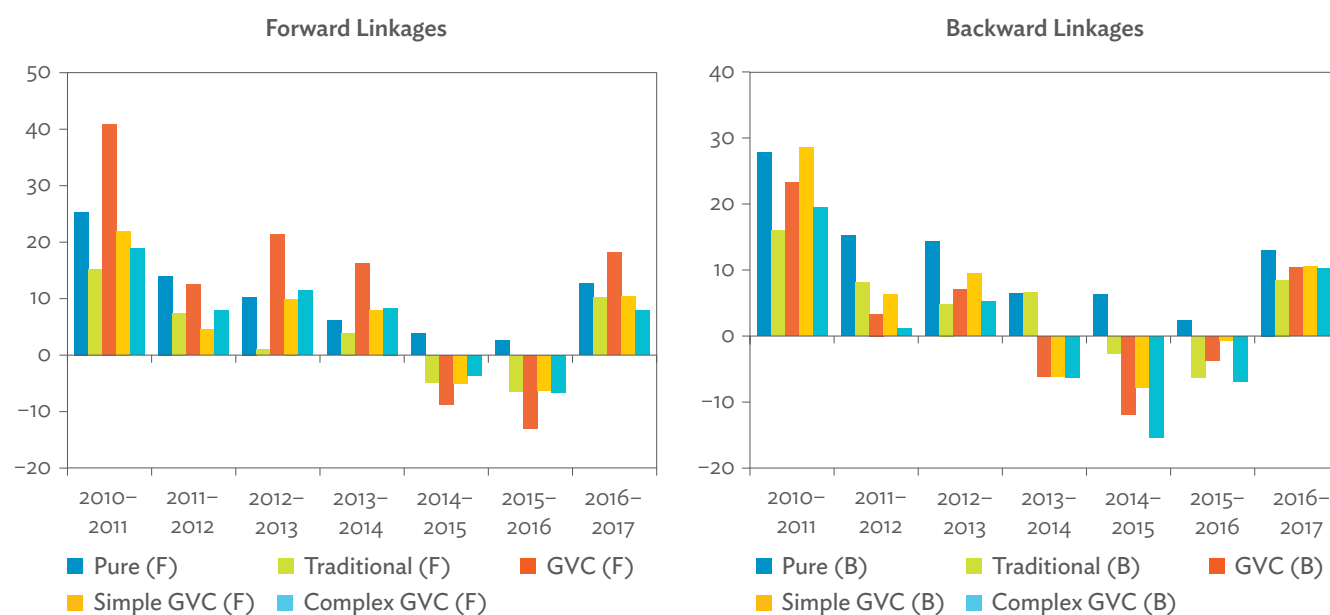


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input–Output Database.

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**Figure 4.4.11: Nominal Growth Rates of Different Value-Added Activities in the Manufacturing Sector, 2010–2017 (%)**



GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

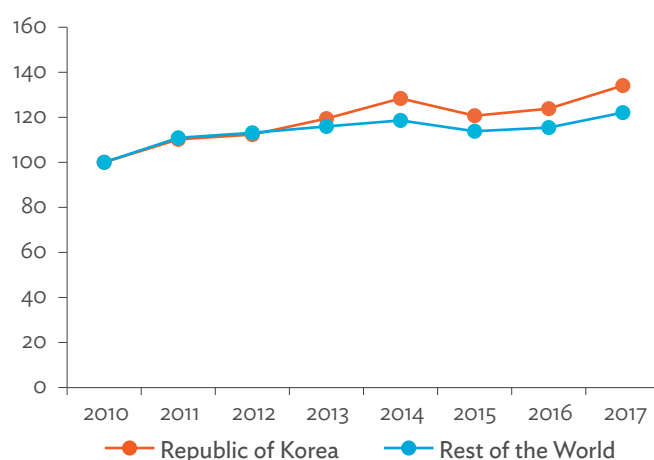
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# OVERVIEW OF PRODUCTION AND DEMAND STRUCTURES

# 5.1

## Republic of Korea

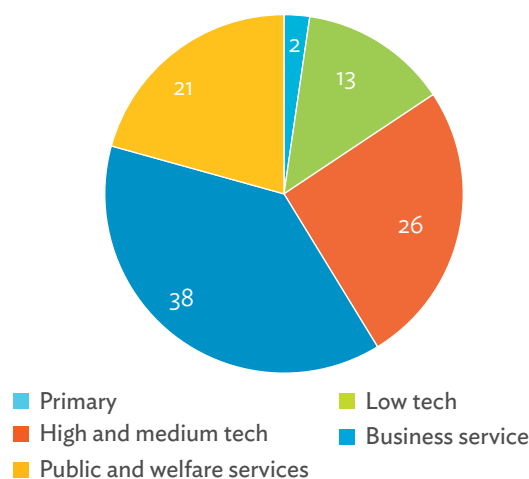
**Figure 5.1.1a: Gross Domestic Product Scaled to 2010 Levels in Comparison with the Rest of the World, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

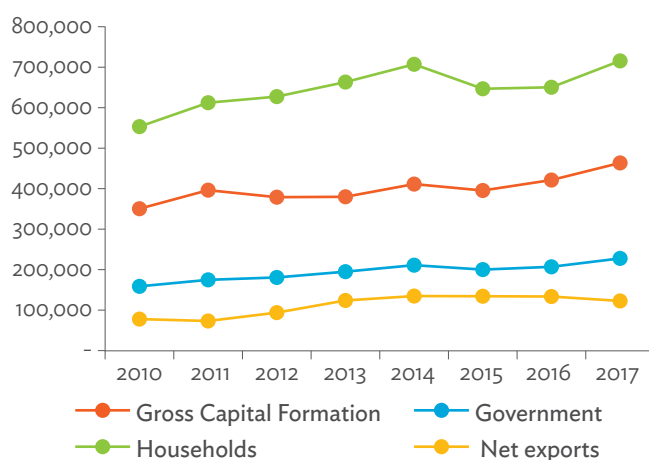
**Figure 5.1.1b: Gross Domestic Product Share by 5-Sector Aggregation, 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.1.2a: Gross Domestic Product Trend by Final Consumption Expenditure Components, 2010–2017 (\$ million)**

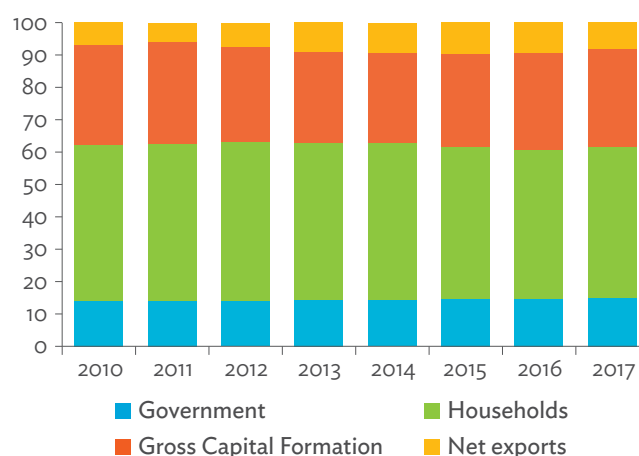


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.1.2b: Share of Consumption Expenditure by Final Consumption Expenditure Components, 2010–2017 (%)**

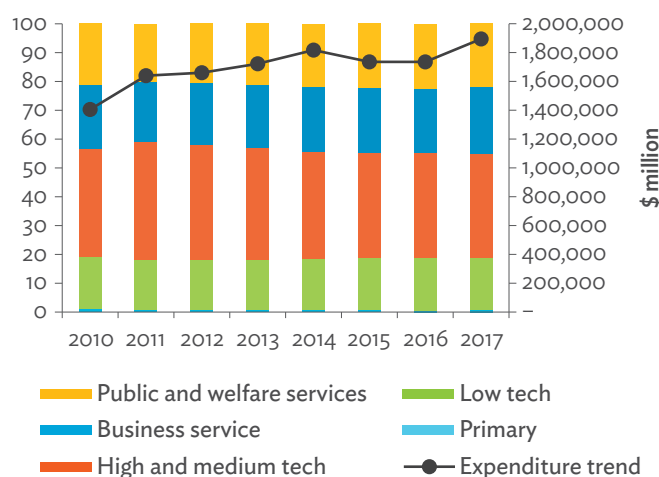


Source: Asian Development Bank Multi-Regional Input–Output Database.

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**Figure 5.1.2c: Final Consumption Expenditure Total Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

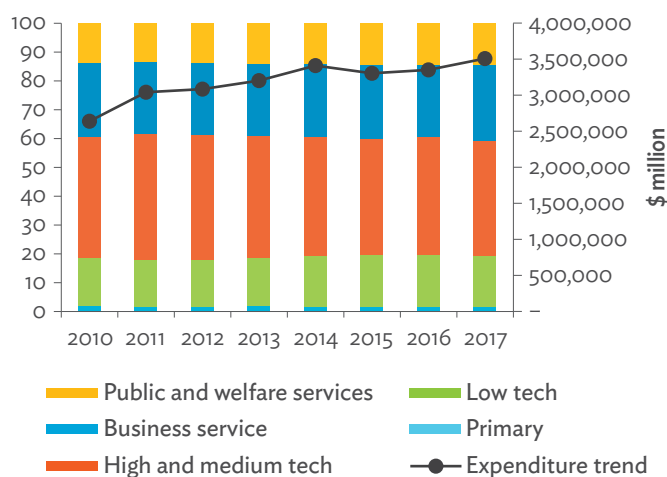


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.1.3a: Gross Total Output Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

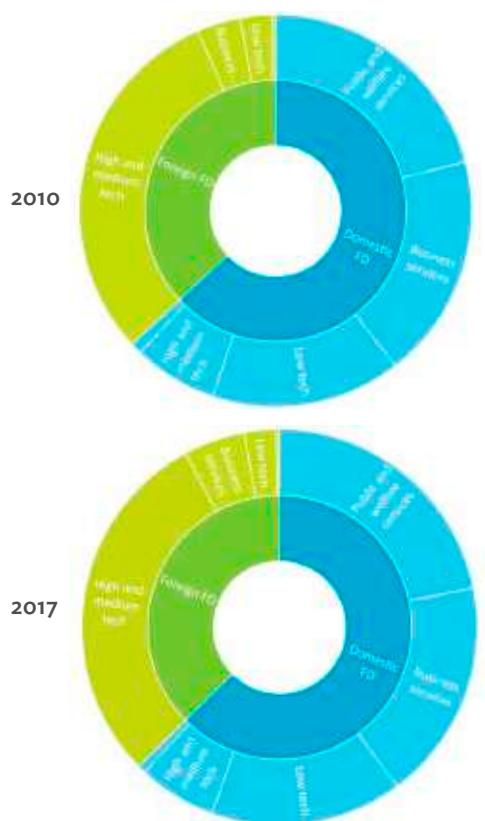


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

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**Figure 5.1.3b: Shares by 5-Sector Aggregation Attributed to Foreign and Domestic Final Demand, 2010 and 2017 (%)**

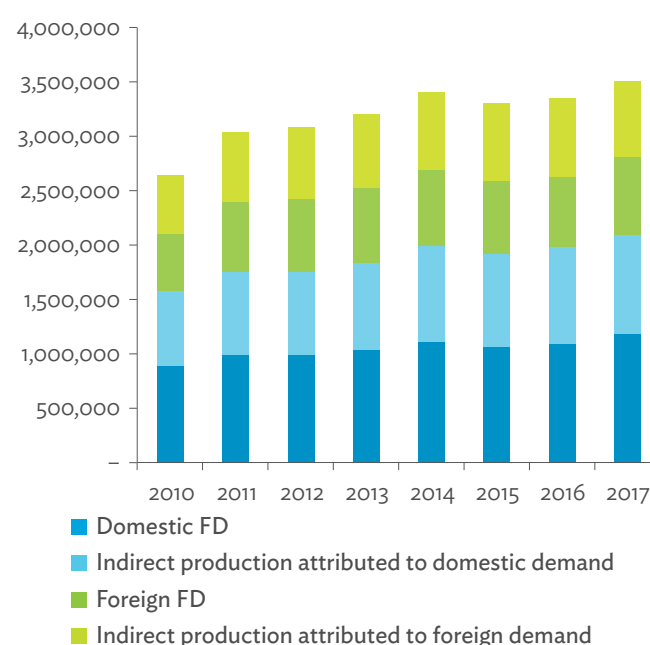


FD=final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

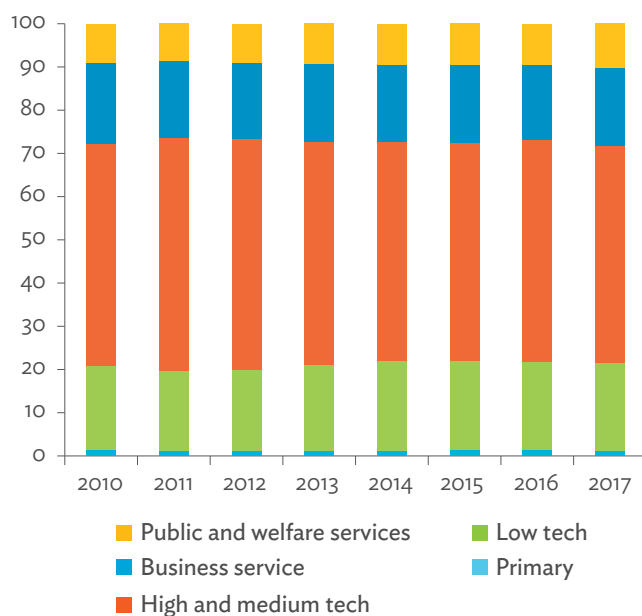
**Figure 5.1.3c: Gross Output by Production Attributed to Foreign and Domestic Demand, 2010–2017 (\$ million)**



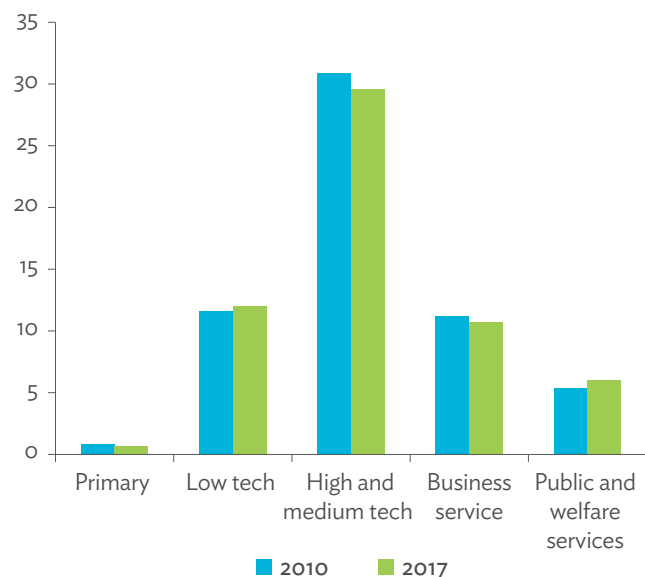
\$ = United States dollar, FD = final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

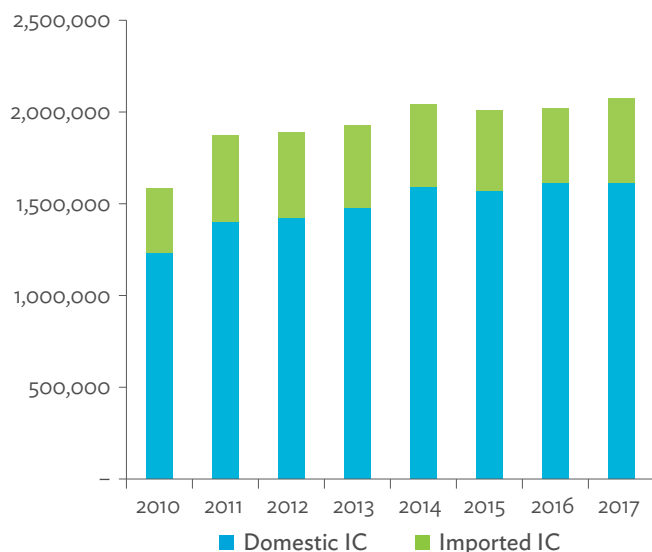
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**Figure 5.1.4a: Intermediate Consumption Shares by 5-Sector Aggregation, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

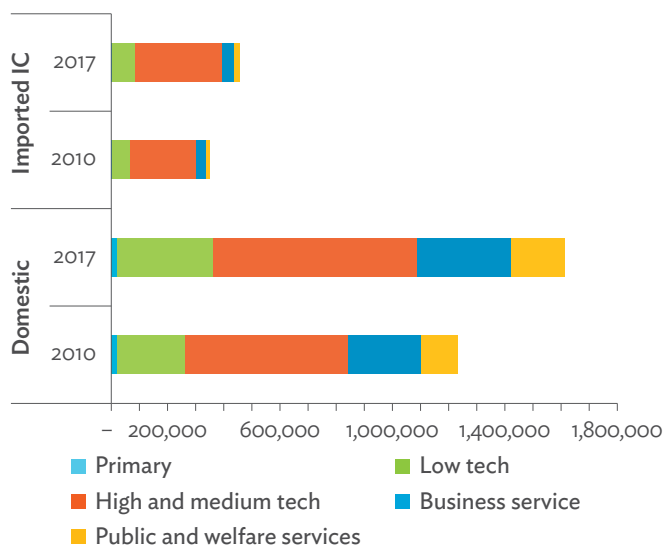
[Click here for figure data](#)**Figure 5.1.4b: Intermediate Consumption Ratio to Output by 5-Sector Aggregation, 2010 and 2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.1.4c: Shares of Domestic and Imported Intermediate Consumption, 2010–2017 (\$ million)**

\$ = United States dollar, IC= intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

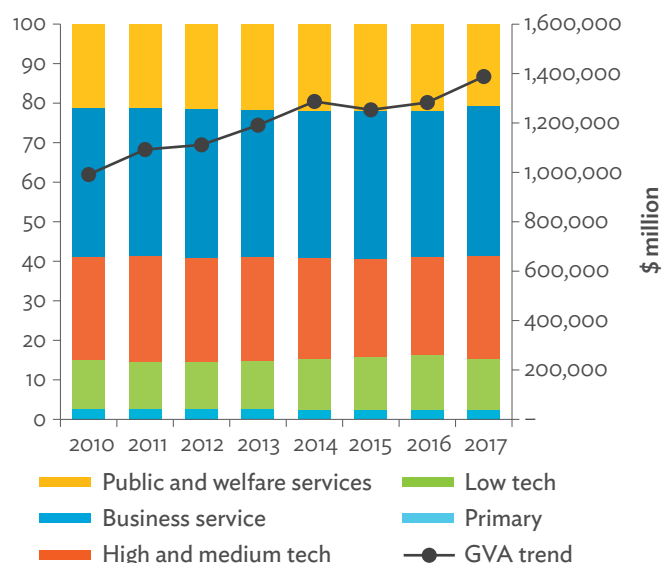
[Click here for figure data](#)**Figure 5.1.4d: Shares of Domestic and Imported Intermediate Consumption by 5-Sector Aggregation, 2010 and 2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.1.5a: Gross Value Added Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

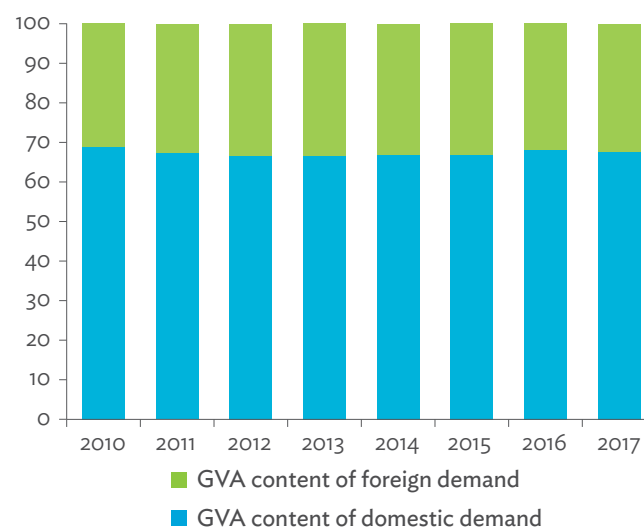


\$ = United States dollar, GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.1.5b: Gross Value Added Share Attributed to Foreign and Domestic Final Demand, 2010–2017 (%)**

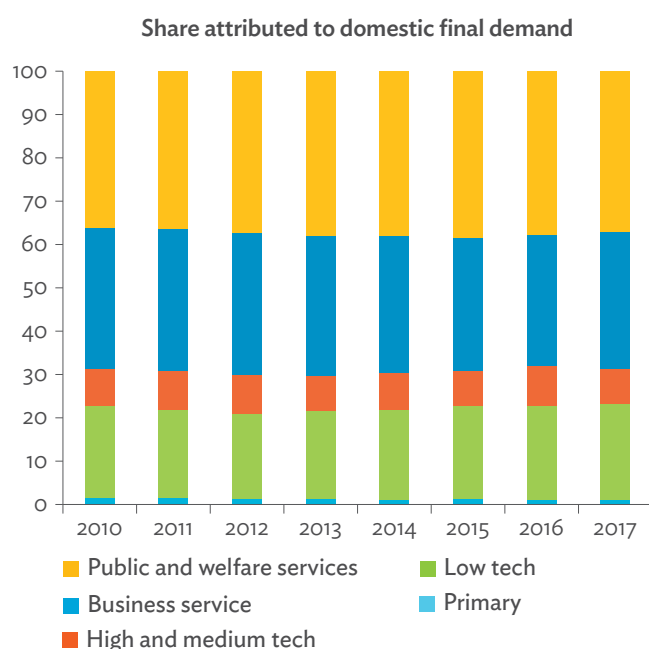


GVA = gross value added.

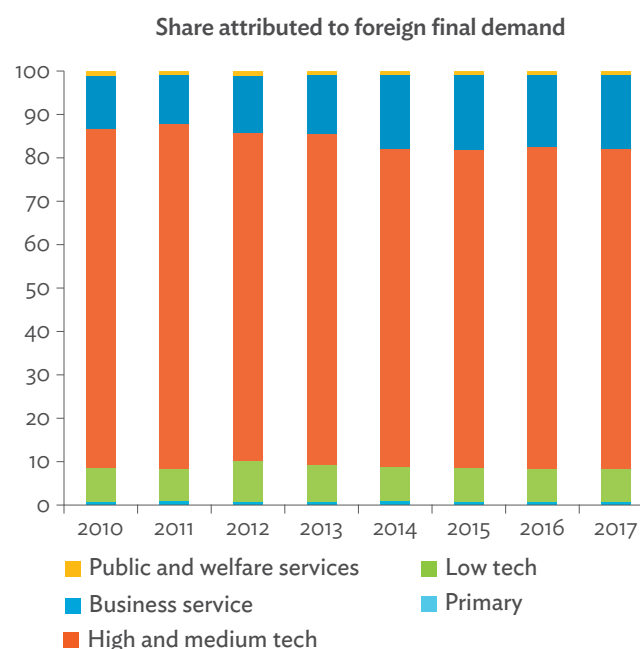
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.1.5c: Sectoral Shares of Gross Value Added Content in Domestic and Foreign Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.



[Click here for figure data](#)

**Table 5.1.1: Gross Value Added Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.797	0.788	0.782	0.789	0.804	0.813	0.817	0.823
Mining and quarrying	0.799	0.784	0.789	0.783	0.789	0.800	0.809	0.804
Food, beverages, and tobacco	0.697	0.666	0.668	0.682	0.702	0.717	0.728	0.725
Textiles and textile products	0.677	0.650	0.641	0.666	0.682	0.697	0.711	0.698
Leather, leather products, and footwear	0.626	0.595	0.588	0.623	0.620	0.639	0.656	0.633
Wood and products of wood and cork	0.666	0.638	0.655	0.665	0.657	0.671	0.692	0.672
Pulp, paper, paper products, printing, and publishing	0.734	0.719	0.721	0.735	0.743	0.755	0.767	0.677
Coke, refined petroleum, and nuclear fuel	0.166	0.143	0.139	0.159	0.179	0.195	0.233	0.204
Chemicals and chemical products	0.547	0.503	0.493	0.515	0.539	0.556	0.581	0.588
Rubber and plastics	0.633	0.599	0.589	0.608	0.630	0.646	0.671	0.648
Other nonmetallic minerals	0.608	0.559	0.559	0.581	0.607	0.625	0.644	0.642
Basic metals and fabricated metal	0.538	0.500	0.509	0.546	0.555	0.578	0.603	0.593
Machinery, nec	0.645	0.613	0.614	0.639	0.654	0.672	0.689	0.687
Electrical and optical equipment	0.606	0.559	0.576	0.602	0.612	0.630	0.649	0.640
Transport equipment	0.643	0.603	0.607	0.630	0.646	0.664	0.673	0.662
Manufacturing, nec; recycling	0.669	0.636	0.638	0.660	0.658	0.677	0.694	0.683
Electricity, gas, and water supply	0.486	0.429	0.425	0.453	0.478	0.517	0.546	0.597
Construction	0.669	0.632	0.641	0.662	0.677	0.693	0.727	0.709
Sale, maintenance, and repair	0.862	0.850	0.844	0.850	0.857	0.863	0.870	0.847
Wholesale trade and commission trade	0.850	0.840	0.852	0.858	0.864	0.871	0.877	0.853
Retail trade	0.848	0.835	0.840	0.847	0.854	0.860	0.868	0.845
Hotels and restaurants	0.805	0.784	0.781	0.793	0.804	0.813	0.829	0.795
Inland transport	0.613	0.579	0.569	0.598	0.619	0.648	0.660	0.649
Water transport	0.634	0.597	0.587	0.615	0.634	0.646	0.664	0.672
Air transport	0.622	0.578	0.575	0.603	0.627	0.656	0.674	0.668
Other supporting and auxiliary transport activities	0.760	0.736	0.729	0.751	0.760	0.780	0.790	0.796
Post and telecommunications	0.808	0.791	0.787	0.798	0.802	0.808	0.817	0.946
Financial intermediation	0.854	0.850	0.837	0.839	0.843	0.843	0.851	0.852
Real estate activities	0.945	0.939	0.937	0.939	0.942	0.944	0.947	0.953
Renting of M&Eq and other business activities	0.831	0.817	0.817	0.826	0.834	0.835	0.847	0.871
Public administration and defense; compulsory social security	0.881	0.872	0.874	0.881	0.887	0.891	0.896	0.896
Education	0.870	0.866	0.860	0.870	0.876	0.874	0.876	0.885
Health and social work	0.771	0.752	0.749	0.757	0.768	0.778	0.801	0.792
Other community, social, and personal services	0.800	0.776	0.773	0.786	0.795	0.801	0.811	0.771
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 5.1.2: Import Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.170	0.181	0.184	0.178	0.165	0.169	0.164	0.158
Mining and quarrying	0.151	0.167	0.163	0.167	0.164	0.164	0.153	0.157
Food, beverages, and tobacco	0.251	0.283	0.280	0.265	0.248	0.252	0.240	0.241
Textiles and textile products	0.276	0.302	0.309	0.287	0.273	0.278	0.263	0.275
Leather, leather products, and footwear	0.326	0.358	0.363	0.330	0.337	0.337	0.318	0.341
Wood and products of wood and cork	0.289	0.317	0.299	0.292	0.302	0.311	0.288	0.309
Pulp, paper, paper products, printing, and publishing	0.216	0.230	0.228	0.215	0.209	0.212	0.199	0.283
Coke, refined petroleum, and nuclear fuel	0.737	0.761	0.758	0.742	0.728	0.787	0.746	0.777
Chemicals and chemical products	0.397	0.439	0.446	0.426	0.404	0.424	0.399	0.391
Rubber and plastics	0.321	0.354	0.362	0.345	0.325	0.336	0.310	0.332
Other nonmetallic minerals	0.333	0.382	0.378	0.358	0.336	0.346	0.326	0.327
Basic metals and fabricated metal	0.410	0.447	0.436	0.403	0.398	0.407	0.380	0.391
Machinery, nec	0.312	0.343	0.341	0.319	0.306	0.311	0.293	0.297
Electrical and optical equipment	0.350	0.395	0.378	0.356	0.346	0.356	0.336	0.347
Transport equipment	0.316	0.355	0.350	0.329	0.315	0.320	0.310	0.321
Manufacturing, nec; recycling	0.288	0.320	0.317	0.297	0.302	0.305	0.287	0.298
Electricity, gas, and water supply	0.425	0.476	0.475	0.453	0.433	0.437	0.406	0.340
Construction	0.281	0.317	0.307	0.288	0.276	0.281	0.246	0.265
Sale, maintenance, and repair	0.112	0.123	0.128	0.122	0.117	0.117	0.109	0.131
Wholesale trade and commission trade	0.121	0.131	0.121	0.116	0.111	0.111	0.104	0.126
Retail trade	0.123	0.135	0.131	0.125	0.120	0.120	0.112	0.133
Hotels and restaurants	0.146	0.167	0.168	0.158	0.148	0.151	0.134	0.169
Inland transport	0.260	0.293	0.301	0.280	0.263	0.256	0.240	0.237
Water transport	0.307	0.342	0.348	0.326	0.310	0.325	0.305	0.294
Air transport	0.334	0.376	0.376	0.351	0.331	0.332	0.312	0.319
Other supporting and auxiliary transport activities	0.197	0.219	0.224	0.206	0.198	0.193	0.181	0.173
Post and telecommunications	0.158	0.173	0.177	0.169	0.165	0.167	0.157	0.039
Financial intermediation	0.096	0.100	0.110	0.109	0.107	0.111	0.099	0.098
Real estate activities	0.039	0.044	0.046	0.045	0.043	0.044	0.039	0.034
Renting of M&Eq and other business activities	0.129	0.142	0.142	0.135	0.129	0.135	0.122	0.100
Public administration and defense; compulsory social security	0.085	0.094	0.093	0.087	0.083	0.084	0.078	0.078
Education	0.094	0.100	0.104	0.096	0.092	0.100	0.097	0.087
Health and social work	0.175	0.194	0.195	0.188	0.180	0.184	0.160	0.170
Other community, social, and personal services	0.155	0.176	0.179	0.168	0.160	0.165	0.154	0.188
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 5.1.3: Output Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.796	1.729	1.759	1.795	1.816	1.842	1.906	1.760
Mining and quarrying	1.681	1.659	1.635	1.682	1.689	1.688	1.712	1.649
Food, beverages, and tobacco	2.374	2.311	2.341	2.392	2.432	2.472	2.536	2.376
Textiles and textile products	2.275	2.265	2.275	2.274	2.315	2.343	2.389	2.321
Leather, leather products, and footwear	2.382	2.364	2.370	2.412	2.412	2.433	2.497	2.403
Wood and products of wood and cork	2.099	2.075	2.072	2.074	2.062	2.104	2.137	2.062
Pulp, paper, paper products, printing, and publishing	2.074	2.076	2.049	2.066	2.073	2.087	2.122	2.456
Coke, refined petroleum, and nuclear fuel	1.286	1.242	1.260	1.296	1.354	1.406	1.520	1.331
Chemicals and chemical products	2.118	2.107	2.108	2.120	2.176	2.221	2.300	2.076
Rubber and plastics	2.104	2.079	2.092	2.108	2.157	2.195	2.225	2.151
Other nonmetallic minerals	1.920	1.838	1.880	1.907	1.967	2.000	2.054	1.912
Basic metals and fabricated metal	1.941	1.916	1.947	1.965	1.998	2.039	2.089	1.962
Machinery, nec	2.164	2.133	2.105	2.102	2.139	2.177	2.223	2.093
Electrical and optical equipment	2.088	2.012	2.033	2.021	2.042	2.088	2.144	2.020
Transport equipment	2.245	2.224	2.236	2.228	2.275	2.313	2.399	2.284
Manufacturing, nec; recycling	2.204	2.192	2.185	2.188	2.190	2.215	2.264	2.162
Electricity, gas, and water supply	1.599	1.608	1.633	1.643	1.719	1.740	1.786	1.544
Construction	1.996	1.934	1.940	1.955	1.986	2.018	1.983	1.931
Sale, maintenance, and repair	1.655	1.664	1.679	1.681	1.680	1.686	1.700	1.770
Wholesale trade and commission trade	1.712	1.710	1.644	1.646	1.644	1.650	1.662	1.738
Retail trade	1.722	1.729	1.693	1.695	1.695	1.701	1.715	1.782
Hotels and restaurants	1.877	1.871	1.894	1.904	1.918	1.941	1.916	2.046
Inland transport	1.812	1.802	1.801	1.782	1.819	1.787	1.827	1.695
Water transport	1.839	1.823	1.826	1.803	1.827	1.856	1.902	1.720
Air transport	1.877	1.840	1.861	1.835	1.872	1.867	1.920	1.778
Other supporting and auxiliary transport activities	2.038	2.048	2.052	2.017	2.031	2.004	2.033	1.914
Post and telecommunications	1.907	1.914	1.909	1.897	1.899	1.916	1.937	1.210
Financial intermediation	1.652	1.660	1.698	1.713	1.705	1.735	1.720	1.656
Real estate activities	1.341	1.359	1.361	1.363	1.351	1.357	1.355	1.305
Renting of M&Eq and other business activities	1.655	1.647	1.651	1.649	1.649	1.686	1.676	1.507
Public administration and defense; compulsory social security	1.488	1.484	1.477	1.473	1.468	1.475	1.482	1.453
Education	1.478	1.449	1.471	1.462	1.460	1.500	1.535	1.443
Health and social work	1.780	1.791	1.789	1.803	1.810	1.828	1.792	1.771
Other community, social, and personal services	1.903	1.917	1.926	1.925	1.934	1.970	1.982	2.109
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

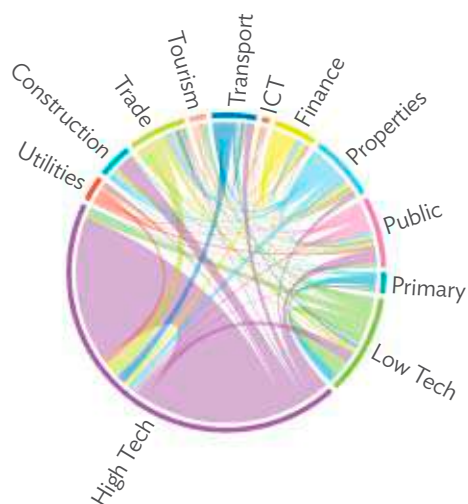
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 5.2

## DOMESTIC INTERINDUSTRY LINKAGES

### Republic of Korea

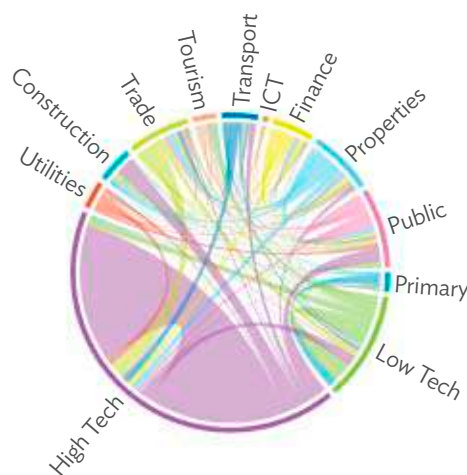
**Figure 5.2.1a: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2010**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

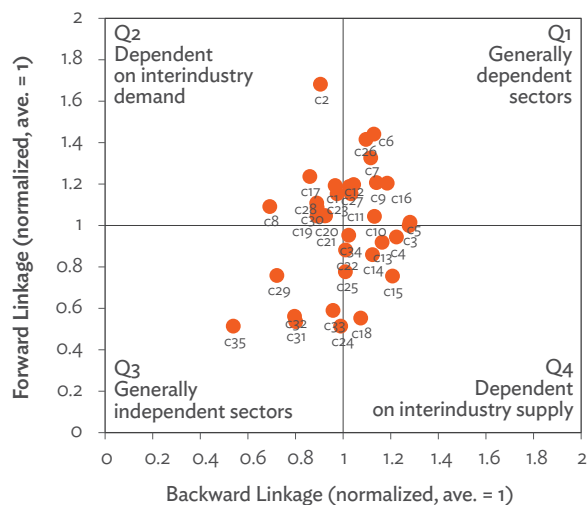
**Figure 5.2.1b: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2017**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

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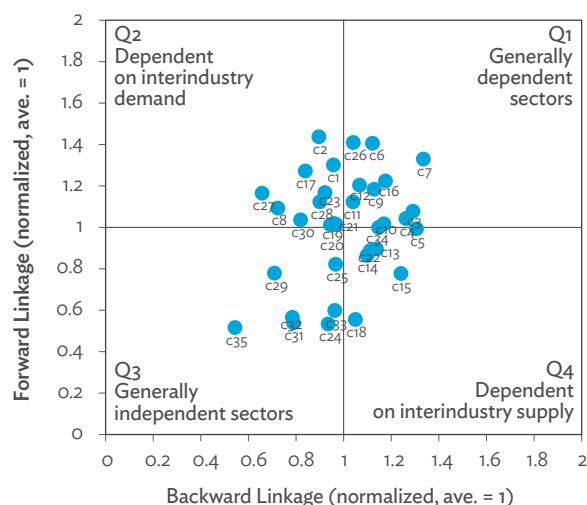
**Figure 5.2.2a: Backward and Forward Linkages by Industry, 2010**



Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

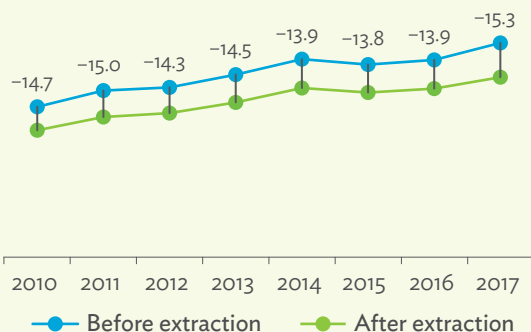
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**Figure 5.2.2b: Backward and Forward Linkages by Industry, 2017**

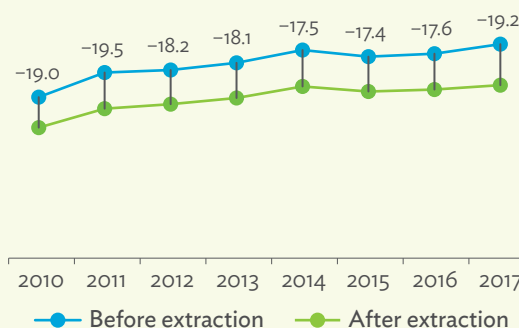


Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

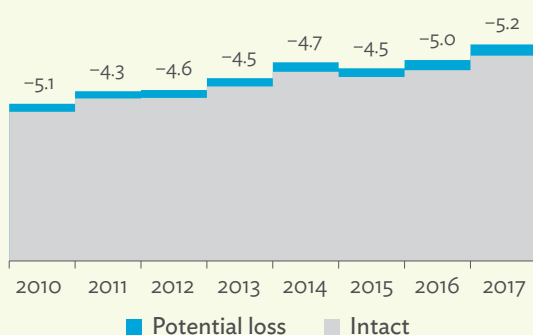
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**Box 5: Hypothetical Extraction of Electrical and Optical Equipment Industry in the Republic of Korea****Figure 5.2.3a: Potential Decline in Gross Value Added, 2010–2017 (%)**

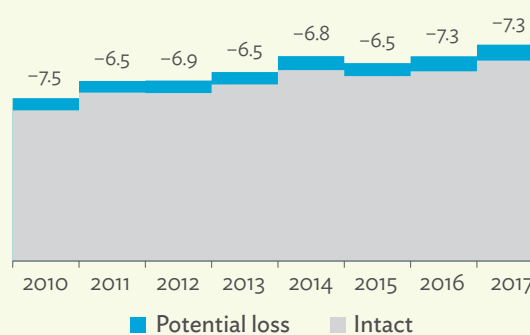
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.2.4a: Potential Decline in Gross Output, 2010–2017 (%)**

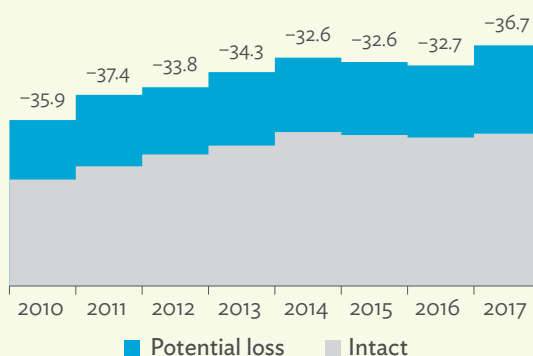
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.2.3b: Potential Decline in Gross Value Added Attributed to Domestic Final Demand, 2010–2017 (%)**

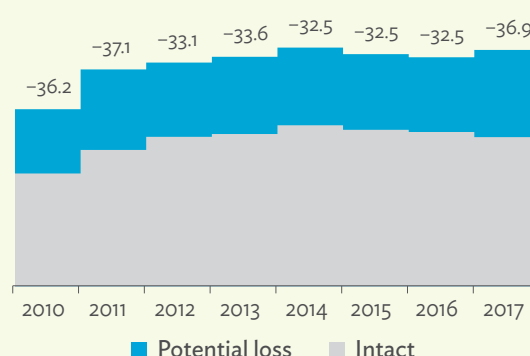
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.2.4b: Potential Decline in Gross Output Attributed to Domestic Final Demand, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.2.3c: Potential Decline in Gross Value Added Attributed to Exports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.2.4c: Potential Decline in Gross Output Attributed to Exports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



Table 5.2.1: Input-Output Backward Linkage

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.966	0.939	0.952	0.969	0.969	0.972	0.989	0.957
Mining and quarrying	0.904	0.901	0.885	0.907	0.902	0.891	0.888	0.896
Food, beverages, and tobacco	1.277	1.255	1.267	1.290	1.298	1.304	1.316	1.292
Textiles and textile products	1.224	1.229	1.232	1.227	1.236	1.236	1.240	1.261
Leather, leather products, and footwear	1.281	1.283	1.283	1.301	1.287	1.284	1.296	1.306
Wood and products of wood and cork	1.129	1.126	1.121	1.119	1.101	1.110	1.109	1.121
Pulp, paper, paper products, printing, and publishing	1.115	1.127	1.109	1.114	1.107	1.101	1.101	1.335
Coke, refined petroleum, and nuclear fuel	0.692	0.674	0.682	0.699	0.723	0.742	0.789	0.724
Chemicals and chemical products	1.139	1.144	1.141	1.144	1.162	1.172	1.194	1.128
Rubber and plastics	1.131	1.129	1.133	1.137	1.152	1.158	1.155	1.169
Other nonmetallic minerals	1.033	0.998	1.018	1.029	1.050	1.055	1.066	1.039
Basic metals and fabricated metal	1.044	1.040	1.054	1.060	1.066	1.076	1.084	1.066
Machinery, nec	1.164	1.158	1.140	1.134	1.142	1.149	1.153	1.138
Electrical and optical equipment	1.123	1.092	1.101	1.090	1.090	1.102	1.113	1.098
Transport equipment	1.207	1.207	1.211	1.202	1.214	1.220	1.245	1.241
Manufacturing, nec; recycling	1.185	1.190	1.183	1.181	1.169	1.169	1.175	1.175
Electricity, gas, and water supply	0.860	0.873	0.884	0.886	0.918	0.918	0.927	0.839
Construction	1.073	1.050	1.050	1.055	1.060	1.065	1.029	1.050
Sale, maintenance, and repair	0.890	0.903	0.909	0.907	0.897	0.890	0.882	0.962
Wholesale trade and commission trade	0.921	0.928	0.890	0.888	0.877	0.870	0.863	0.945
Retail trade	0.926	0.939	0.917	0.915	0.905	0.897	0.890	0.969
Hotels and restaurants	1.010	1.016	1.026	1.027	1.024	1.024	0.994	1.112
Inland transport	0.974	0.978	0.975	0.961	0.971	0.943	0.948	0.921
Water transport	0.989	0.990	0.989	0.973	0.975	0.979	0.987	0.935
Air transport	1.009	0.999	1.007	0.990	0.999	0.985	0.996	0.966
Other supporting and auxiliary transport activities	1.096	1.112	1.111	1.088	1.084	1.057	1.055	1.041
Post and telecommunications	1.026	1.039	1.034	1.024	1.014	1.011	1.005	0.658
Financial intermediation	0.888	0.901	0.919	0.924	0.910	0.915	0.893	0.900
Real estate activities	0.721	0.738	0.737	0.735	0.721	0.716	0.703	0.709
Renting of M&Eq and other business activities	0.890	0.894	0.894	0.890	0.880	0.890	0.870	0.819
Public administration and defense; compulsory social security	0.800	0.806	0.799	0.794	0.784	0.778	0.769	0.790
Education	0.795	0.787	0.796	0.789	0.779	0.791	0.797	0.785
Health and social work	0.957	0.972	0.968	0.973	0.966	0.964	0.930	0.963
Other community, social, and personal services	1.023	1.040	1.043	1.038	1.033	1.039	1.028	1.147
Private households with employed persons	0.538	0.543	0.541	0.539	0.534	0.528	0.519	0.544
	lowest linkage	<div><div></div><div></div><div></div></div>				<div><div></div><div></div><div></div></div> highest linkage		

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 5.2.2: Input-Output Forward Linkage**

	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.199	1.186	1.225	1.262	1.269	1.320	1.317	1.311
Mining and quarrying	1.702	1.565	1.641	1.764	1.759	1.271	1.529	1.450
Food, beverages, and tobacco	0.999	1.001	1.020	1.033	1.039	1.082	1.070	1.081
Textiles and textile products	0.943	0.973	0.956	0.988	1.021	1.061	1.048	1.044
Leather, leather products, and footwear	1.016	0.937	0.953	0.968	0.981	1.006	1.034	0.993
Wood and products of wood and cork	1.454	1.488	1.466	1.445	1.412	1.409	1.359	1.418
Pulp, paper, paper products, printing, and publishing	1.336	1.335	1.331	1.333	1.321	1.266	1.290	1.340
Coke, refined petroleum, and nuclear fuel	1.095	1.059	1.055	1.075	1.091	1.122	1.118	1.096
Chemicals and chemical products	1.213	1.201	1.205	1.191	1.217	1.199	1.222	1.190
Rubber and plastics	1.045	1.004	0.979	0.962	1.004	1.010	1.030	1.018
Other nonmetallic minerals	1.157	1.152	1.142	1.126	1.124	1.129	1.134	1.128
Basic metals and fabricated metal	1.203	1.221	1.218	1.220	1.205	1.207	1.195	1.210
Machinery, nec	0.917	0.927	0.889	0.875	0.889	0.897	0.864	0.893
Electrical and optical equipment	0.855	0.806	0.843	0.832	0.845	0.853	0.851	0.861
Transport equipment	0.748	0.754	0.761	0.743	0.766	0.769	0.754	0.771
Manufacturing, nec; recycling	1.210	1.225	1.224	1.217	1.213	1.230	1.220	1.230
Electricity, gas, and water supply	1.243	1.269	1.270	1.278	1.316	1.353	1.346	1.280
Construction	0.540	0.550	0.551	0.546	0.541	0.543	0.518	0.543
Sale, maintenance, and repair	1.047	1.055	1.050	1.033	1.010	1.037	1.041	1.019
Wholesale trade and commission trade	1.048	1.056	1.046	1.029	1.004	1.031	1.022	1.013
Retail trade	1.048	1.055	1.046	1.030	1.005	1.032	1.020	1.014
Hotels and restaurants	0.879	0.890	0.897	0.887	0.877	0.902	0.890	0.885
Inland transport	1.158	1.175	1.173	1.162	1.160	1.186	1.176	1.173
Water transport	0.500	0.510	0.510	0.505	0.500	0.499	0.539	0.521
Air transport	0.770	0.750	0.743	0.787	0.801	0.806	0.827	0.817
Other supporting and auxiliary transport activities	1.428	1.435	1.424	1.417	1.415	1.432	1.420	1.421
Post and telecommunications	1.193	1.220	1.210	1.189	1.179	1.210	1.192	1.170
Financial intermediation	1.112	1.136	1.136	1.125	1.121	1.148	1.133	1.127
Real estate activities	0.752	0.772	0.765	0.756	0.747	0.763	0.746	0.773
Renting of M&Eq and other business activities	1.089	1.102	1.090	1.072	1.039	1.055	1.003	1.037
Public administration and defense; compulsory social security	0.522	0.532	0.533	0.527	0.523	0.527	0.511	0.527
Education	0.549	0.559	0.560	0.554	0.549	0.554	0.540	0.554
Health and social work	0.578	0.590	0.590	0.584	0.580	0.590	0.573	0.588
Other community, social, and personal services	0.952	1.001	0.990	0.981	0.975	1.003	0.985	0.999
Private households with employed persons	0.500	0.510	0.510	0.504	0.500	0.499	0.484	0.503
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values

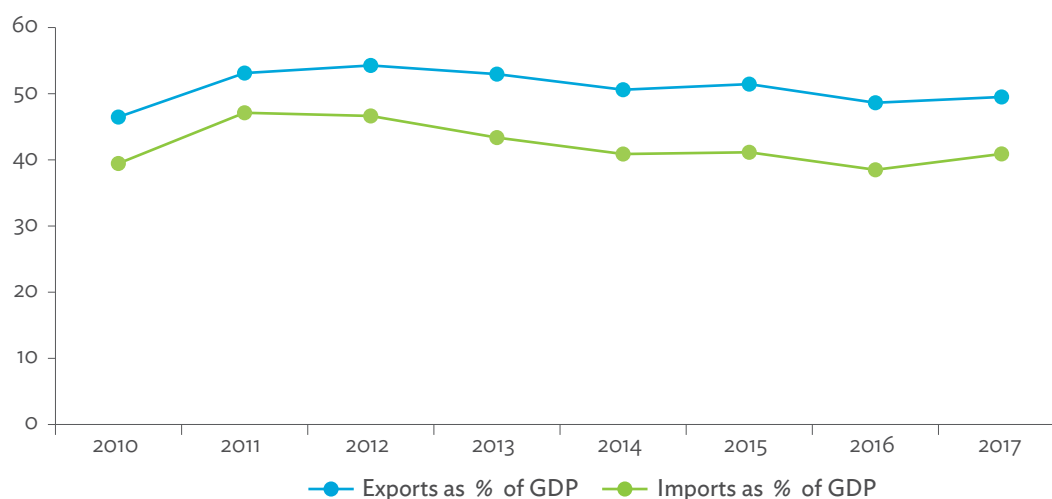
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 5.3

## INTERNATIONAL TRADE AND PRODUCTION LINKAGES

### Republic of Korea

**Figure 5.3.1: Exports and Imports as a Share of Gross Domestic Product, 2010–2017 (%)**

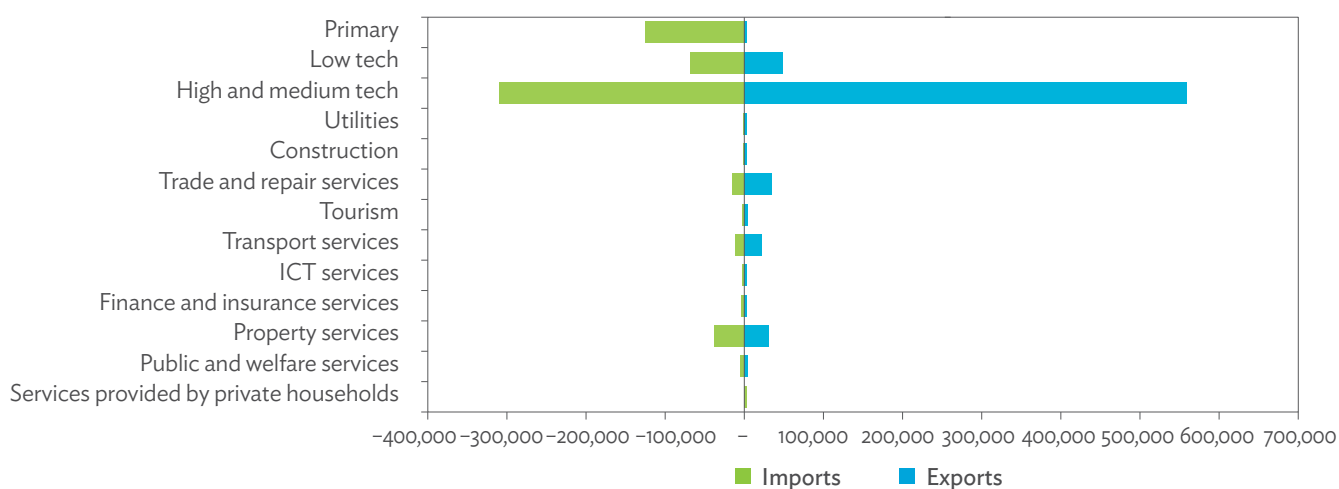


GDP = gross domestic product.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

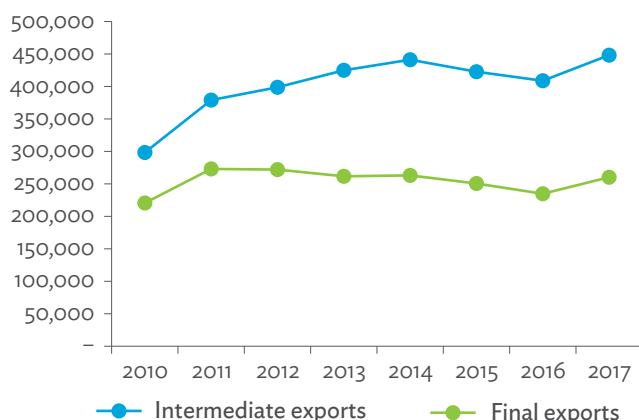
**Figure 5.3.2: Total Foreign Trade by Sector, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

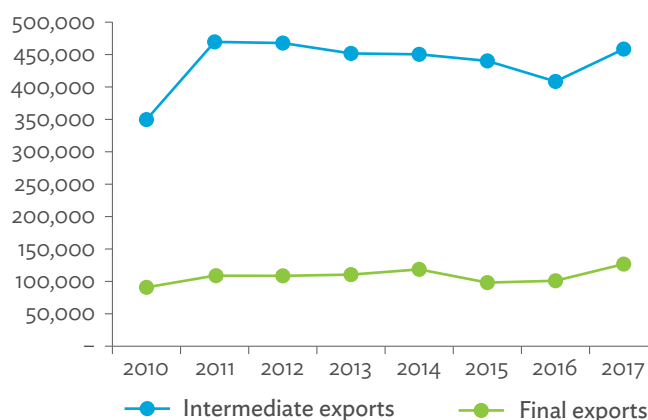
Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.3.3: Trend of Export Activity by End-Use Category, 2010–2017 (\$ million)**

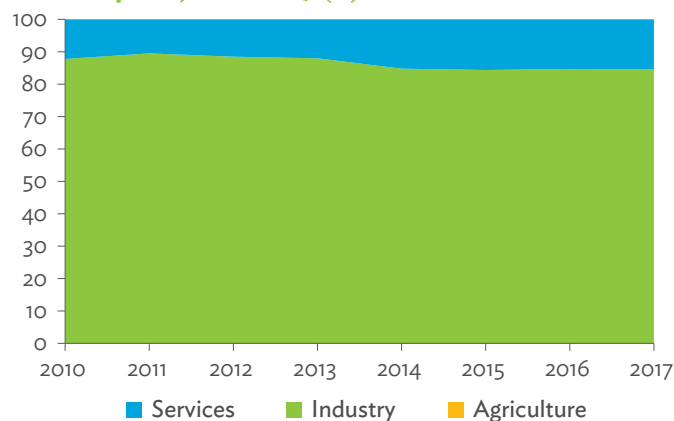
\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

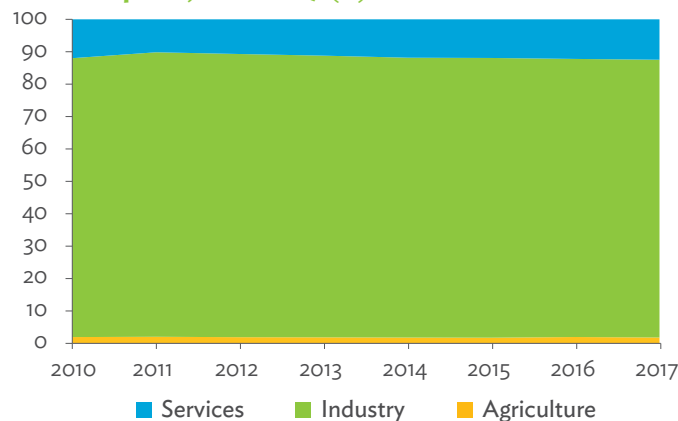
[Click here for figure data](#)**Figure 5.3.6: Trend of Import Activity by End-Use Category, 2010–2017 (\$ million)**

\$ = United States dollar.

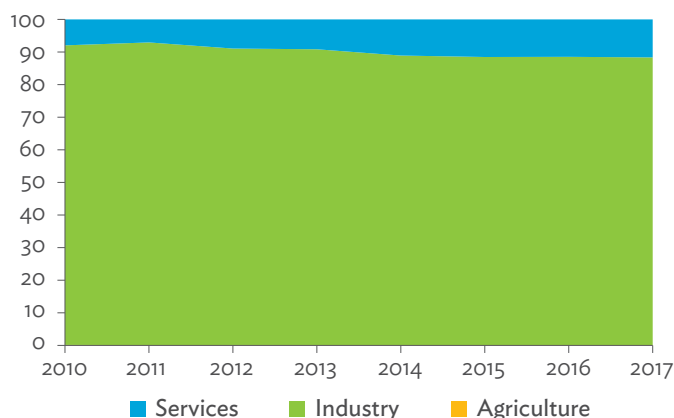
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.3.4: Shares of Sectors to Total Intermediate Exports, 2010–2017 (%)**

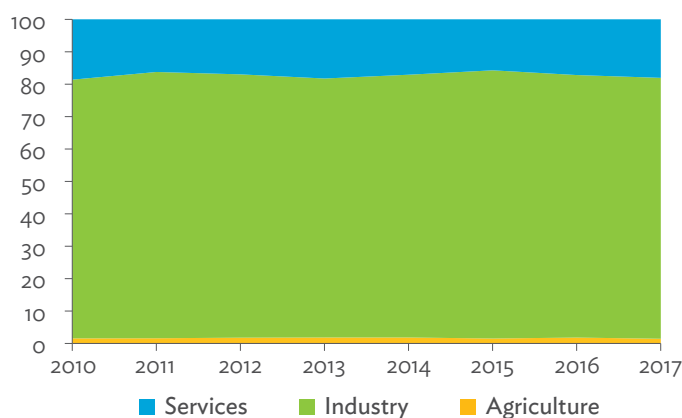
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.3.7: Shares of Sectors to Total Intermediate Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.3.5: Shares of Sectors to Total Final Exports, 2010–2017 (%)**

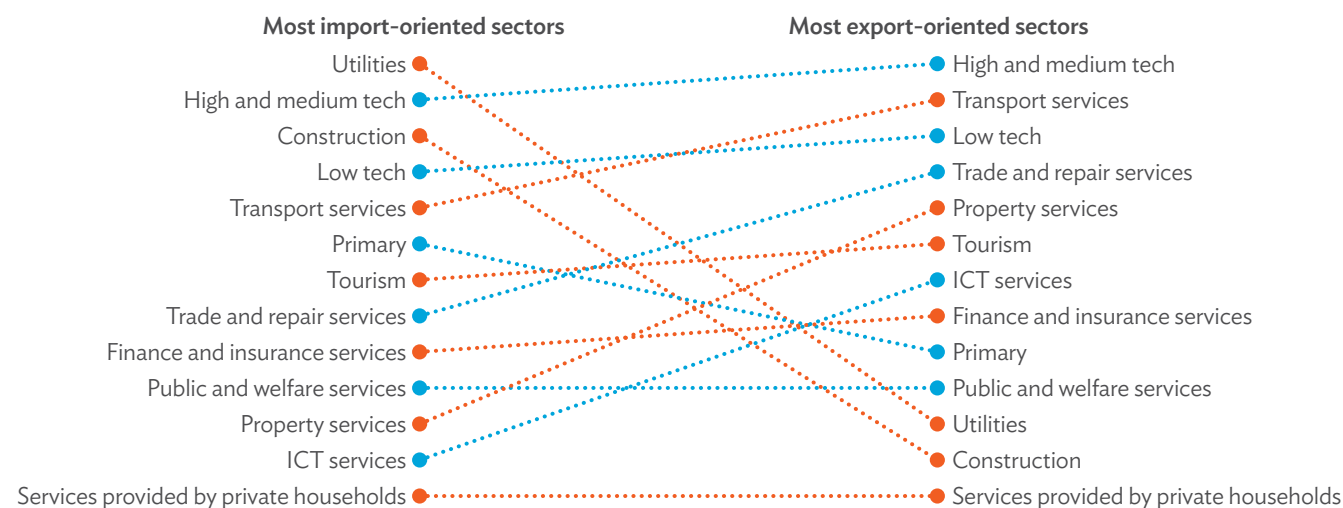
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 5.3.8: Shares of Sectors to Total Final Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.3.9: Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios, 2017**

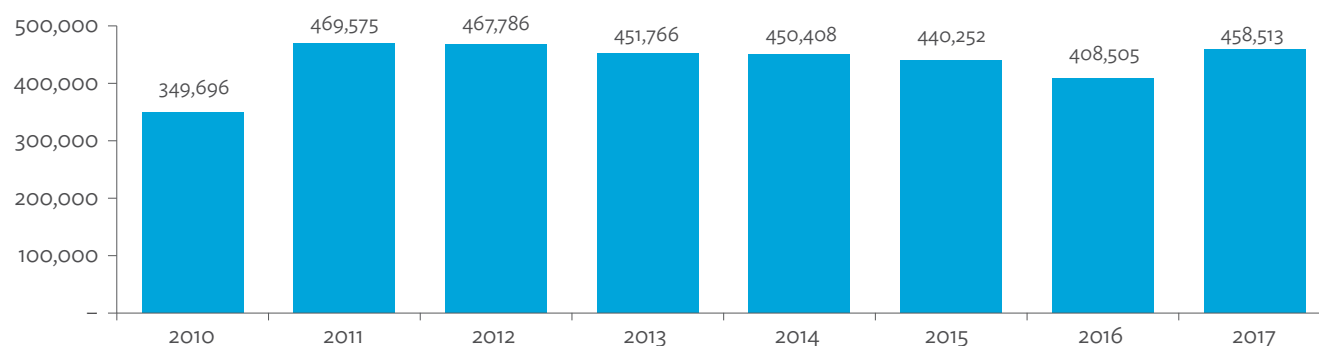


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.3.10: Total Foreign-Traded Input, 2010–2017 (\$ million)**

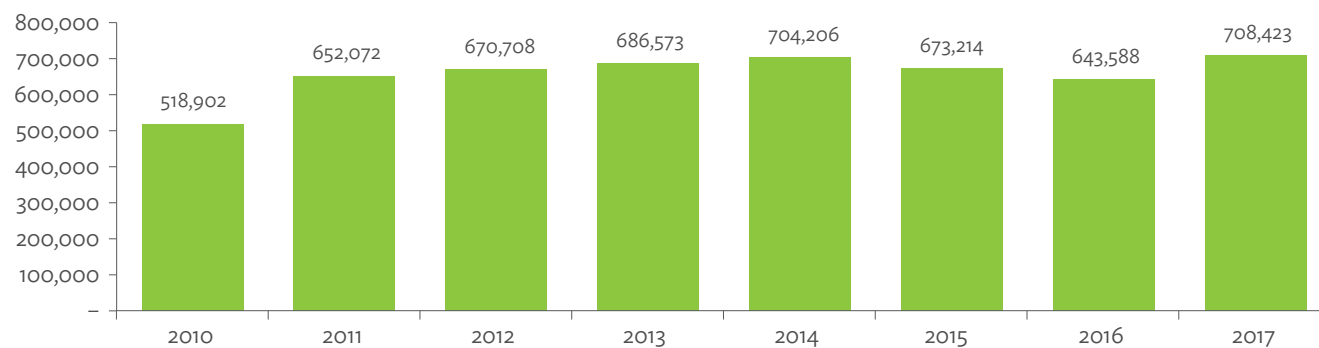


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.3.11: Total Foreign-Traded Output, 2010–2017 (\$ million)**

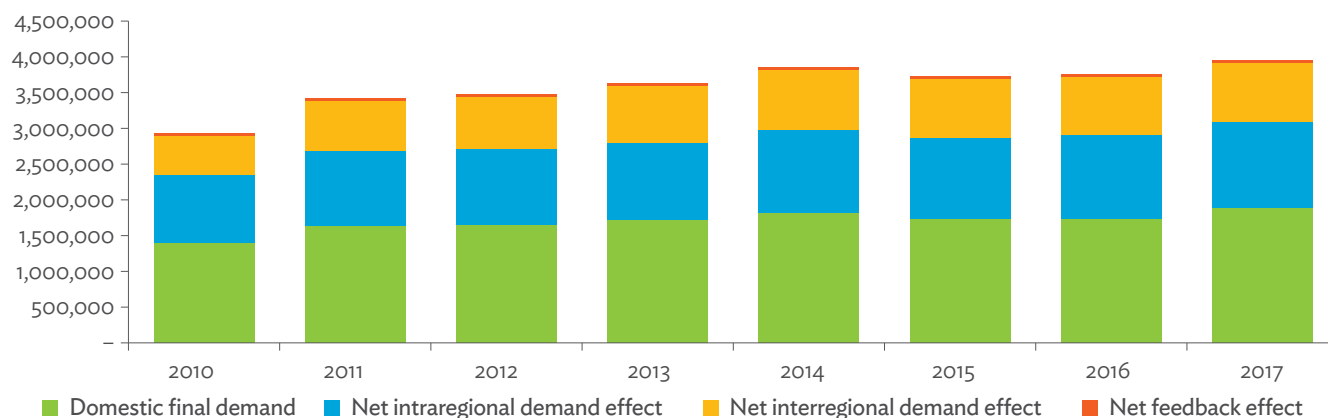


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.3.12: Decomposition of Total Production Attributable to Domestic and Interregional Demand, 2010–2017 (\$ million)**

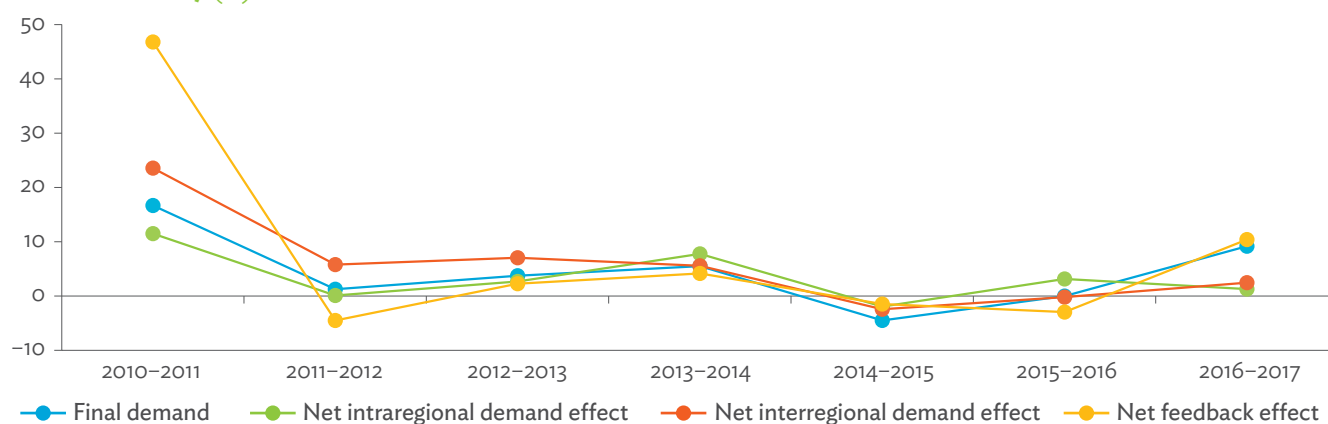


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

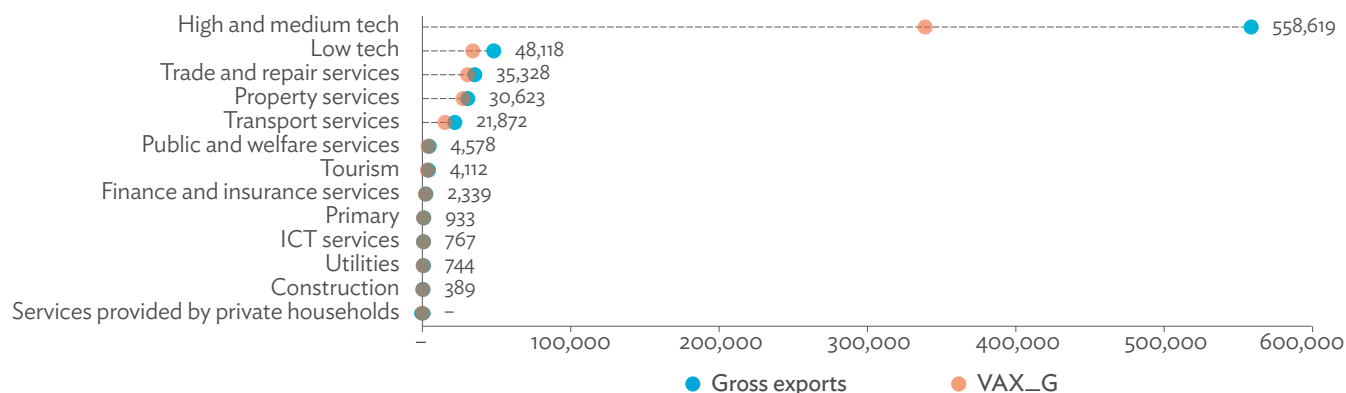
**Figure 5.3.13: Growth Rates of Production Components Based on Two-Region Input-Output Table, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.3.14: Gross Exports versus Value-Added Exports by Sector, 2017 (\$ million)**

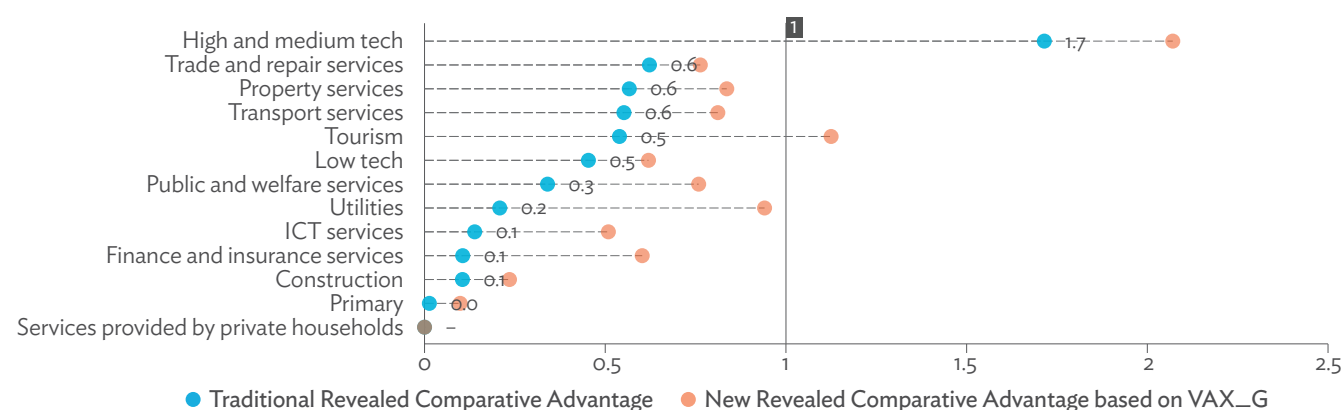


\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.3.15: Comparison of Traditional and New Revealed Comparative Advantage by Sector, 2017**

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Table 5.3.1: Production Attributable to Domestic Linkages by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Final demand								
Primary	13,563	16,282	14,913	13,197	13,762	13,723	11,843	13,348
Low tech	256,433	280,632	285,857	301,788	322,754	312,296	313,410	346,793
High and medium tech	525,758	669,704	661,538	665,336	672,399	633,098	629,639	679,569
Business service	311,150	345,444	355,940	375,595	411,510	390,339	390,614	437,237
Personal service	298,326	327,510	341,826	366,252	396,581	385,888	389,696	417,512
Intraregional effects (M1)								
Primary	31,870	32,895	34,357	37,238	40,226	38,392	39,887	38,950
Low tech	149,279	164,680	168,568	186,099	215,678	214,524	224,997	206,988
High and medium tech	409,105	464,505	462,671	457,613	491,128	467,372	490,722	495,798
Business service	299,685	327,394	323,552	332,781	345,847	347,335	347,157	375,487
Personal service	51,917	60,643	62,011	65,620	70,278	72,943	73,671	74,281

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 5.3.2: Production Attributable to Linkages with the Rest of the World by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Interregional effects (M2)								
Primary	4,560	5,067	5,607	6,441	6,902	6,222	6,641	6,395
Low tech	61,552	72,765	86,793	91,204	101,840	98,661	98,906	94,639
High and medium tech	396,563	503,821	520,054	555,118	565,327	545,149	546,754	565,883
Business service	108,244	124,795	133,353	146,328	168,401	170,379	166,534	173,976
Personal service	12,241	14,126	16,484	16,947	19,033	20,125	20,049	18,639
Feedback effects (M3)								
Primary	42.76	56.90	58.87	65.05	68.48	62.29	65.96	65.18
Low tech	530.87	736.06	796.82	816.57	923.46	917.15	904.07	887.51
High and medium tech	4,655.21	7,000.15	6,550.62	6,654.70	6,730.60	6,538.40	6,353.97	7,152.00
Business service	1,075.54	1,472.03	1,425.67	1,502.85	1,684.51	1,733.00	1,652.91	1,831.19
Personal service	125.85	174.26	182.32	179.75	195.59	210.08	204.52	200.51

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 5.3.3: Net Intraregional Multipliers (M1), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.7959	0.7295	0.7588	0.7953	0.8159	0.8418	0.9065	0.7604
Mining and quarrying	0.6810	0.6592	0.6353	0.6816	0.6893	0.6885	0.7116	0.6486
Food, beverages, and tobacco	1.3744	1.3115	1.3408	1.3920	1.4320	1.4721	1.5356	1.3763
Textiles and textile products	1.2754	1.2648	1.2750	1.2740	1.3151	1.3425	1.3889	1.3206
Leather, leather products, and footwear	1.3815	1.3643	1.3700	1.4119	1.4117	1.4331	1.4974	1.4030
Wood and products of wood and cork	1.0990	1.0748	1.0716	1.0745	1.0622	1.1040	1.1372	1.0624
Pulp, paper, paper products, printing, and publishing	1.0739	1.0763	1.0489	1.0658	1.0730	1.0869	1.1224	1.4555
Coke, refined petroleum, and nuclear fuel	0.2861	0.2418	0.2601	0.2961	0.3544	0.4056	0.5196	0.3310
Chemicals and chemical products	1.1184	1.1072	1.1080	1.1201	1.1761	1.2209	1.3004	1.0756
Rubber and plastics	1.1036	1.0789	1.0923	1.1075	1.1571	1.1947	1.2252	1.1511
Other nonmetallic minerals	0.9204	0.8378	0.8804	0.9069	0.9669	0.9995	1.0541	0.9120
Basic metals and fabricated metal	0.9406	0.9158	0.9469	0.9651	0.9978	1.0393	1.0886	0.9619
Machinery, nec	1.1636	1.1329	1.1054	1.1022	1.1390	1.1769	1.2225	1.0931
Electrical and optical equipment	1.0877	1.0122	1.0332	1.0207	1.0424	1.0878	1.1439	1.0200
Transport equipment	1.2447	1.2241	1.2363	1.2281	1.2745	1.3128	1.3989	1.2836
Manufacturing, nec; recycling	1.2036	1.1915	1.1848	1.1885	1.1904	1.2154	1.2640	1.1624
Electricity, gas, and water supply	0.5991	0.6078	0.6333	0.6429	0.7194	0.7395	0.7865	0.5441
Construction	0.9960	0.9342	0.9404	0.9551	0.9860	1.0181	0.9833	0.9312
Sale, maintenance, and repair	0.6553	0.6639	0.6790	0.6812	0.6800	0.6864	0.6995	0.7695
Wholesale trade and commission trade	0.7118	0.7104	0.6436	0.6456	0.6436	0.6496	0.6621	0.7384
Retail trade	0.7216	0.7290	0.6932	0.6954	0.6946	0.7010	0.7145	0.7818
Hotels and restaurants	0.8774	0.8713	0.8944	0.9037	0.9177	0.9411	0.9157	1.0464
Inland transport	0.8115	0.8025	0.8010	0.7819	0.8187	0.7866	0.8272	0.6946
Water transport	0.8391	0.8234	0.8261	0.8034	0.8267	0.8564	0.9021	0.7203
Air transport	0.8766	0.8402	0.8608	0.8345	0.8719	0.8670	0.9195	0.7778
Other supporting and auxiliary transport activities	1.0376	1.0485	1.0522	1.0174	1.0309	1.0041	1.0326	0.9142
Post and telecommunications	0.9069	0.9143	0.9092	0.8975	0.8987	0.9156	0.9368	0.2100
Financial intermediation	0.6519	0.6600	0.6975	0.7131	0.7052	0.7349	0.7198	0.6558
Real estate activities	0.3408	0.3588	0.3606	0.3633	0.3511	0.3572	0.3553	0.3049
Renting of M&Eq and other business activities	0.6545	0.6469	0.6510	0.6492	0.6491	0.6862	0.6756	0.5067
Public administration and defense; compulsory social security	0.4880	0.4839	0.4768	0.4727	0.4678	0.4754	0.4824	0.4531
Education	0.4780	0.4493	0.4708	0.4621	0.4598	0.4996	0.5352	0.4434
Health and social work	0.7798	0.7911	0.7890	0.8032	0.8096	0.8276	0.7923	0.7708
Other community, social, and personal services	0.9029	0.9165	0.9257	0.9246	0.9345	0.9697	0.9817	1.1094
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 5.3.4: Net Interregional Multipliers (M2), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.3885	0.4199	0.4319	0.4215	0.3915	0.4033	0.3909	0.3798
Mining and quarrying	0.3483	0.3917	0.3831	0.3964	0.3901	0.3943	0.3714	0.3812
Food, beverages, and tobacco	0.5561	0.6321	0.6340	0.6072	0.5703	0.5834	0.5502	0.5590
Textiles and textile products	0.6727	0.7484	0.7678	0.7245	0.6874	0.7055	0.6669	0.7065
Leather, leather products, and footwear	0.8116	0.9133	0.9303	0.8547	0.8781	0.8813	0.8321	0.9012
Wood and products of wood and cork	0.6593	0.7251	0.6994	0.6891	0.7091	0.7344	0.6789	0.7332
Pulp, paper, paper products, printing, and publishing	0.4983	0.5417	0.5364	0.5135	0.4964	0.5042	0.4738	0.6767
Coke, refined petroleum, and nuclear fuel	1.4404	1.4922	1.5020	1.5043	1.4930	1.6557	1.5836	1.6348
Chemicals and chemical products	0.9269	1.0416	1.0644	1.0326	0.9828	1.0383	0.9814	0.9646
Rubber and plastics	0.7783	0.8753	0.8991	0.8681	0.8196	0.8491	0.7857	0.8479
Other nonmetallic minerals	0.7541	0.8784	0.8780	0.8467	0.7979	0.8320	0.7916	0.7943
Basic metals and fabricated metal	0.9684	1.0557	1.0391	0.9830	0.9699	1.0032	0.9503	0.9776
Machinery, nec	0.7861	0.8761	0.8796	0.8359	0.7990	0.8190	0.7741	0.7888
Electrical and optical equipment	0.8961	1.0314	0.9930	0.9507	0.9264	0.9564	0.9048	0.9453
Transport equipment	0.8023	0.9143	0.9050	0.8652	0.8264	0.8459	0.8214	0.8589
Manufacturing, nec; recycling	0.7049	0.7975	0.7972	0.7564	0.7698	0.7817	0.7371	0.7707
Electricity, gas, and water supply	0.8659	0.9792	0.9886	0.9600	0.9229	0.9524	0.8930	0.7503
Construction	0.6855	0.7854	0.7671	0.7322	0.7002	0.7177	0.6301	0.6816
Sale, maintenance, and repair	0.2479	0.2780	0.2898	0.2807	0.2684	0.2712	0.2526	0.3029
Wholesale trade and commission trade	0.2697	0.2978	0.2755	0.2668	0.2545	0.2571	0.2396	0.2914
Retail trade	0.2723	0.3043	0.2956	0.2863	0.2735	0.2763	0.2578	0.3075
Hotels and restaurants	0.3298	0.3818	0.3878	0.3689	0.3465	0.3553	0.3124	0.3999
Inland transport	0.5861	0.6683	0.6891	0.6517	0.6143	0.6063	0.5719	0.5646
Water transport	0.6799	0.7684	0.7876	0.7461	0.7139	0.7567	0.7133	0.6873
Air transport	0.7596	0.8714	0.8741	0.8279	0.7845	0.7956	0.7519	0.7662
Other supporting and auxiliary transport activities	0.4488	0.5099	0.5224	0.4841	0.4660	0.4552	0.4285	0.4138
Post and telecommunications	0.3567	0.4022	0.4119	0.3963	0.3876	0.3941	0.3674	0.0919
Financial intermediation	0.2067	0.2206	0.2430	0.2427	0.2374	0.2468	0.2210	0.2186
Real estate activities	0.0850	0.0979	0.1014	0.1010	0.0959	0.0991	0.0888	0.0786
Renting of M&Eq and other business activities	0.3022	0.3395	0.3406	0.3263	0.3116	0.3288	0.2956	0.2461
Public administration and defense; compulsory social security	0.1943	0.2196	0.2175	0.2068	0.1953	0.1995	0.1845	0.1879
Education	0.2124	0.2294	0.2398	0.2253	0.2157	0.2361	0.2296	0.2068
Health and social work	0.4131	0.4637	0.4708	0.4602	0.4401	0.4535	0.3958	0.4234
Other community, social, and personal services	0.3636	0.4201	0.4272	0.4058	0.3871	0.4021	0.3733	0.4607
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 5.3.5: Net Feedback Multipliers (M<sub>3</sub>), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.0030	0.0037	0.0039	0.0038	0.0036	0.0038	0.0037	0.0034
Mining and quarrying	0.0031	0.0040	0.0039	0.0041	0.0040	0.0041	0.0040	0.0039
Food, beverages, and tobacco	0.0040	0.0052	0.0053	0.0051	0.0049	0.0051	0.0048	0.0047
Textiles and textile products	0.0071	0.0090	0.0096	0.0089	0.0083	0.0086	0.0081	0.0082
Leather, leather products, and footwear	0.0076	0.0097	0.0104	0.0093	0.0094	0.0095	0.0091	0.0094
Wood and products of wood and cork	0.0049	0.0062	0.0061	0.0060	0.0060	0.0065	0.0060	0.0060
Pulp, paper, paper products, printing, and publishing	0.0042	0.0053	0.0053	0.0052	0.0050	0.0053	0.0049	0.0067
Coke, refined petroleum, and nuclear fuel	0.0090	0.0102	0.0108	0.0109	0.0115	0.0134	0.0132	0.0126
Chemicals and chemical products	0.0080	0.0103	0.0107	0.0105	0.0100	0.0110	0.0108	0.0095
Rubber and plastics	0.0078	0.0101	0.0105	0.0102	0.0096	0.0103	0.0096	0.0095
Other nonmetallic minerals	0.0061	0.0079	0.0081	0.0079	0.0076	0.0082	0.0080	0.0075
Basic metals and fabricated metal	0.0087	0.0103	0.0102	0.0098	0.0099	0.0104	0.0101	0.0098
Machinery, nec	0.0096	0.0119	0.0116	0.0113	0.0110	0.0113	0.0108	0.0110
Electrical and optical equipment	0.0157	0.0206	0.0181	0.0179	0.0181	0.0186	0.0179	0.0193
Transport equipment	0.0096	0.0123	0.0119	0.0116	0.0112	0.0116	0.0113	0.0117
Manufacturing, nec; recycling	0.0069	0.0088	0.0089	0.0085	0.0085	0.0088	0.0083	0.0083
Electricity, gas, and water supply	0.0064	0.0081	0.0084	0.0082	0.0082	0.0088	0.0085	0.0070
Construction	0.0072	0.0091	0.0088	0.0085	0.0082	0.0085	0.0075	0.0079
Sale, maintenance, and repair	0.0022	0.0029	0.0029	0.0029	0.0028	0.0029	0.0027	0.0031
Wholesale trade and commission trade	0.0024	0.0031	0.0028	0.0028	0.0027	0.0027	0.0025	0.0030
Retail trade	0.0024	0.0031	0.0030	0.0030	0.0028	0.0029	0.0027	0.0031
Hotels and restaurants	0.0024	0.0032	0.0033	0.0031	0.0030	0.0031	0.0028	0.0034
Inland transport	0.0046	0.0060	0.0062	0.0059	0.0057	0.0058	0.0057	0.0053
Water transport	0.0051	0.0065	0.0067	0.0064	0.0063	0.0069	0.0067	0.0060
Air transport	0.0061	0.0081	0.0082	0.0079	0.0076	0.0080	0.0075	0.0074
Other supporting and auxiliary transport activities	0.0044	0.0057	0.0058	0.0054	0.0052	0.0052	0.0049	0.0047
Post and telecommunications	0.0042	0.0056	0.0054	0.0053	0.0052	0.0053	0.0048	0.0013
Financial intermediation	0.0019	0.0024	0.0025	0.0026	0.0025	0.0027	0.0024	0.0023
Real estate activities	0.0007	0.0010	0.0010	0.0010	0.0010	0.0010	0.0009	0.0008
Renting of M&Eq and other business activities	0.0036	0.0046	0.0044	0.0043	0.0042	0.0045	0.0040	0.0034
Public administration and defense; compulsory social security	0.0019	0.0025	0.0024	0.0023	0.0022	0.0023	0.0021	0.0021
Education	0.0020	0.0024	0.0025	0.0024	0.0023	0.0026	0.0025	0.0023
Health and social work	0.0041	0.0053	0.0053	0.0053	0.0051	0.0054	0.0048	0.0048
Other community, social, and personal services	0.0038	0.0050	0.0050	0.0048	0.0046	0.0049	0.0045	0.0055
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 5.3.6: Comparison of Exports in Gross and Value-Added Terms, 2010–2017 (\$ million)**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	776	644	919	750	1,027	838	936	767	966	800	923	762	872	725	933	778
Low tech	33,949	24,347	41,007	28,217	52,067	35,559	50,235	35,312	49,914	35,688	45,566	32,386	43,561	31,695	48,118	33,947
High and medium tech	427,863	262,596	549,856	310,876	544,942	310,075	558,873	332,180	555,605	338,426	530,316	314,623	508,256	312,697	558,619	338,928
Utilities	1,889	1,081	822	428	2,037	1,063	1,139	619	1,037	585	1,056	591	1,022	604	744	488
Construction	338	242	331	225	330	228	315	224	331	238	336	241	316	237	389	285
Trade and repair services	10,355	9,033	12,281	10,570	17,313	15,024	21,808	19,031	31,049	27,241	29,346	25,747	27,889	24,690	35,328	30,496
Tourism	2,467	2,094	2,882	2,386	2,565	2,122	2,596	2,174	3,249	2,751	3,278	2,768	3,034	2,616	4,112	3,396
Transport services	20,266	13,810	21,530	13,863	22,871	14,740	22,495	15,024	24,401	16,700	25,199	17,064	24,095	16,782	21,872	15,283
ICT services	635	532	626	515	650	532	762	631	783	651	766	635	716	602	767	734
Finance and insurance services	2,351	2,111	2,507	2,240	2,589	2,289	2,192	1,940	2,315	2,051	2,290	2,022	2,115	1,891	2,339	2,092
Property services	14,210	12,440	16,369	14,011	19,562	16,796	21,294	18,407	29,843	25,939	29,499	25,471	27,329	23,967	30,623	27,459
Public and welfare services	3,802	3,213	2,942	2,444	4,754	3,923	3,927	3,293	4,713	3,995	4,639	3,910	4,384	3,743	4,578	3,792
Services provided by private households	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

\$ = United States dollar, ICT = information and communication technology.

Note: “VAX\_G” refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 5.3.7: Comparison of Revealed Comparative Advantage Measures in Gross and Value-Added Terms, 2010–2017**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	0.014	0.091	0.012	0.078	0.013	0.084	0.012	0.087	0.013	0.094	0.014	0.100	0.014	0.108	0.013	0.099
Low tech	0.454	0.718	0.444	0.738	0.551	0.792	0.502	0.763	0.476	0.726	0.452	0.715	0.453	0.729	0.453	0.620
High and medium tech	1.761	2.102	1.804	2.191	1.752	2.143	1.768	2.163	1.714	2.049	1.699	1.964	1.724	1.960	1.715	2.070
Utilities	0.813	0.769	0.282	0.614	0.667	0.708	0.358	0.766	0.314	0.999	0.323	1.110	0.262	1.195	0.208	0.941
Construction	0.166	0.221	0.132	0.206	0.121	0.201	0.085	0.192	0.091	0.199	0.094	0.229	0.080	0.197	0.105	0.235
Trade and repair services	0.255	0.699	0.244	0.720	0.324	0.753	0.406	0.768	0.561	0.802	0.543	0.809	0.537	0.809	0.622	0.763
Tourism	0.451	1.123	0.418	1.115	0.369	1.085	0.357	1.069	0.425	1.116	0.451	1.229	0.383	1.197	0.539	1.125
Transport services	0.655	0.851	0.592	0.790	0.603	0.785	0.592	0.794	0.622	0.822	0.662	0.918	0.671	0.940	0.552	0.812
ICT services	0.182	0.332	0.153	0.318	0.140	0.311	0.162	0.318	0.160	0.327	0.162	0.344	0.151	0.319	0.139	0.509
Finance and insurance services	0.147	0.697	0.132	0.744	0.133	0.687	0.106	0.606	0.108	0.605	0.109	0.624	0.101	0.634	0.106	0.602
Property services	0.419	0.685	0.392	0.692	0.457	0.717	0.457	0.705	0.600	0.761	0.595	0.782	0.561	0.747	0.567	0.836
Public and welfare services	0.392	0.867	0.259	0.882	0.394	0.950	0.298	0.878	0.352	0.915	0.346	0.975	0.322	0.957	0.340	0.759
Services provided by private households	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ICT = information and communication technology.

Note: “VAX\_G” refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

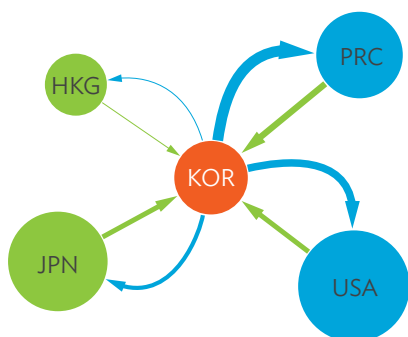
Source: Asian Development Bank Multi-Regional Input-Output Database.

# GLOBAL VALUE CHAIN INDICATORS

# 5.4

## Republic of Korea

**Figure 5.4.1a: Trade in Value-Added Flow with Top Trading Partners, 2010**



● Economy in focus ● Import partner ● Export partner

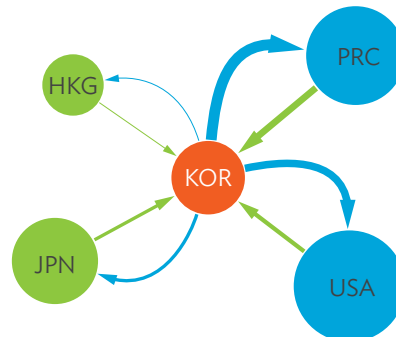
HKG = Hong Kong, China; JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; USA = United States.

Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.4.1b: Trade in Value-Added Flow with Top Trading Partners, 2017**



● Economy in focus ● Import partner ● Export partner

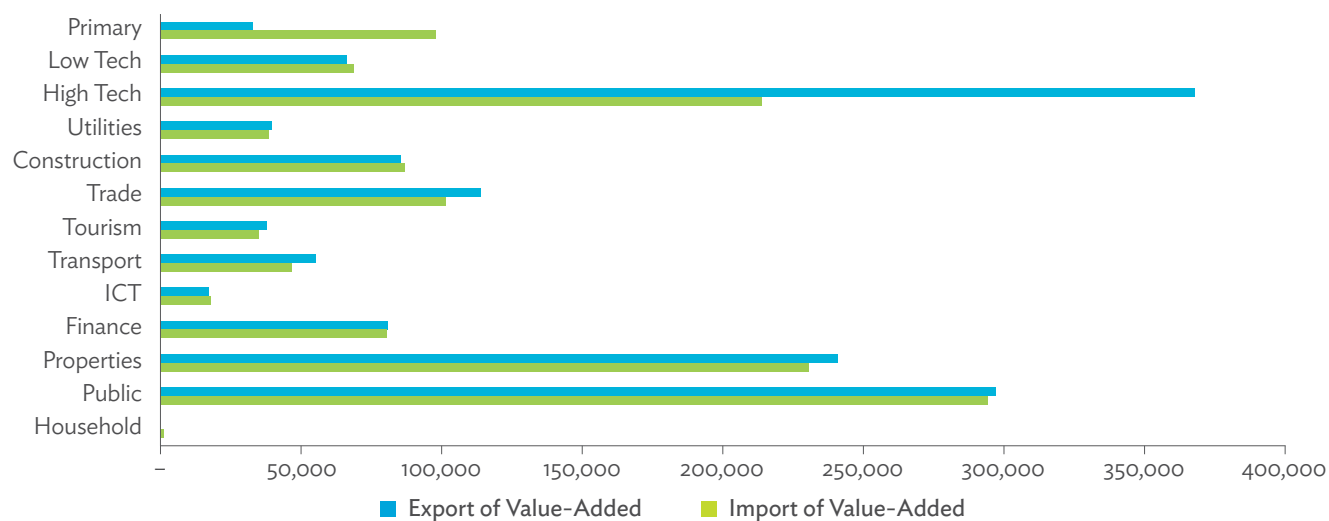
HKG = Hong Kong, China; JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; USA = United States.

Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.4.2: Trade in Value-Added by Industry, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

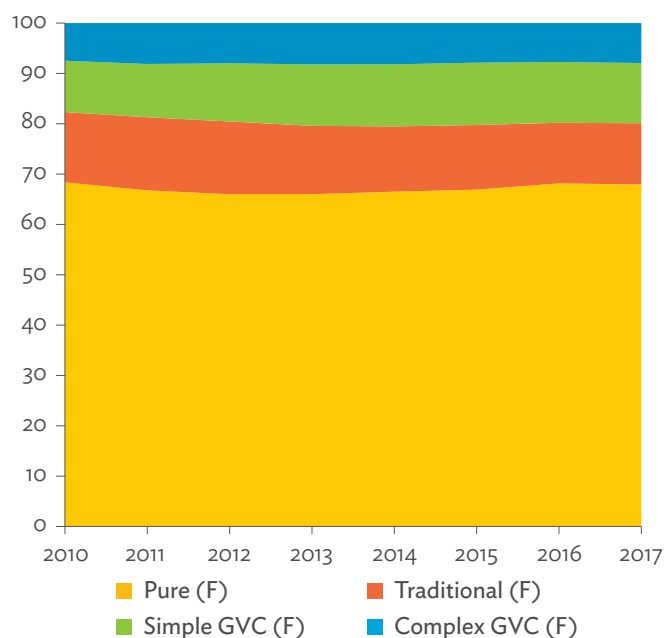
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**Figure 5.4.3: Trade in Value-Added, 2010–2017 (\$ million)**

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

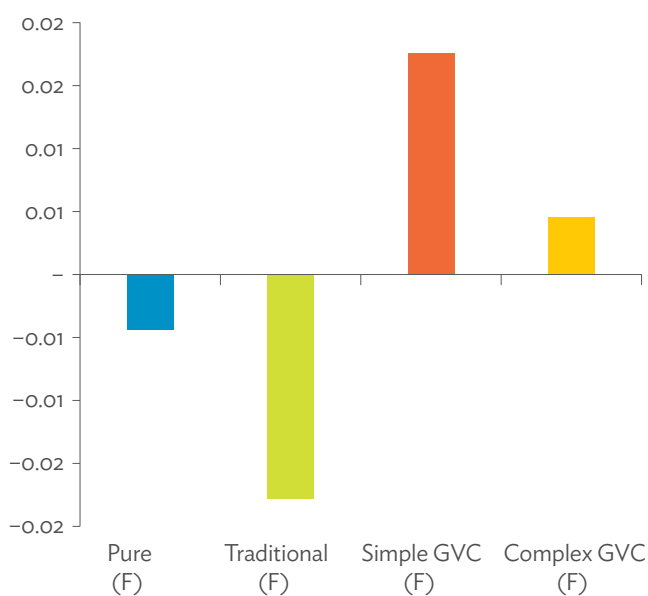
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**Figure 5.4.4: Trends in Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Forward Linkages, 2010–2017 (%)**

GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.4.5: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Forward Linkages (%)**

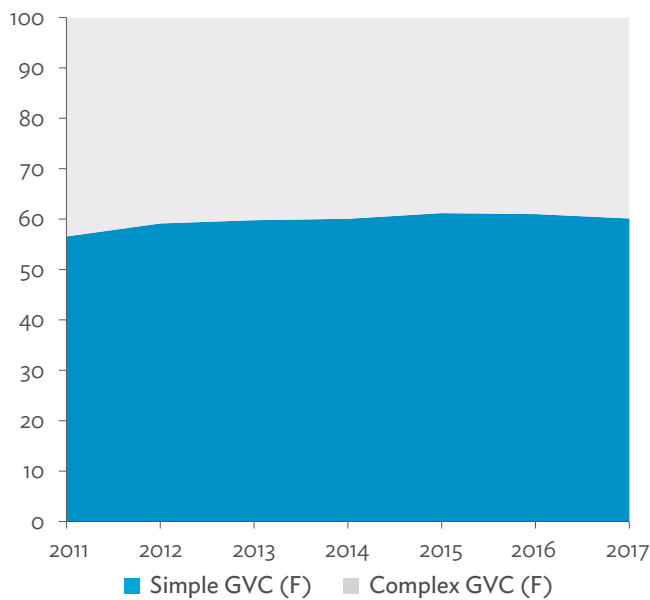
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 5.4.6: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Forward Linkages, 2010–2017 (%)**

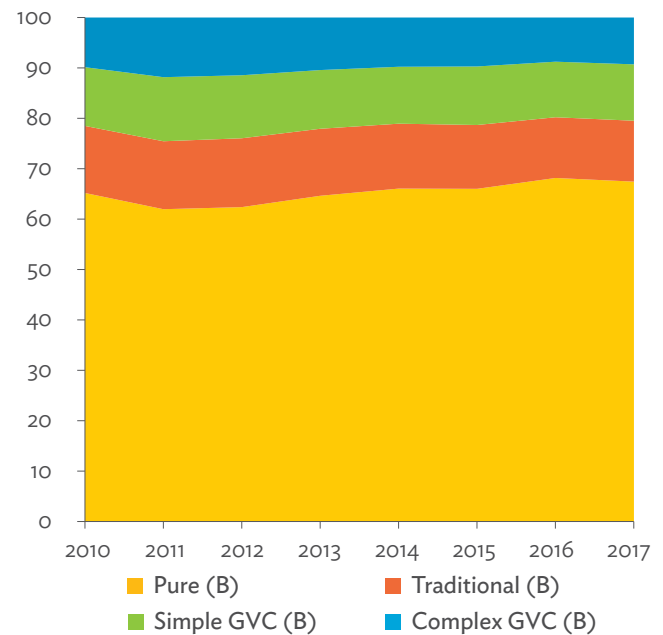


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.4.7: Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Backward Linkages, 2010–2017 (%)**

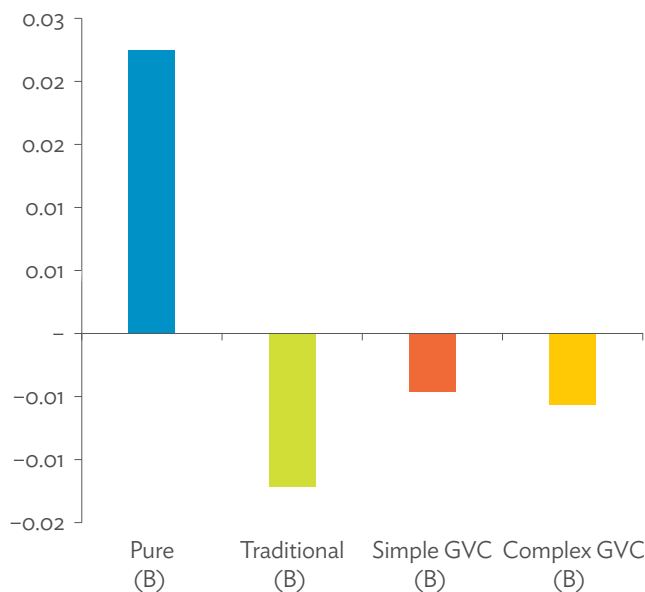


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.4.8: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Backward Linkages (%)**



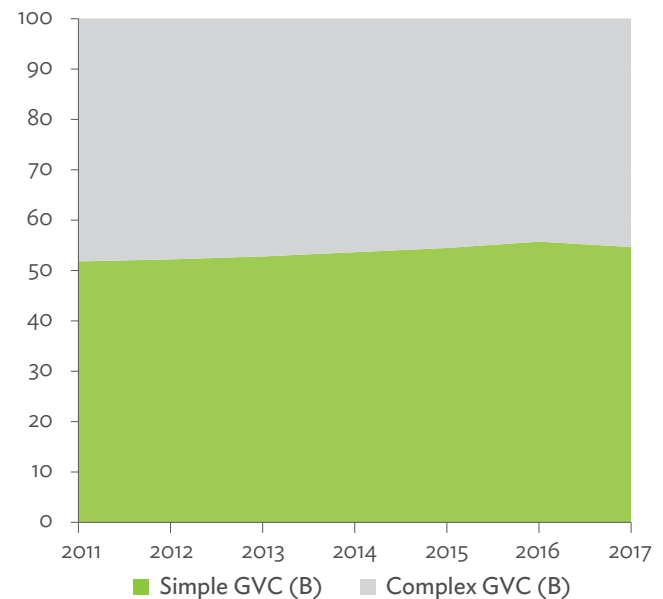
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.4.9: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Backward Linkages (%)**

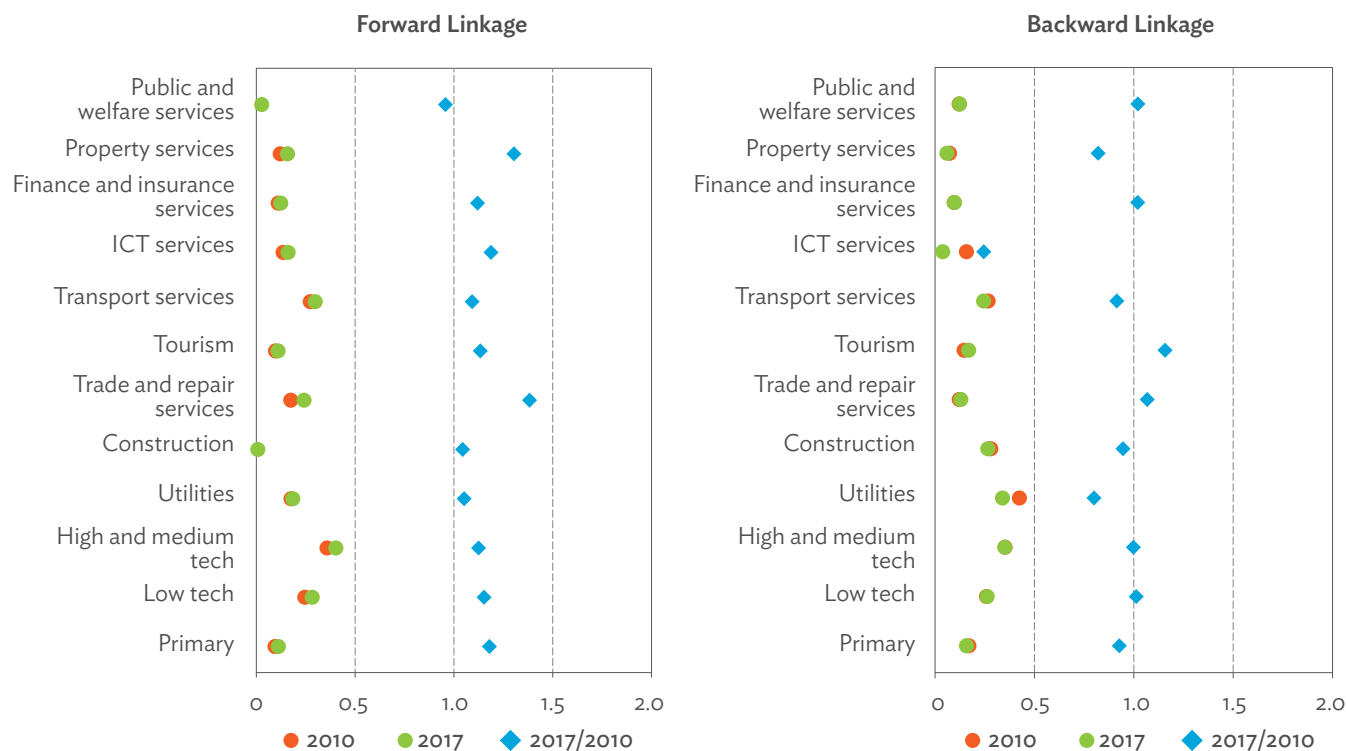


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.4.10: Global Value Chain Participation Based on Forward and Backward Linkages at the Sectoral Level, 2010 and 2017**

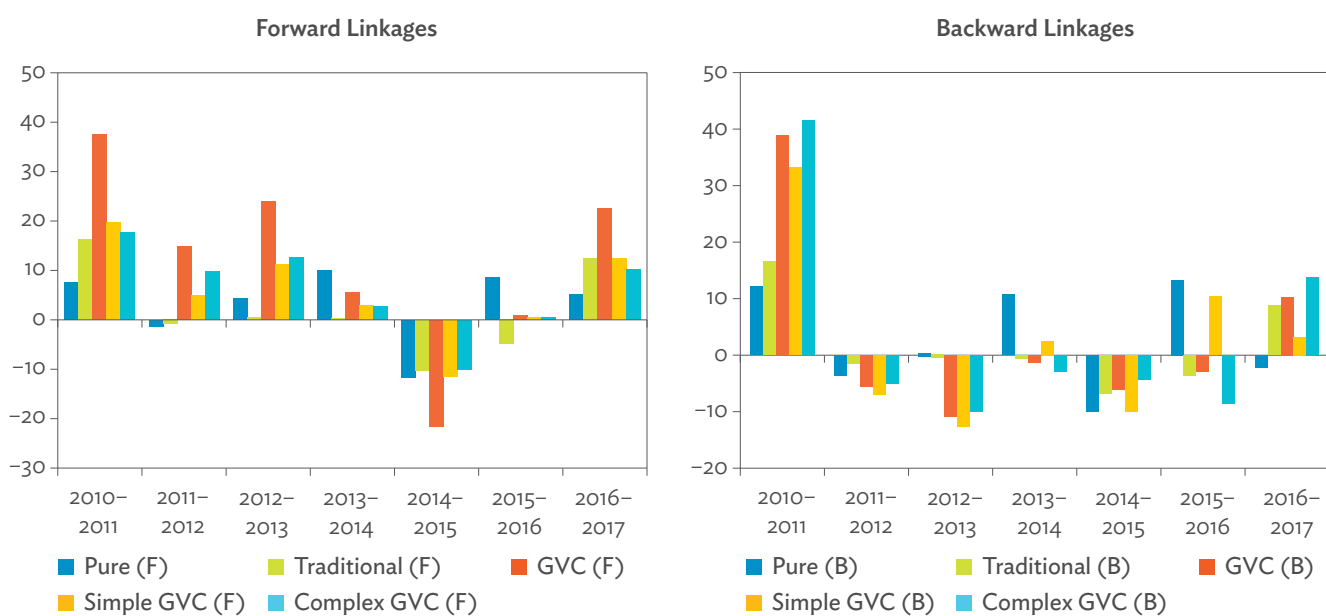


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 5.4.11: Nominal Growth Rates of Different Value-Added Activities in the Manufacturing Sector, 2010–2017 (%)**



GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

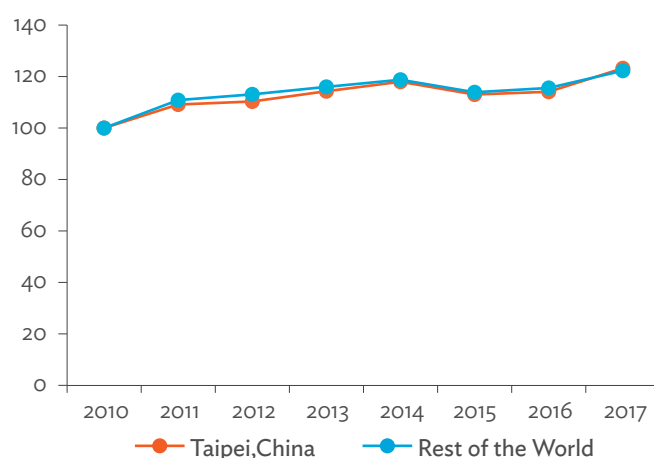
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# OVERVIEW OF PRODUCTION AND DEMAND STRUCTURES

# 6.1

## Taipei, China

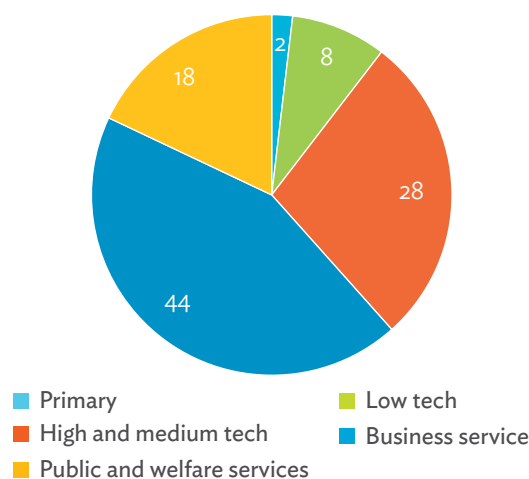
**Figure 6.1.1a: Gross Domestic Product Scaled to 2010 Levels in Comparison with the Rest of the World, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

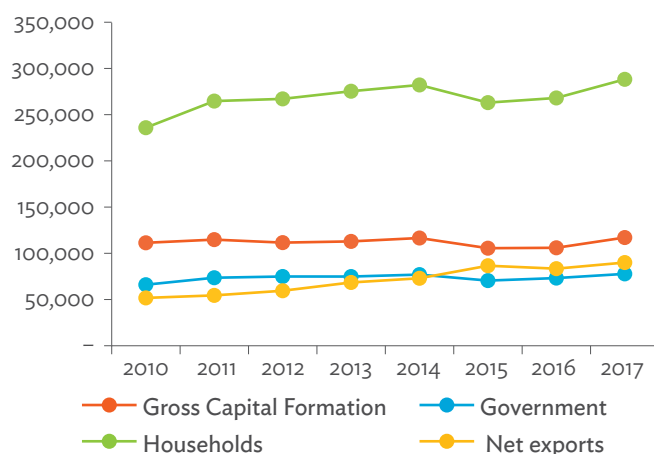
**Figure 6.1.1b: Gross Domestic Product Share by 5-Sector Aggregation, 2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.1.2a: Gross Domestic Product Trend by Final Consumption Expenditure Components, 2010–2017 (\$ million)**

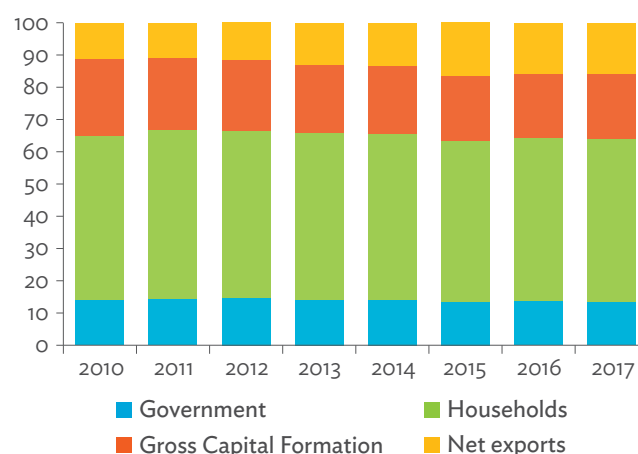


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.1.2b: Share of Consumption Expenditure by Final Consumption Expenditure Components, 2010–2017 (%)**

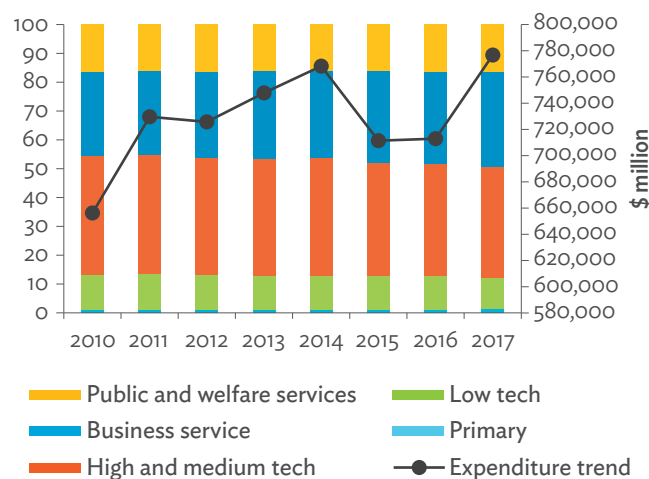


Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



**Figure 6.1.2c: Final Consumption Expenditure Total Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

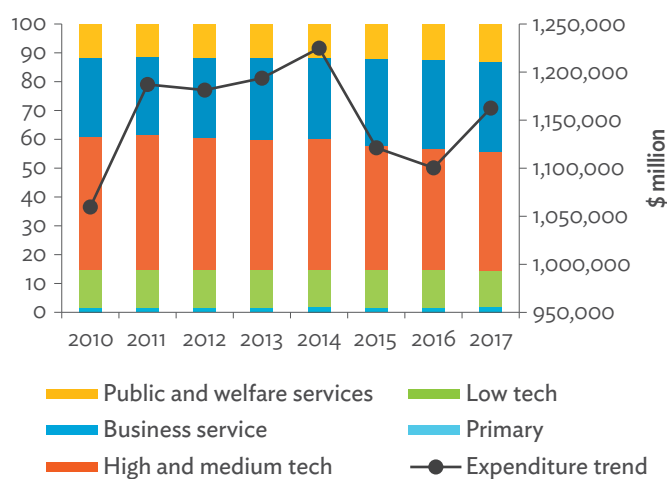


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.1.3a: Gross Total Output Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

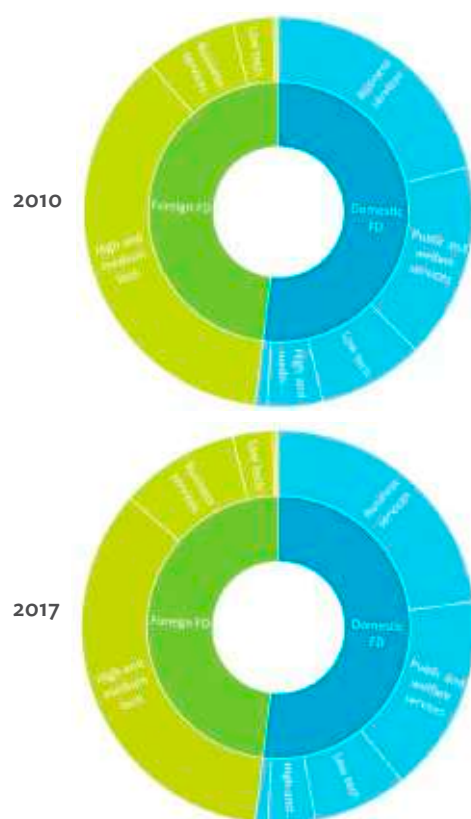


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.1.3b: Shares by 5-Sector Aggregation Attributed to Foreign and Domestic Final Demand, 2010 and 2017 (%)**

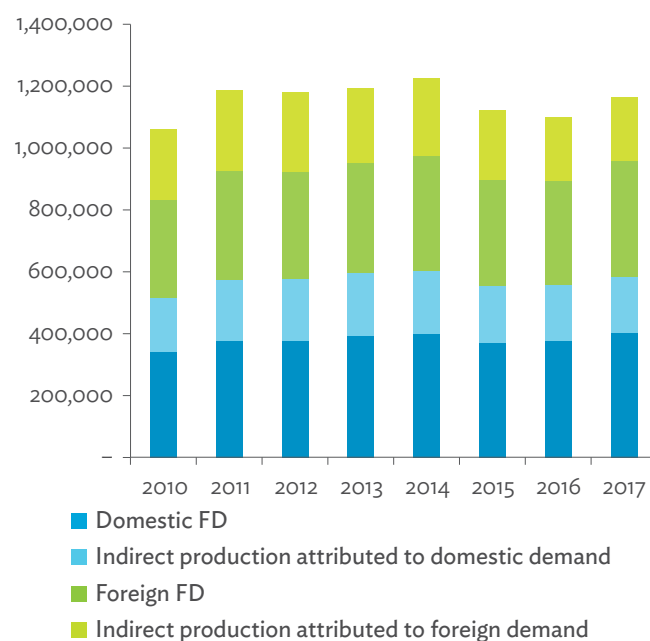


FD=final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

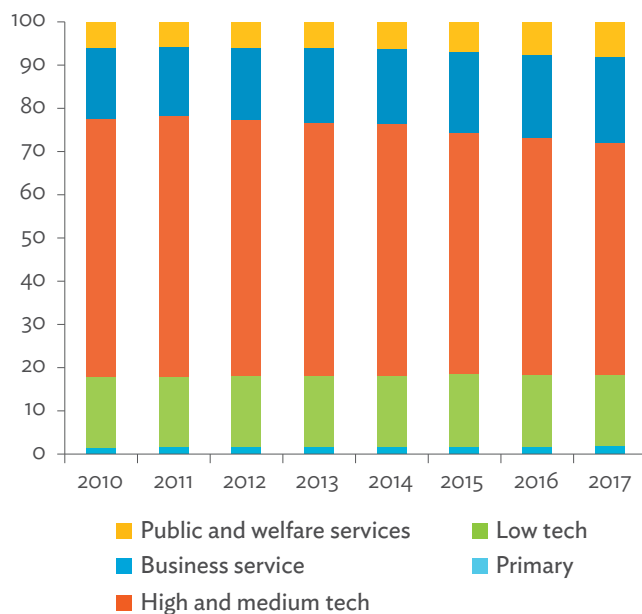
**Figure 6.1.3c: Gross Output by Production Attributed to Foreign and Domestic Demand, 2010–2017 (\$ million)**



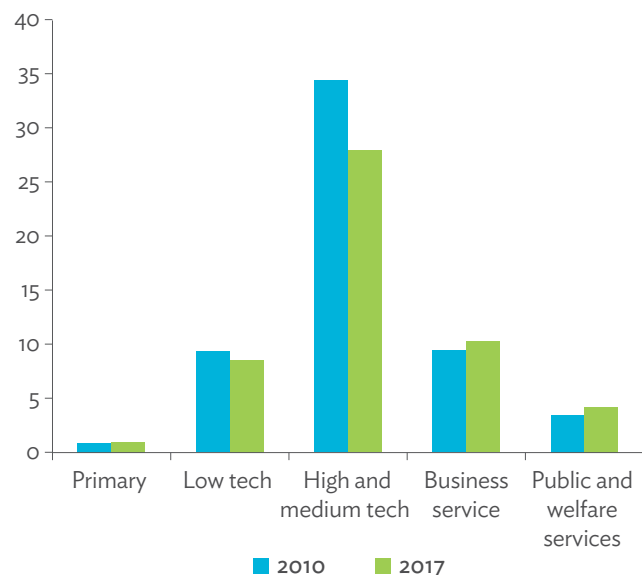
\$ = United States dollar, FD = final demand.

Source: Asian Development Bank Multi-Regional Input-Output Database.

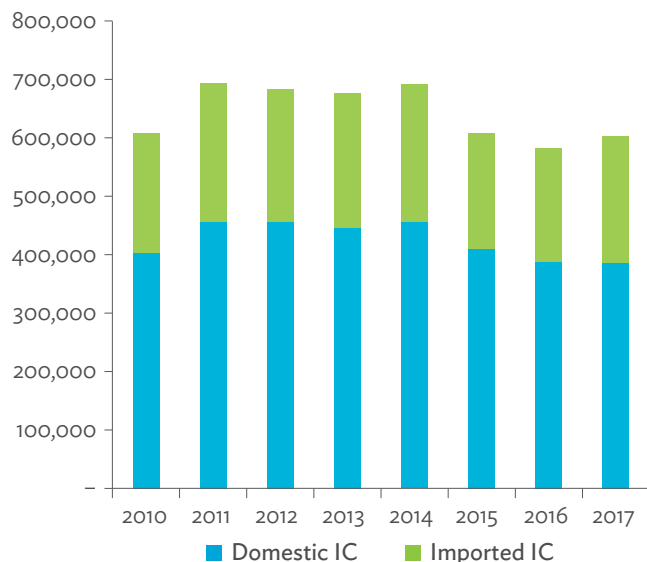
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**Figure 6.1.4a: Intermediate Consumption Shares by 5-Sector Aggregation, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

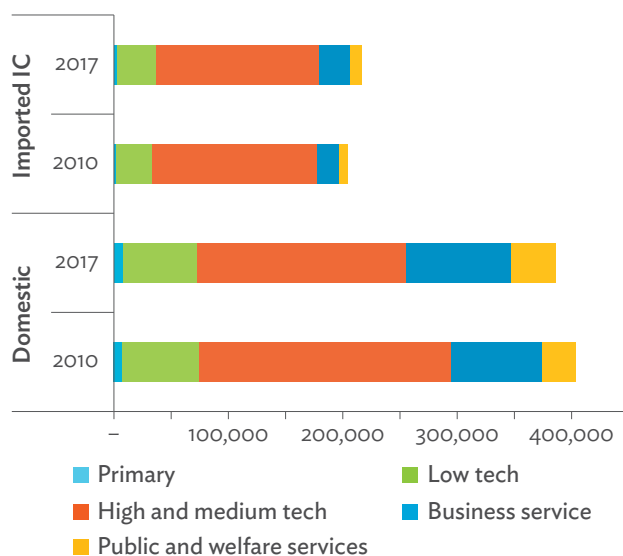
[Click here for figure data](#)**Figure 6.1.4b: Intermediate Consumption Ratio to Output by 5-Sector Aggregation, 2010 and 2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 6.1.4c: Shares of Domestic and Imported Intermediate Consumption, 2010–2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

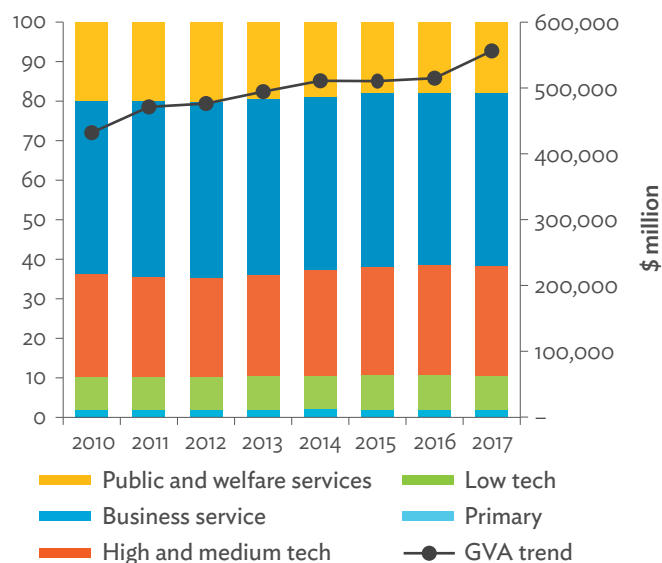
[Click here for figure data](#)**Figure 6.1.4d: Shares of Domestic and Imported Intermediate Consumption by 5-Sector Aggregation, 2010 and 2017 (\$ million)**

\$ = United States dollar, IC = intermediate consumption.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.1.5a: Gross Value Added Trend and Shares by 5-Sector Aggregation, 2010–2017 (% and \$ million)**

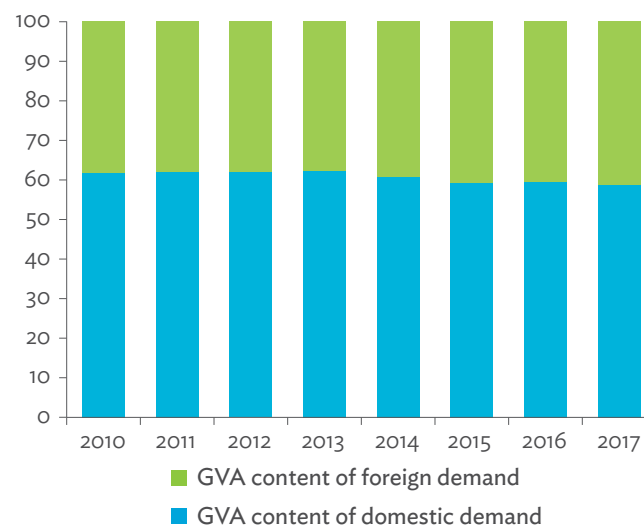


\$ = United States dollar, GVA = gross value added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.1.5b: Gross Value Added Share Attributed to Foreign and Domestic Final Demand, 2010–2017 (%)**

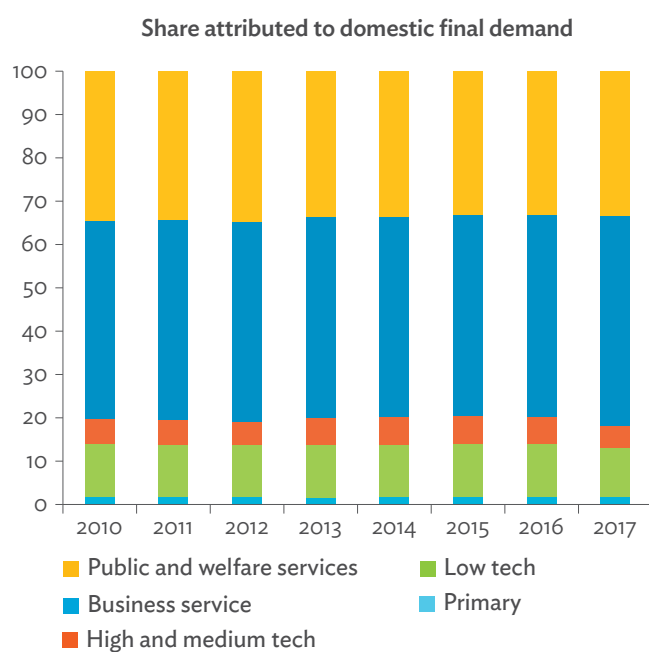


GVA = gross value added.

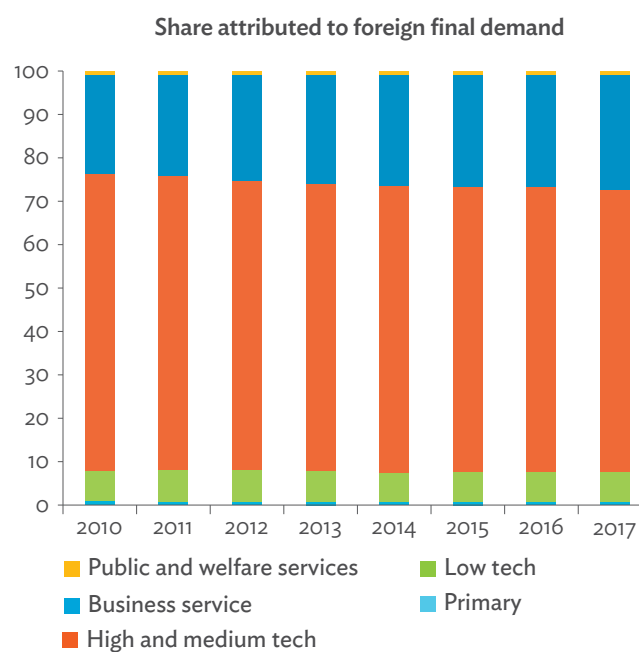
Source: Asian Development Bank Multi-Regional Input-Output Database.

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**Figure 6.1.5c: Sectoral Shares of Gross Value Added Content in Domestic and Foreign Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.



[Click here for figure data](#)

**Table 6.1.1: Gross Value Added Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.712	0.702	0.706	0.739	0.725	0.767	0.777	0.748
Mining and quarrying	0.717	0.717	0.690	0.688	0.695	0.764	0.769	0.792
Food, beverages, and tobacco	0.631	0.616	0.632	0.683	0.649	0.695	0.697	0.681
Textiles and textile products	0.564	0.537	0.558	0.562	0.557	0.628	0.633	0.622
Leather, leather products, and footwear	0.464	0.578	0.602	0.609	0.600	0.644	0.648	0.639
Wood and products of wood and cork	0.524	0.526	0.537	0.519	0.508	0.558	0.564	0.548
Pulp, paper, paper products, printing, and publishing	0.654	0.645	0.652	0.655	0.652	0.697	0.697	0.679
Coke, refined petroleum, and nuclear fuel	0.184	0.148	0.130	0.163	0.151	0.271	0.344	0.330
Chemicals and chemical products	0.354	0.308	0.289	0.301	0.303	0.427	0.453	0.440
Rubber and plastics	0.465	0.447	0.465	0.473	0.473	0.562	0.567	0.557
Other nonmetallic minerals	0.542	0.519	0.530	0.527	0.518	0.586	0.596	0.584
Basic metals and fabricated metal	0.447	0.423	0.427	0.457	0.442	0.505	0.505	0.488
Machinery, nec	0.518	0.508	0.535	0.535	0.533	0.587	0.584	0.571
Electrical and optical equipment	0.519	0.513	0.540	0.540	0.560	0.608	0.608	0.607
Transport equipment	0.544	0.534	0.537	0.551	0.548	0.607	0.604	0.593
Manufacturing, nec; recycling	0.539	0.522	0.538	0.545	0.544	0.608	0.613	0.600
Electricity, gas, and water supply	0.400	0.308	0.306	0.377	0.405	0.519	0.533	0.492
Construction	0.565	0.550	0.556	0.564	0.558	0.617	0.614	0.606
Sale, maintenance, and repair	0.702	0.694	0.697	0.701	0.701	0.738	0.731	0.723
Wholesale trade and commission trade	0.871	0.868	0.869	0.869	0.869	0.884	0.881	0.877
Retail trade	0.895	0.889	0.888	0.889	0.887	0.910	0.909	0.906
Hotels and restaurants	0.784	0.775	0.779	0.800	0.790	0.826	0.826	0.816
Inland transport	0.673	0.661	0.663	0.662	0.673	0.744	0.751	0.755
Water transport	0.469	0.413	0.427	0.412	0.423	0.475	0.452	0.423
Air transport	0.466	0.398	0.416	0.417	0.426	0.559	0.573	0.563
Other supporting and auxiliary transport activities	0.819	0.814	0.825	0.822	0.819	0.867	0.868	0.879
Post and telecommunications	0.852	0.837	0.830	0.827	0.820	0.846	0.849	0.826
Financial intermediation	0.923	0.922	0.923	0.923	0.920	0.929	0.927	0.926
Real estate activities	0.948	0.943	0.944	0.944	0.944	0.955	0.959	0.957
Renting of M&Eq and other business activities	0.814	0.810	0.817	0.811	0.811	0.836	0.832	0.816
Public administration and defense; compulsory social security	0.896	0.896	0.895	0.900	0.885	0.903	0.897	0.882
Education	0.902	0.906	0.910	0.910	0.910	0.924	0.922	0.914
Health and social work	0.790	0.793	0.797	0.797	0.802	0.832	0.832	0.825
Other community, social, and personal services	0.808	0.803	0.809	0.807	0.802	0.784	0.783	0.774
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 6.1.2: Import Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.256	0.266	0.261	0.229	0.245	0.221	0.211	0.241
Mining and quarrying	0.257	0.259	0.281	0.283	0.277	0.233	0.229	0.205
Food, beverages, and tobacco	0.327	0.342	0.326	0.276	0.310	0.287	0.285	0.301
Textiles and textile products	0.397	0.424	0.403	0.399	0.405	0.367	0.362	0.373
Leather, leather products, and footwear	0.499	0.387	0.363	0.355	0.366	0.346	0.341	0.351
Wood and products of wood and cork	0.435	0.434	0.421	0.439	0.451	0.437	0.431	0.447
Pulp, paper, paper products, printing, and publishing	0.313	0.321	0.314	0.311	0.314	0.293	0.293	0.311
Coke, refined petroleum, and nuclear fuel	0.734	0.769	0.778	0.751	0.766	0.727	0.653	0.668
Chemicals and chemical products	0.589	0.633	0.647	0.637	0.636	0.568	0.542	0.555
Rubber and plastics	0.489	0.507	0.488	0.481	0.483	0.432	0.427	0.436
Other nonmetallic minerals	0.419	0.441	0.428	0.431	0.442	0.409	0.399	0.411
Basic metals and fabricated metal	0.507	0.530	0.524	0.497	0.516	0.493	0.493	0.510
Machinery, nec	0.442	0.451	0.425	0.425	0.428	0.407	0.410	0.422
Electrical and optical equipment	0.441	0.448	0.422	0.422	0.404	0.390	0.389	0.391
Transport equipment	0.413	0.424	0.419	0.408	0.411	0.381	0.383	0.394
Manufacturing, nec; recycling	0.426	0.441	0.425	0.419	0.420	0.389	0.383	0.396
Electricity, gas, and water supply	0.540	0.626	0.622	0.559	0.537	0.480	0.466	0.506
Construction	0.399	0.413	0.407	0.399	0.406	0.379	0.382	0.390
Sale, maintenance, and repair	0.271	0.279	0.275	0.272	0.273	0.255	0.262	0.270
Wholesale trade and commission trade	0.122	0.125	0.123	0.124	0.124	0.115	0.118	0.122
Retail trade	0.098	0.104	0.104	0.103	0.105	0.089	0.090	0.093
Hotels and restaurants	0.193	0.201	0.197	0.177	0.187	0.166	0.165	0.176
Inland transport	0.298	0.310	0.305	0.306	0.297	0.254	0.247	0.243
Water transport	0.508	0.562	0.547	0.561	0.551	0.523	0.546	0.575
Air transport	0.494	0.558	0.536	0.535	0.528	0.439	0.425	0.435
Other supporting and auxiliary transport activities	0.171	0.176	0.165	0.168	0.171	0.132	0.132	0.120
Post and telecommunications	0.140	0.154	0.160	0.163	0.169	0.151	0.149	0.171
Financial intermediation	0.068	0.069	0.068	0.067	0.070	0.064	0.065	0.066
Real estate activities	0.048	0.053	0.051	0.052	0.052	0.044	0.039	0.042
Renting of M&Eq and other business activities	0.172	0.176	0.169	0.175	0.175	0.162	0.165	0.181
Public administration and defense; compulsory social security	0.089	0.089	0.089	0.084	0.097	0.084	0.090	0.106
Education	0.084	0.080	0.077	0.076	0.077	0.067	0.069	0.077
Health and social work	0.178	0.176	0.171	0.171	0.167	0.149	0.149	0.157
Other community, social, and personal services	0.173	0.177	0.171	0.173	0.177	0.206	0.206	0.215
Private households with employed persons	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table 6.1.3: Output Multipliers**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.732	1.746	1.770	1.792	1.709	1.691	1.640	1.657
Mining and quarrying	1.330	1.451	1.498	1.451	1.472	1.440	1.421	1.335
Food, beverages, and tobacco	2.015	2.043	2.045	2.148	2.057	2.036	1.989	1.944
Textiles and textile products	2.173	2.099	2.095	2.098	2.069	2.027	1.977	1.899
Leather, leather products, and footwear	1.731	2.262	2.252	2.259	2.230	2.234	2.166	2.083
Wood and products of wood and cork	1.662	1.696	1.717	1.695	1.681	1.685	1.629	1.562
Pulp, paper, paper products, printing, and publishing	1.915	1.927	1.940	1.925	1.927	1.921	1.883	1.844
Coke, refined petroleum, and nuclear fuel	1.195	1.202	1.207	1.181	1.211	1.218	1.150	1.079
Chemicals and chemical products	1.981	2.000	2.068	2.024	2.036	1.987	1.905	1.820
Rubber and plastics	1.925	1.929	1.938	1.920	1.904	1.849	1.797	1.720
Other nonmetallic minerals	1.720	1.697	1.695	1.678	1.698	1.682	1.628	1.564
Basic metals and fabricated metal	2.058	2.092	2.087	2.068	1.995	1.991	1.935	1.853
Machinery, nec	1.909	1.937	1.920	1.875	1.845	1.832	1.790	1.716
Electrical and optical equipment	1.654	1.651	1.660	1.584	1.573	1.570	1.526	1.454
Transport equipment	1.946	1.977	1.997	1.983	1.974	1.938	1.891	1.816
Manufacturing, nec; recycling	1.985	2.031	2.019	2.003	2.001	1.970	1.908	1.838
Electricity, gas, and water supply	1.326	1.334	1.349	1.301	1.327	1.311	1.267	1.224
Construction	1.874	1.880	1.882	1.863	1.848	1.826	1.790	1.714
Sale, maintenance, and repair	1.659	1.665	1.670	1.660	1.668	1.658	1.643	1.593
Wholesale trade and commission trade	1.317	1.324	1.328	1.319	1.319	1.315	1.312	1.286
Retail trade	1.368	1.366	1.381	1.374	1.378	1.351	1.349	1.326
Hotels and restaurants	1.706	1.721	1.740	1.750	1.726	1.688	1.668	1.645
Inland transport	1.517	1.525	1.549	1.500	1.528	1.512	1.495	1.435
Water transport	1.842	1.909	1.907	1.782	1.724	1.737	1.734	1.658
Air transport	1.651	1.733	1.767	1.685	1.732	1.681	1.647	1.577
Other supporting and auxiliary transport activities	1.369	1.373	1.374	1.366	1.376	1.316	1.304	1.247
Post and telecommunications	1.507	1.526	1.558	1.548	1.553	1.523	1.494	1.514
Financial intermediation	1.380	1.384	1.392	1.387	1.395	1.377	1.373	1.345
Real estate activities	1.288	1.302	1.304	1.313	1.310	1.284	1.254	1.251
Renting of M&Eq and other business activities	1.438	1.437	1.442	1.424	1.428	1.419	1.407	1.399
Public administration and defense; compulsory social security	1.318	1.323	1.332	1.311	1.352	1.326	1.336	1.358
Education	1.229	1.218	1.220	1.214	1.217	1.202	1.199	1.199
Health and social work	1.455	1.440	1.452	1.441	1.432	1.410	1.393	1.370
Other community, social, and personal services	1.571	1.580	1.588	1.574	1.578	1.716	1.692	1.654
Private households with employed persons	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

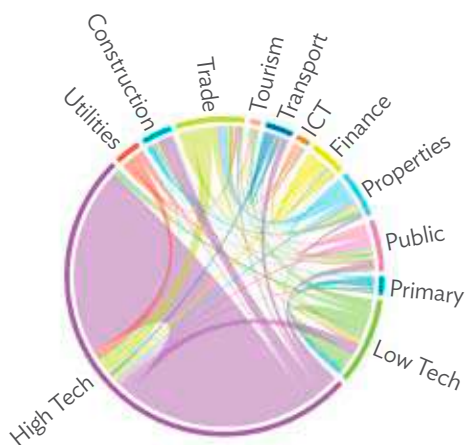
Source: Asian Development Bank Multi-Regional Input–Output Database.

# 6.2

## DOMESTIC INTERINDUSTRY LINKAGES

### Taipei, China

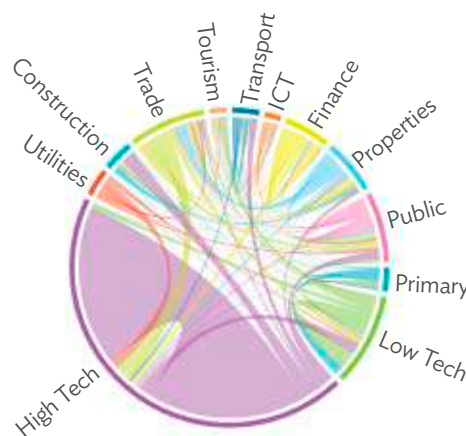
**Figure 6.2.1a: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2010**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

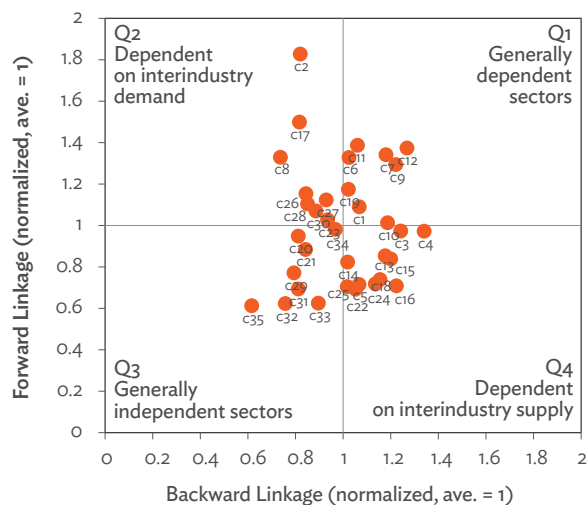
**Figure 6.2.1b: Patterns of Interindustry Transactions Based on the Domestic Consumption Matrix, 2017**



ICT = information and communication technology.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

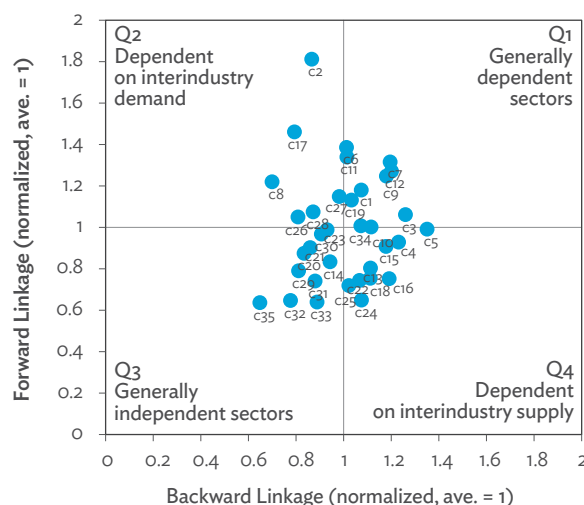
**Figure 6.2.2a: Backward and Forward Linkages by Industry, 2010**



Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.2.2b: Backward and Forward Linkages by Industry, 2017**

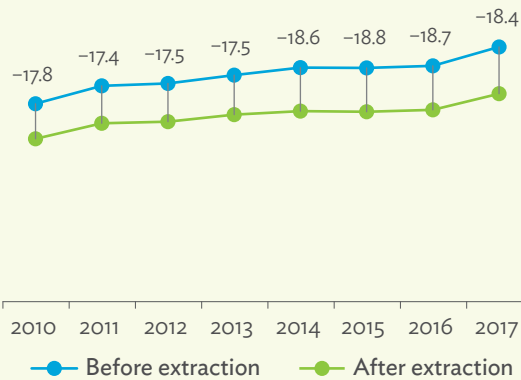


Note: Mapping of sectors based on normalized backward and forward linkages.  
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

### Box 6: Hypothetical Extraction of Electrical and Optical Equipment Industry in Taipei, China

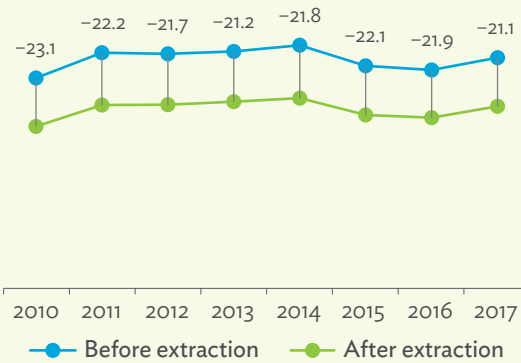
**Figure 6.2.3a: Potential Decline in Gross Value Added, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

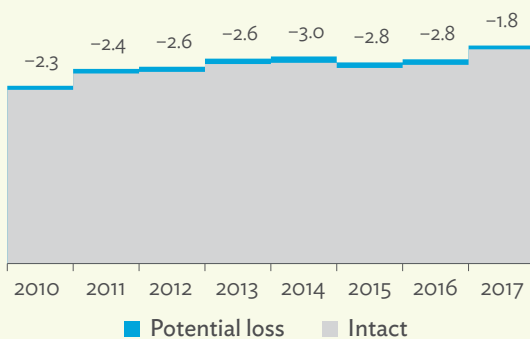
**Figure 6.2.4a: Potential Decline in Gross Output, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

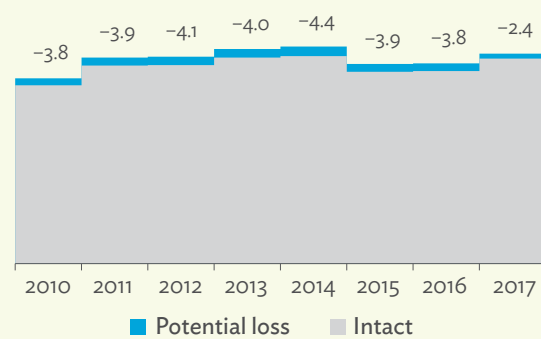
**Figure 6.2.3b: Potential Decline in Gross Value Added Attributed to Domestic Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

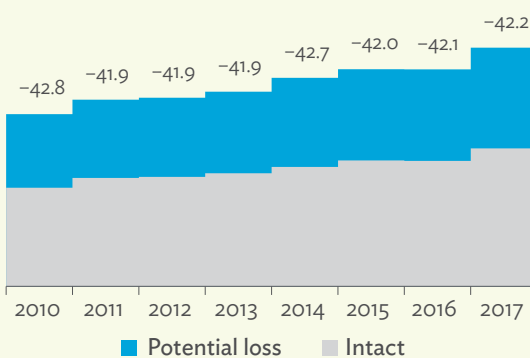
**Figure 6.2.4b: Potential Decline in Gross Output Attributed to Domestic Final Demand, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

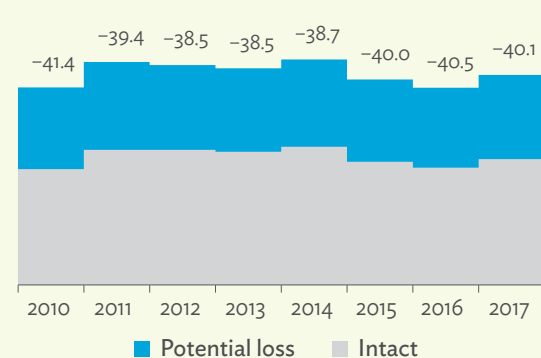
**Figure 6.2.3c: Potential Decline in Gross Value Added Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.2.4c: Potential Decline in Gross Output Attributed to Exports, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)



**Table 6.2.1: Input-Output Backward Linkage**



Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.068	1.058	1.065	1.091	1.045	1.043	1.033	1.075
Mining and quarrying	0.821	0.879	0.902	0.883	0.899	0.889	0.895	0.866
Food, beverages, and tobacco	1.243	1.238	1.231	1.308	1.257	1.256	1.252	1.260
Textiles and textile products	1.340	1.272	1.261	1.277	1.264	1.251	1.244	1.231
Leather, leather products, and footwear	1.067	1.370	1.355	1.375	1.363	1.378	1.364	1.351
Wood and products of wood and cork	1.025	1.027	1.034	1.032	1.028	1.040	1.026	1.013
Pulp, paper, paper products, printing, and publishing	1.181	1.167	1.168	1.172	1.178	1.185	1.185	1.196
Coke, refined petroleum, and nuclear fuel	0.737	0.728	0.727	0.719	0.740	0.751	0.724	0.699
Chemicals and chemical products	1.222	1.212	1.245	1.232	1.244	1.226	1.199	1.180
Rubber and plastics	1.187	1.168	1.166	1.169	1.164	1.141	1.131	1.115
Other nonmetallic minerals	1.061	1.028	1.020	1.021	1.037	1.038	1.025	1.014
Basic metals and fabricated metal	1.269	1.267	1.256	1.259	1.219	1.228	1.218	1.202
Machinery, nec	1.177	1.173	1.156	1.141	1.127	1.131	1.127	1.113
Electrical and optical equipment	1.020	1.000	0.999	0.964	0.961	0.968	0.961	0.943
Transport equipment	1.200	1.197	1.202	1.207	1.206	1.196	1.190	1.178
Manufacturing, nec; recycling	1.225	1.230	1.216	1.219	1.223	1.215	1.202	1.192
Electricity, gas, and water supply	0.818	0.808	0.812	0.792	0.811	0.809	0.798	0.793
Construction	1.156	1.139	1.133	1.134	1.129	1.127	1.127	1.112
Sale, maintenance, and repair	1.023	1.008	1.005	1.010	1.019	1.023	1.035	1.033
Wholesale trade and commission trade	0.812	0.802	0.799	0.803	0.806	0.812	0.826	0.834
Retail trade	0.844	0.827	0.831	0.836	0.842	0.834	0.849	0.860
Hotels and restaurants	1.052	1.043	1.048	1.066	1.055	1.042	1.050	1.067
Inland transport	0.935	0.924	0.933	0.913	0.934	0.933	0.941	0.930
Water transport	1.136	1.156	1.148	1.085	1.054	1.072	1.092	1.075
Air transport	1.018	1.050	1.064	1.025	1.059	1.038	1.037	1.022
Other supporting and auxiliary transport activities	0.844	0.832	0.827	0.831	0.841	0.812	0.821	0.809
Post and telecommunications	0.930	0.924	0.938	0.942	0.949	0.939	0.941	0.982
Financial intermediation	0.851	0.838	0.838	0.845	0.853	0.849	0.864	0.872
Real estate activities	0.794	0.789	0.785	0.799	0.801	0.792	0.790	0.811
Renting of M&Eq and other business activities	0.887	0.871	0.868	0.867	0.872	0.875	0.886	0.907
Public administration and defense; compulsory social security	0.813	0.801	0.802	0.798	0.826	0.818	0.841	0.881
Education	0.758	0.738	0.735	0.739	0.744	0.742	0.755	0.777
Health and social work	0.897	0.872	0.874	0.877	0.875	0.870	0.877	0.888
Other community, social, and personal services	0.969	0.957	0.956	0.958	0.964	1.059	1.065	1.072
Private households with employed persons	0.617	0.606	0.602	0.609	0.611	0.617	0.630	0.648
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

Source: Asian Development Bank Multi-Regional Input–Output Database.

Table 6.2.2: Input-Output Forward Linkage

	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	1.092	1.082	1.097	1.170	1.128	1.136	1.179	1.186
Mining and quarrying	1.850	2.265	2.266	2.305	2.262	2.301	1.456	1.836
Food, beverages, and tobacco	0.972	0.978	0.985	1.021	1.010	1.017	1.054	1.064
Textiles and textile products	0.971	0.921	0.921	0.940	0.943	0.936	0.962	0.928
Leather, leather products, and footwear	0.707	0.958	0.983	0.940	0.980	0.993	1.011	0.992
Wood and products of wood and cork	1.337	1.356	1.360	1.350	1.364	1.363	1.364	1.398
Pulp, paper, paper products, printing, and publishing	1.350	1.317	1.311	1.303	1.311	1.319	1.336	1.325
Coke, refined petroleum, and nuclear fuel	1.338	1.331	1.277	1.178	1.299	1.272	1.283	1.227
Chemicals and chemical products	1.302	1.256	1.277	1.294	1.284	1.262	1.289	1.255
Rubber and plastics	1.013	1.022	1.016	1.025	1.021	1.012	1.024	1.003
Other nonmetallic minerals	1.397	1.342	1.313	1.326	1.328	1.313	1.338	1.350
Basic metals and fabricated metal	1.384	1.359	1.341	1.360	1.315	1.290	1.308	1.279
Machinery, nec	0.849	0.819	0.847	0.786	0.798	0.799	0.821	0.799
Electrical and optical equipment	0.818	0.799	0.813	0.814	0.824	0.814	0.839	0.830
Transport equipment	0.833	0.833	0.843	0.860	0.882	0.886	0.913	0.906
Manufacturing, nec; recycling	0.700	0.685	0.688	0.695	0.709	0.713	0.738	0.746
Electricity, gas, and water supply	1.513	1.478	1.479	1.477	1.484	1.480	1.500	1.475
Construction	0.731	0.720	0.717	0.716	0.720	0.717	0.737	0.748
Sale, maintenance, and repair	1.179	1.147	1.149	1.150	1.150	1.165	1.195	1.136
Wholesale trade and commission trade	0.947	0.923	0.907	0.905	0.883	0.880	0.902	0.871
Retail trade	0.881	0.871	0.875	0.876	0.879	0.891	0.913	0.900
Hotels and restaurants	0.684	0.708	0.702	0.703	0.707	0.712	0.739	0.737
Inland transport	1.027	1.000	1.002	0.996	0.988	0.993	1.011	0.989
Water transport	0.710	0.702	0.707	0.643	0.607	0.593	0.630	0.640
Air transport	0.696	0.674	0.676	0.678	0.668	0.665	0.690	0.712
Other supporting and auxiliary transport activities	1.157	1.145	1.146	1.119	1.074	1.059	1.102	1.052
Post and telecommunications	1.126	1.090	1.096	1.101	1.107	1.113	1.148	1.154
Financial intermediation	1.107	1.070	1.073	1.086	1.094	1.096	1.125	1.078
Real estate activities	0.764	0.739	0.740	0.748	0.751	0.756	0.784	0.785
Renting of M&Eq and other business activities	1.072	1.008	1.005	1.005	1.000	1.003	1.027	0.968
Public administration and defense; compulsory social security	0.684	0.674	0.676	0.682	0.684	0.694	0.717	0.734
Education	0.612	0.596	0.591	0.600	0.603	0.600	0.626	0.637
Health and social work	0.614	0.587	0.584	0.594	0.597	0.593	0.620	0.629
Other community, social, and personal services	0.980	0.960	0.954	0.961	0.949	0.973	1.003	1.008
Private households with employed persons	0.601	0.585	0.583	0.593	0.595	0.591	0.618	0.627
	lowest linkage							highest linkage

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Note: Values are normalized values.

Source: Asian Development Bank Multi-Regional Input–Output Database.

# 6.3

## INTERNATIONAL TRADE AND PRODUCTION LINKAGES

### Taipei, China

**Figure 6.3.1: Exports and Imports as a Share of Gross Domestic Product, 2010–2017 (%)**

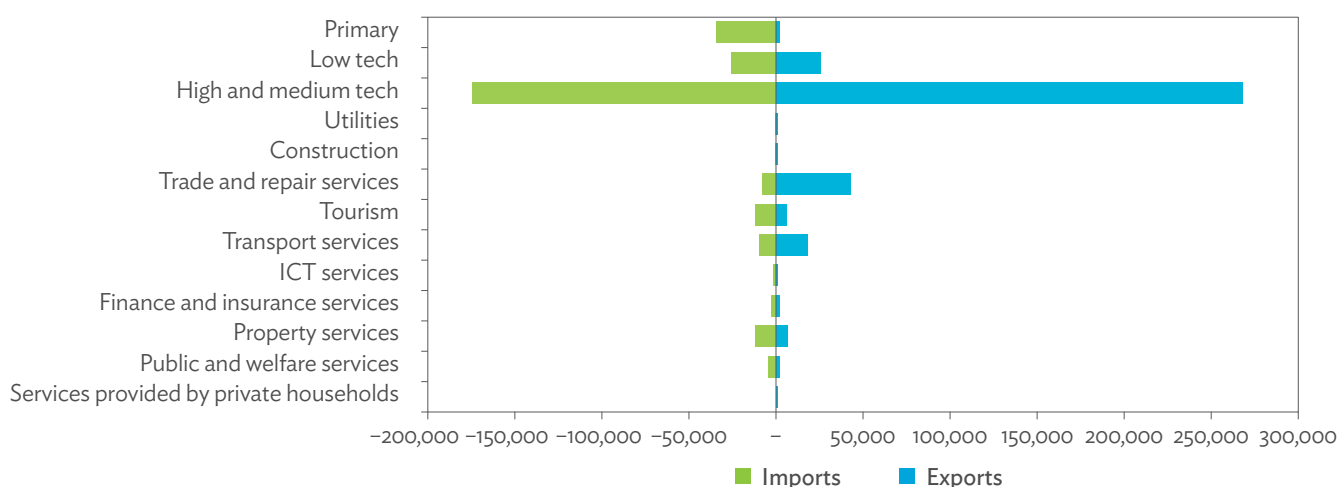


GDP = gross domestic product.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

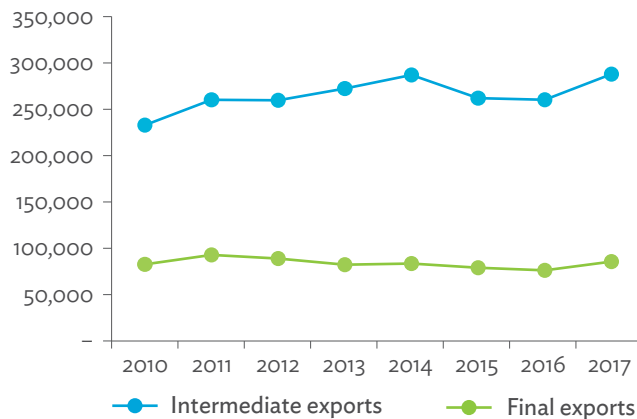
**Figure 6.3.2: Total Foreign Trade by Sector, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

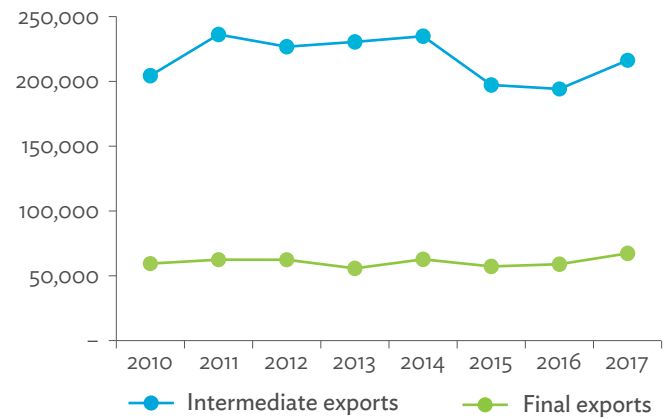
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.3.3: Trend of Export Activity by End-Use Category, 2010–2017 (\$ million)**

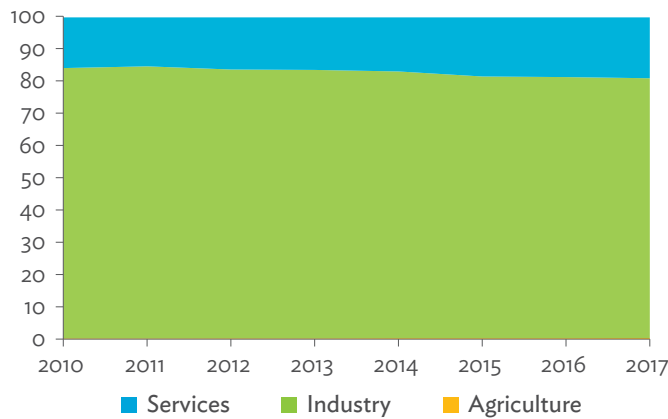
\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

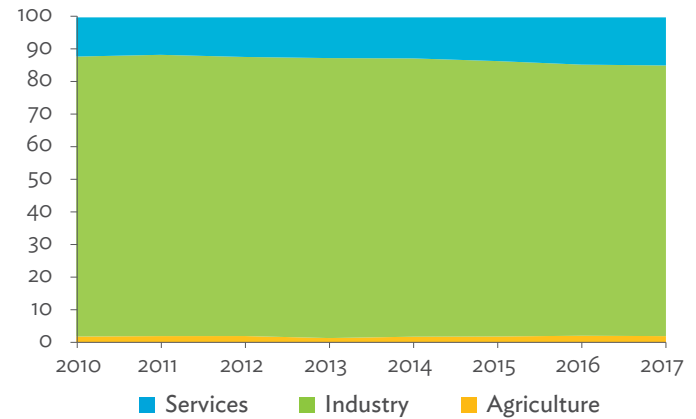
[Click here for figure data](#)**Figure 6.3.6: Trend of Import Activity by End-Use Category, 2010–2017 (\$ million)**

\$ = United States dollar.

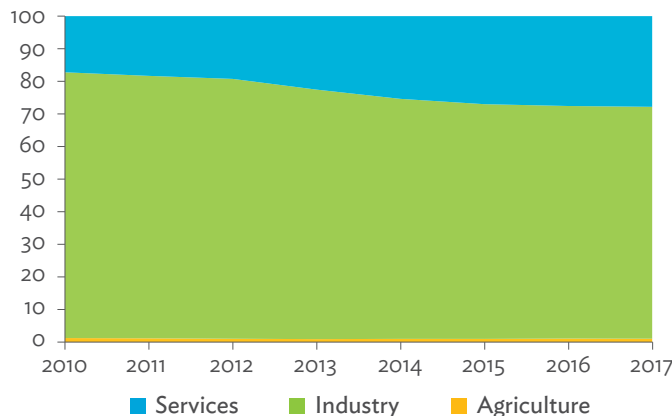
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 6.3.4: Shares of Sectors to Total Intermediate Exports, 2010–2017 (%)**

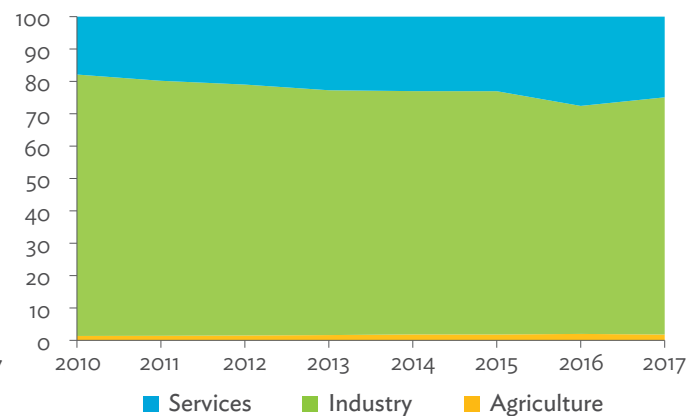
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 6.3.7: Shares of Sectors to Total Intermediate Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 6.3.5: Shares of Sectors to Total Final Exports, 2010–2017 (%)**

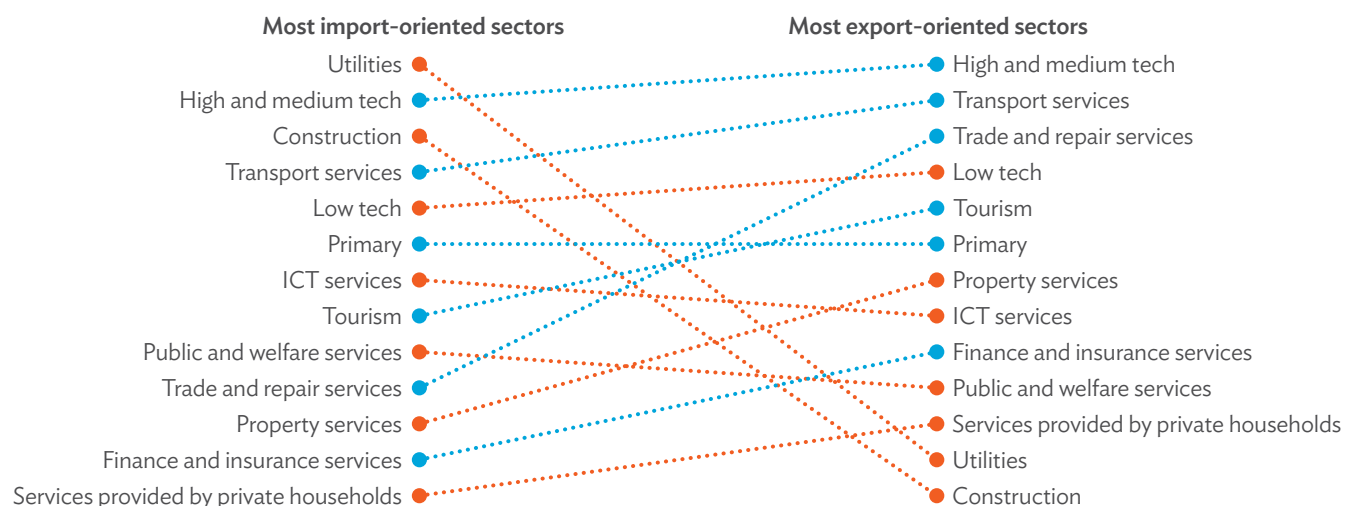
Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)**Figure 6.3.8: Shares of Sectors to Total Final Imports, 2010–2017 (%)**

Source: Asian Development Bank Multi-Regional Input–Output Database.

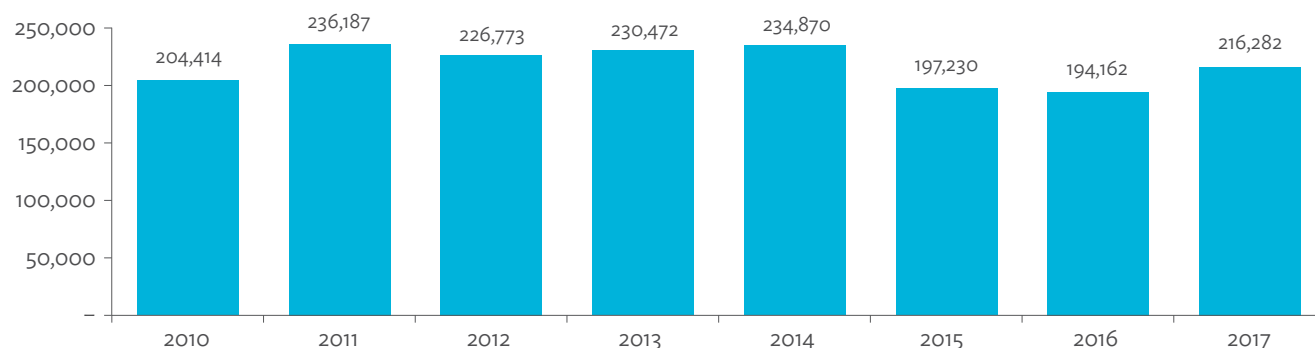
[Click here for figure data](#)

**Figure 6.3.9: Ranking of Sectors According to Imported Input-to-Output Ratios and Exported Output-to-Output Ratios, 2017**



[Click here for figure data](#)

**Figure 6.3.10: Total Foreign-Traded Input, 2010–2017 (\$ million)**

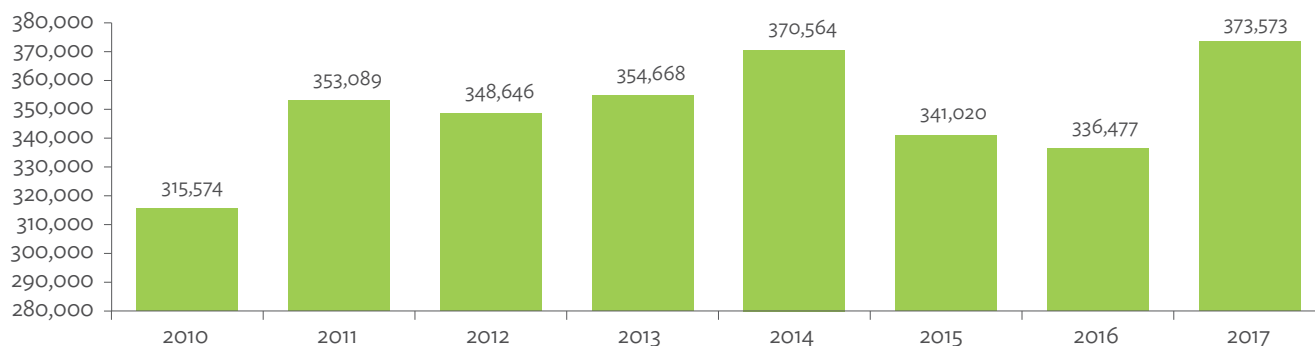


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.3.11: Total Foreign-Traded Output, 2010–2017 (\$ million)**

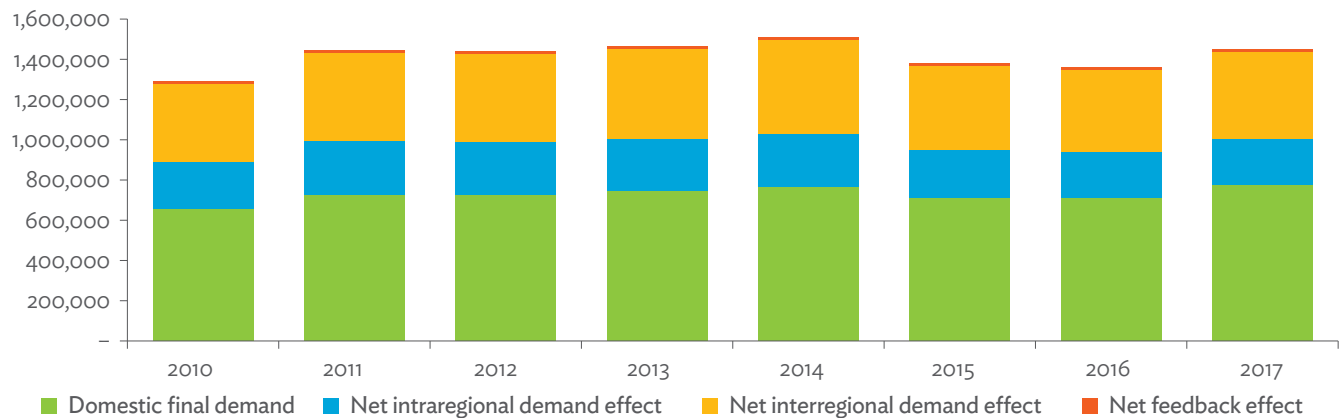


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.3.12: Decomposition of Total Production Attributable to Domestic and Interregional Demand, 2010–2017 (\$ million)**

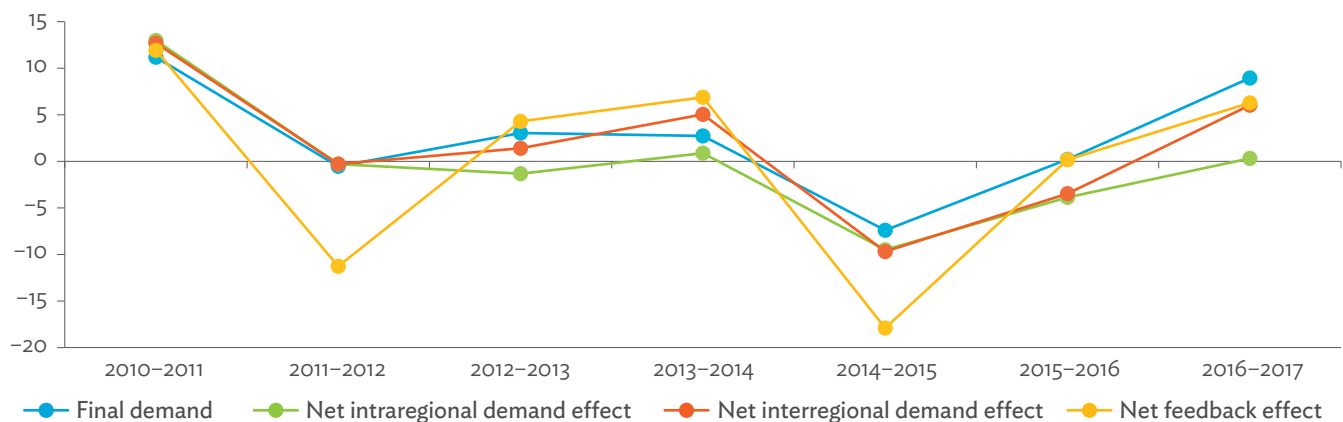


\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

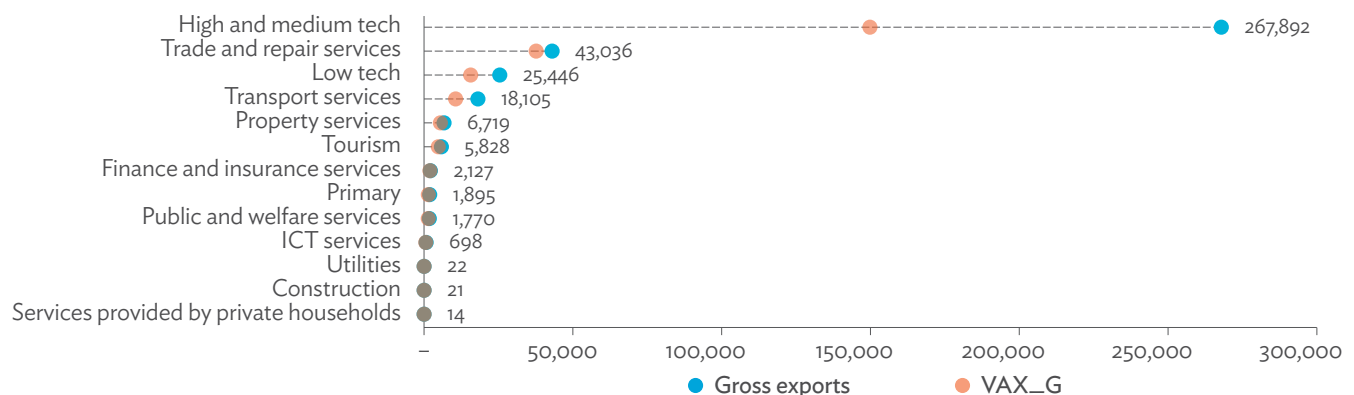
**Figure 6.3.13: Growth Rates of Production Components Based on Two-Region Input-Output Table, 2010–2017 (%)**



Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.3.14: Gross Exports versus Value-Added Exports by Sector, 2017 (\$ million)**

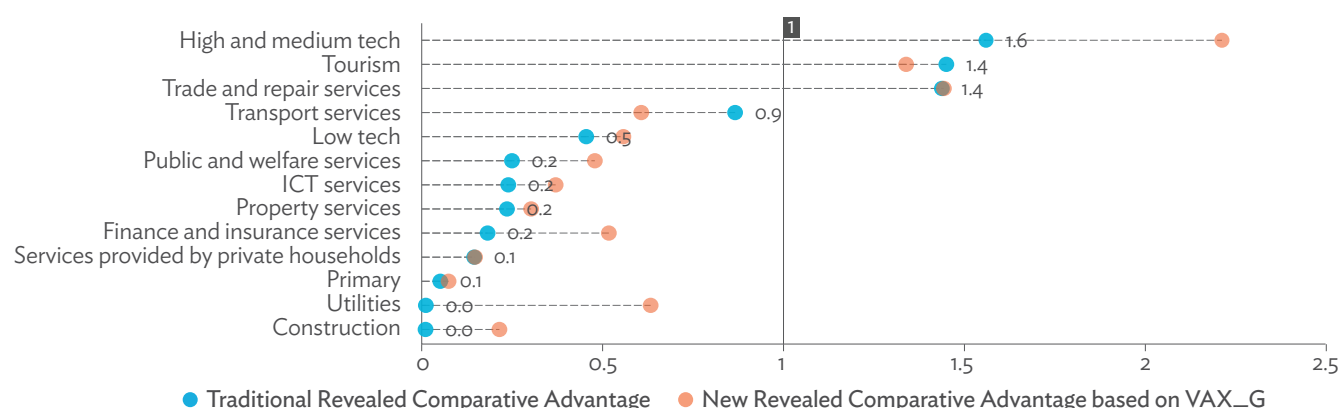


\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.3.15: Comparison of Traditional and New Revealed Comparative Advantage by Sector, 2017**

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Table 6.3.1: Production Attributable to Domestic Linkages by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Final demand								
Primary	8,123	9,162	8,785	8,067	9,459	8,302	9,110	9,869
Low tech	79,960	88,777	88,406	89,492	90,608	83,327	81,928	85,510
High and medium tech	270,938	303,134	293,383	303,748	313,102	278,862	276,441	298,232
Business service	189,586	211,409	215,431	226,514	232,484	225,271	227,302	254,457
Personal service	107,656	117,152	119,745	120,027	122,609	115,651	118,167	128,661
Intraregional effects (M1)								
Primary	7,657	9,243	9,350	10,255	10,228	9,312	9,200	10,003
Low tech	39,796	45,839	46,511	47,289	47,724	43,966	41,867	42,842
High and medium tech	102,331	116,931	113,392	106,675	108,376	88,596	82,635	80,060
Business service	71,215	78,181	79,698	81,360	81,295	80,546	79,478	78,968
Personal service	12,328	13,422	13,882	13,773	14,007	14,373	14,456	16,485

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 6.3.2: Production Attributable to Linkages with the Rest of the World by Sector, 2010–2017 (\$ million)**

Sectors	2010	2011	2012	2013	2014	2015	2016	2017
Interregional effects (M2)								
Primary	1,893	2,264	2,403	2,475	2,754	2,550	2,149	2,615
Low tech	34,264	38,635	38,885	38,125	39,881	37,685	34,950	36,679
High and medium tech	294,158	334,005	329,275	335,209	351,935	306,389	296,256	314,594
Business service	65,662	71,371	74,114	75,413	79,570	80,974	79,448	83,707
Personal service	3,736	4,184	4,479	4,237	4,299	4,496	4,299	4,642
Feedback effects (M3)								
Primary	7.84	10.08	9.68	9.83	10.50	8.79	6.61	8.09
Low tech	187.19	211.13	192.82	187.84	199.77	170.65	161.86	165.33
High and medium tech	2,644.44	2,974.34	2,613.71	2,753.90	2,951.21	2,370.98	2,389.16	2,553.47
Business service	396.73	426.33	396.02	401.33	423.10	389.31	387.89	403.60
Personal service	25.17	28.20	26.56	24.89	25.62	24.15	23.59	25.15

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 6.3.3: Net Intraregional Multipliers (M1), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.7324	0.7463	0.7698	0.7918	0.7095	0.6909	0.6401	0.6571
Mining and quarrying	0.3304	0.4507	0.4978	0.4508	0.4717	0.4405	0.4215	0.3355
Food, beverages, and tobacco	1.0149	1.0434	1.0449	1.1484	1.0569	1.0362	0.9888	0.9435
Textiles and textile products	1.1734	1.0991	1.0953	1.0978	1.0686	1.0275	0.9766	0.8988
Leather, leather products, and footwear	0.7308	1.2623	1.2515	1.2594	1.2301	1.2336	1.1661	1.0832
Wood and products of wood and cork	0.6622	0.6961	0.7168	0.6951	0.6814	0.6851	0.6292	0.5615
Pulp, paper, paper products, printing, and publishing	0.9148	0.9268	0.9403	0.9252	0.9272	0.9206	0.8829	0.8437
Coke, refined petroleum, and nuclear fuel	0.1954	0.2025	0.2070	0.1805	0.2105	0.2177	0.1504	0.0786
Chemicals and chemical products	0.9814	1.0002	1.0681	1.0239	1.0363	0.9865	0.9050	0.8196
Rubber and plastics	0.9251	0.9285	0.9376	0.9205	0.9039	0.8489	0.7969	0.7196
Other nonmetallic minerals	0.7201	0.6975	0.6948	0.6780	0.6977	0.6823	0.6279	0.5635
Basic metals and fabricated metal	1.0581	1.0923	1.0868	1.0683	0.9950	0.9908	0.9351	0.8529
Machinery, nec	0.9086	0.9367	0.9202	0.8747	0.8448	0.8324	0.7896	0.7164
Electrical and optical equipment	0.6540	0.6507	0.6601	0.5842	0.5728	0.5695	0.5256	0.4539
Transport equipment	0.9458	0.9768	0.9970	0.9835	0.9736	0.9375	0.8907	0.8163
Manufacturing, nec; recycling	0.9854	1.0313	1.0193	1.0029	1.0010	0.9696	0.9084	0.8375
Electricity, gas, and water supply	0.3262	0.3341	0.3487	0.3012	0.3271	0.3107	0.2667	0.2237
Construction	0.8739	0.8800	0.8819	0.8632	0.8478	0.8263	0.7897	0.7145
Sale, maintenance, and repair	0.6593	0.6647	0.6702	0.6597	0.6680	0.6576	0.6435	0.5929
Wholesale trade and commission trade	0.3169	0.3236	0.3279	0.3191	0.3191	0.3155	0.3116	0.2864
Retail trade	0.3676	0.3659	0.3806	0.3740	0.3783	0.3514	0.3489	0.3259
Hotels and restaurants	0.7065	0.7213	0.7404	0.7505	0.7258	0.6885	0.6679	0.6447
Inland transport	0.5167	0.5249	0.5490	0.4995	0.5279	0.5119	0.4952	0.4348
Water transport	0.8419	0.9085	0.9065	0.7820	0.7240	0.7367	0.7338	0.6576
Air transport	0.6508	0.7334	0.7672	0.6845	0.7324	0.6815	0.6475	0.5766
Other supporting and auxiliary transport activities	0.3691	0.3734	0.3737	0.3655	0.3759	0.3158	0.3036	0.2471
Post and telecommunications	0.5072	0.5255	0.5578	0.5476	0.5528	0.5225	0.4943	0.5142
Financial intermediation	0.3801	0.3841	0.3917	0.3874	0.3954	0.3766	0.3728	0.3446
Real estate activities	0.2879	0.3021	0.3036	0.3133	0.3101	0.2836	0.2541	0.2507
Renting of M&Eq and other business activities	0.4381	0.4373	0.4416	0.4242	0.4277	0.4187	0.4068	0.3985
Public administration and defense; compulsory social security	0.3176	0.3230	0.3316	0.3107	0.3517	0.3258	0.3361	0.3580
Education	0.2295	0.2180	0.2202	0.2145	0.2167	0.2020	0.1992	0.1988
Health and social work	0.4546	0.4396	0.4518	0.4407	0.4318	0.4103	0.3925	0.3698
Other community, social, and personal services	0.5707	0.5798	0.5875	0.5744	0.5779	0.7163	0.6917	0.6537
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.



**Table 6.3.4: Net Interregional Multipliers (M2), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.5717	0.6021	0.5953	0.5412	0.5707	0.5226	0.4957	0.5686
Mining and quarrying	0.5635	0.5886	0.6420	0.6664	0.6562	0.5702	0.5635	0.5086
Food, beverages, and tobacco	0.7107	0.7512	0.7225	0.6364	0.7000	0.6543	0.6389	0.6806
Textiles and textile products	0.9669	1.0587	1.0078	1.0163	1.0359	0.9521	0.9441	0.9742
Leather, leather products, and footwear	1.2809	0.9686	0.9054	0.8961	0.9328	0.8910	0.8783	0.9067
Wood and products of wood and cork	1.0213	1.0331	1.0138	1.0651	1.0963	1.0720	1.0248	1.0940
Pulp, paper, paper products, printing, and publishing	0.7347	0.7692	0.7512	0.7538	0.7642	0.7192	0.7168	0.7633
Coke, refined petroleum, and nuclear fuel	1.4420	1.5175	1.5472	1.5296	1.5748	1.5362	1.3902	1.4266
Chemicals and chemical products	1.4325	1.5739	1.6101	1.6165	1.6146	1.4743	1.4224	1.4667
Rubber and plastics	1.2082	1.2823	1.2367	1.2212	1.2409	1.1275	1.1170	1.1528
Other nonmetallic minerals	0.9192	0.9698	0.9479	0.9712	1.0045	0.9488	0.9324	0.9632
Basic metals and fabricated metal	1.2923	1.3524	1.3449	1.2966	1.3478	1.3095	1.3215	1.3726
Machinery, nec	1.1493	1.1884	1.1270	1.1447	1.1530	1.1097	1.1232	1.1607
Electrical and optical equipment	1.1639	1.2090	1.1477	1.1742	1.1236	1.0974	1.0982	1.1108
Transport equipment	1.1009	1.1461	1.1426	1.1252	1.1361	1.0689	1.0783	1.1146
Manufacturing, nec; recycling	1.0771	1.1281	1.0934	1.0936	1.0988	1.0303	1.0168	1.0577
Electricity, gas, and water supply	1.0776	1.2480	1.2470	1.1505	1.1136	1.0235	1.0003	1.0808
Construction	0.9870	1.0331	1.0227	1.0170	1.0404	0.9860	0.9964	1.0252
Sale, maintenance, and repair	0.7097	0.7467	0.7386	0.7400	0.7427	0.7069	0.7294	0.7552
Wholesale trade and commission trade	0.2648	0.2743	0.2719	0.2785	0.2778	0.2592	0.2641	0.2721
Retail trade	0.2129	0.2280	0.2296	0.2325	0.2356	0.2027	0.2022	0.2118
Hotels and restaurants	0.4350	0.4599	0.4525	0.4167	0.4366	0.3912	0.3865	0.4140
Inland transport	0.6694	0.7004	0.6920	0.7248	0.6929	0.6143	0.6058	0.5944
Water transport	1.0868	1.2156	1.1921	1.2531	1.2194	1.1766	1.2329	1.2869
Air transport	1.0927	1.2427	1.1981	1.2479	1.2113	1.0425	1.0220	1.0445
Other supporting and auxiliary transport activities	0.3741	0.3870	0.3633	0.3803	0.3838	0.3018	0.2988	0.2755
Post and telecommunications	0.3162	0.3536	0.3681	0.3823	0.3967	0.3571	0.3457	0.4001
Financial intermediation	0.1406	0.1443	0.1423	0.1434	0.1486	0.1348	0.1361	0.1389
Real estate activities	0.1082	0.1217	0.1181	0.1208	0.1201	0.1024	0.0918	0.0989
Renting of M&Eq and other business activities	0.4152	0.4331	0.4161	0.4396	0.4416	0.4129	0.4182	0.4602
Public administration and defense; compulsory social security	0.2032	0.2063	0.2067	0.1986	0.2296	0.2015	0.2083	0.2488
Education	0.1971	0.1924	0.1824	0.1852	0.1872	0.1663	0.1684	0.1884
Health and social work	0.4326	0.4346	0.4246	0.4302	0.4225	0.3826	0.3803	0.3977
Other community, social, and personal services	0.4102	0.4294	0.4157	0.4251	0.4366	0.5141	0.5103	0.5313
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 6.3.5: Net Feedback Multipliers (M<sub>3</sub>), 2010–2017**

Industry	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture, hunting, forestry, and fishing	0.0030	0.0033	0.0031	0.0028	0.0029	0.0023	0.0021	0.0024
Mining and quarrying	0.0033	0.0037	0.0038	0.0039	0.0040	0.0032	0.0031	0.0028
Food, beverages, and tobacco	0.0036	0.0038	0.0035	0.0032	0.0034	0.0028	0.0025	0.0028
Textiles and textile products	0.0071	0.0080	0.0071	0.0069	0.0071	0.0057	0.0055	0.0057
Leather, leather products, and footwear	0.0086	0.0063	0.0054	0.0052	0.0054	0.0046	0.0044	0.0046
Wood and products of wood and cork	0.0053	0.0054	0.0050	0.0050	0.0052	0.0045	0.0039	0.0044
Pulp, paper, paper products, printing, and publishing	0.0048	0.0051	0.0047	0.0047	0.0049	0.0042	0.0040	0.0043
Coke, refined petroleum, and nuclear fuel	0.0066	0.0069	0.0068	0.0066	0.0073	0.0065	0.0058	0.0060
Chemicals and chemical products	0.0100	0.0113	0.0109	0.0105	0.0109	0.0087	0.0082	0.0085
Rubber and plastics	0.0092	0.0099	0.0090	0.0085	0.0088	0.0070	0.0067	0.0070
Other nonmetallic minerals	0.0052	0.0054	0.0051	0.0050	0.0055	0.0047	0.0045	0.0046
Basic metals and fabricated metal	0.0083	0.0088	0.0082	0.0076	0.0083	0.0071	0.0071	0.0074
Machinery, nec	0.0111	0.0116	0.0103	0.0104	0.0110	0.0097	0.0099	0.0102
Electrical and optical equipment	0.0212	0.0215	0.0188	0.0203	0.0200	0.0181	0.0188	0.0186
Transport equipment	0.0094	0.0099	0.0093	0.0089	0.0094	0.0081	0.0080	0.0084
Manufacturing, nec; recycling	0.0076	0.0080	0.0072	0.0069	0.0071	0.0059	0.0057	0.0060
Electricity, gas, and water supply	0.0051	0.0058	0.0056	0.0051	0.0053	0.0045	0.0043	0.0046
Construction	0.0081	0.0086	0.0079	0.0076	0.0081	0.0070	0.0071	0.0074
Sale, maintenance, and repair	0.0063	0.0067	0.0062	0.0060	0.0063	0.0055	0.0055	0.0058
Wholesale trade and commission trade	0.0015	0.0016	0.0015	0.0015	0.0016	0.0013	0.0013	0.0013
Retail trade	0.0013	0.0014	0.0014	0.0014	0.0014	0.0011	0.0011	0.0011
Hotels and restaurants	0.0024	0.0025	0.0023	0.0022	0.0023	0.0018	0.0017	0.0018
Inland transport	0.0038	0.0041	0.0038	0.0040	0.0039	0.0032	0.0031	0.0030
Water transport	0.0051	0.0058	0.0055	0.0058	0.0058	0.0051	0.0051	0.0053
Air transport	0.0058	0.0067	0.0062	0.0064	0.0064	0.0051	0.0049	0.0050
Other supporting and auxiliary transport activities	0.0021	0.0022	0.0020	0.0021	0.0022	0.0016	0.0015	0.0014
Post and telecommunications	0.0028	0.0031	0.0031	0.0033	0.0036	0.0030	0.0029	0.0033
Financial intermediation	0.0008	0.0008	0.0008	0.0008	0.0008	0.0007	0.0006	0.0007
Real estate activities	0.0008	0.0009	0.0008	0.0008	0.0009	0.0007	0.0006	0.0006
Renting of M&Eq and other business activities	0.0052	0.0053	0.0047	0.0053	0.0055	0.0048	0.0049	0.0053
Public administration and defense; compulsory social security	0.0015	0.0015	0.0014	0.0014	0.0016	0.0013	0.0013	0.0015
Education	0.0020	0.0019	0.0016	0.0017	0.0018	0.0015	0.0015	0.0016
Health and social work	0.0038	0.0039	0.0035	0.0035	0.0035	0.0029	0.0028	0.0029
Other community, social, and personal services	0.0037	0.0040	0.0035	0.0037	0.0039	0.0042	0.0041	0.0042
Private households with employed persons	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

M&amp;Eq = machinery and equipment, nec = not elsewhere classified.

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 6.3.6: Comparison of Exports in Gross and Value-Added Terms, 2010–2017 (\$ million)**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	1,652	1,228	1,711	1,255	1,633	1,203	1,451	1,114	1,725	1,299	1,579	1,227	1,628	1,282	1,895	1,438
Low tech	22,032	12,626	24,736	13,901	24,581	14,278	24,035	14,166	24,744	14,434	23,584	14,686	22,994	14,424	25,446	15,664
High and medium tech	240,938	123,627	270,005	133,559	263,209	132,978	266,133	135,980	274,607	143,715	246,343	137,306	242,504	137,328	267,892	149,821
Utilities	9	4	11	4	11	4	12	5	24	11	22	11	20	11	22	11
Construction	3	2	1	1	2	1	1	1	22	13	20	12	19	12	21	13
Trade and repair services	26,540	23,178	30,480	26,562	32,120	28,049	34,222	29,870	36,954	32,242	37,396	33,007	37,770	33,192	43,036	37,671
Tourism	3,686	2,965	3,729	2,968	3,962	3,171	4,074	3,343	4,774	3,869	4,844	4,031	5,002	4,164	5,828	4,788
Transport services	13,920	7,849	14,100	7,315	14,377	7,685	15,490	8,194	18,062	9,684	17,601	10,389	16,683	9,922	18,105	10,610
ICT services	524	450	574	484	592	496	598	499	624	517	608	515	614	521	698	577
Finance and insurance services	1,227	1,139	1,572	1,459	1,756	1,631	1,797	1,670	1,813	1,680	1,821	1,700	1,853	1,726	2,127	1,979
Property services	3,728	3,078	4,726	3,883	4,995	4,140	5,389	4,438	5,645	4,648	5,684	4,755	5,834	4,860	6,719	5,491
Public and welfare services	1,307	1,100	1,432	1,197	1,396	1,173	1,453	1,219	1,559	1,295	1,507	1,216	1,542	1,242	1,770	1,410
Services provided by private households	7	7	12	12	12	12	12	12	12	12	12	12	12	12	14	14

\$ = United States dollar, ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

Source: Asian Development Bank Multi-Regional Input-Output Database.

**Table 6.3.7: Comparison of Revealed Comparative Advantage Measures in Gross and Value-Added Terms, 2010–2017**

Sectors	2010		2011		2012		2013		2014		2015		2016		2017	
	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G	Gross	VAX_G
Primary	0.048	0.067	0.040	0.064	0.039	0.064	0.035	0.065	0.043	0.073	0.048	0.078	0.051	0.075	0.051	0.074
Low tech	0.484	0.578	0.494	0.627	0.500	0.637	0.465	0.588	0.449	0.551	0.462	0.572	0.458	0.558	0.455	0.557
High and medium tech	1.631	2.126	1.636	2.159	1.627	2.148	1.630	2.188	1.609	2.176	1.558	2.108	1.573	2.167	1.560	2.212
Utilities	0.007	0.721	0.007	0.537	0.007	0.582	0.007	0.715	0.014	0.785	0.013	0.824	0.010	0.764	0.012	0.633
Construction	0.002	0.283	0.001	0.322	0.001	0.310	0.001	0.246	0.011	0.257	0.011	0.270	0.009	0.220	0.011	0.215
Trade and repair services	1.075	1.433	1.116	1.504	1.157	1.493	1.232	1.487	1.270	1.449	1.367	1.477	1.391	1.446	1.438	1.443
Tourism	1.107	1.060	1.000	1.128	1.098	1.158	1.084	1.144	1.188	1.202	1.317	1.292	1.208	1.238	1.450	1.359
Transport services	0.740	0.607	0.716	0.550	0.729	0.571	0.790	0.567	0.875	0.595	0.912	0.646	0.888	0.621	0.866	0.607
ICT services	0.248	0.534	0.258	0.552	0.245	0.544	0.246	0.511	0.243	0.486	0.254	0.513	0.248	0.473	0.239	0.370
Finance and insurance services	0.126	0.561	0.153	0.620	0.174	0.615	0.169	0.571	0.160	0.559	0.171	0.591	0.169	0.565	0.182	0.517
Property services	0.181	0.340	0.209	0.346	0.224	0.357	0.224	0.340	0.216	0.324	0.226	0.338	0.229	0.328	0.236	0.302
Public and welfare services	0.222	0.583	0.232	0.629	0.222	0.630	0.213	0.564	0.221	0.526	0.222	0.486	0.216	0.450	0.250	0.479
Services provided by private households	0.050	0.061	0.072	0.087	0.058	0.070	0.084	0.098	0.099	0.113	0.119	0.126	0.134	0.138	0.145	0.147

ICT = information and communication technology.

Note: "VAX\_G" refers to domestic value added ultimately absorbed abroad as defined in Wang, Wei, and Zhu (2013).

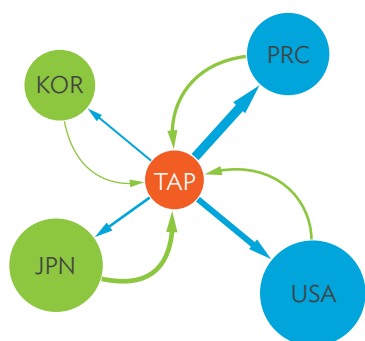
Source: Asian Development Bank Multi-Regional Input-Output Database.

# GLOBAL VALUE CHAIN INDICATORS

# 6.4

## Taipei,China

**Figure 6.4.1a: Trade in Value-Added Flow with Top Trading Partners, 2010**



● Economy in focus ● Import partner ● Export partner

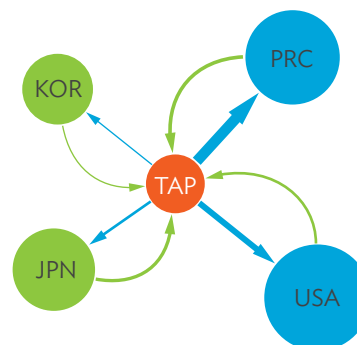
JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; TAP = Taipei,China; USA = United States.

Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

**Figure 6.4.1b: Trade in Value-Added Flow with Top Trading Partners, 2017**



● Economy in focus ● Import partner ● Export partner

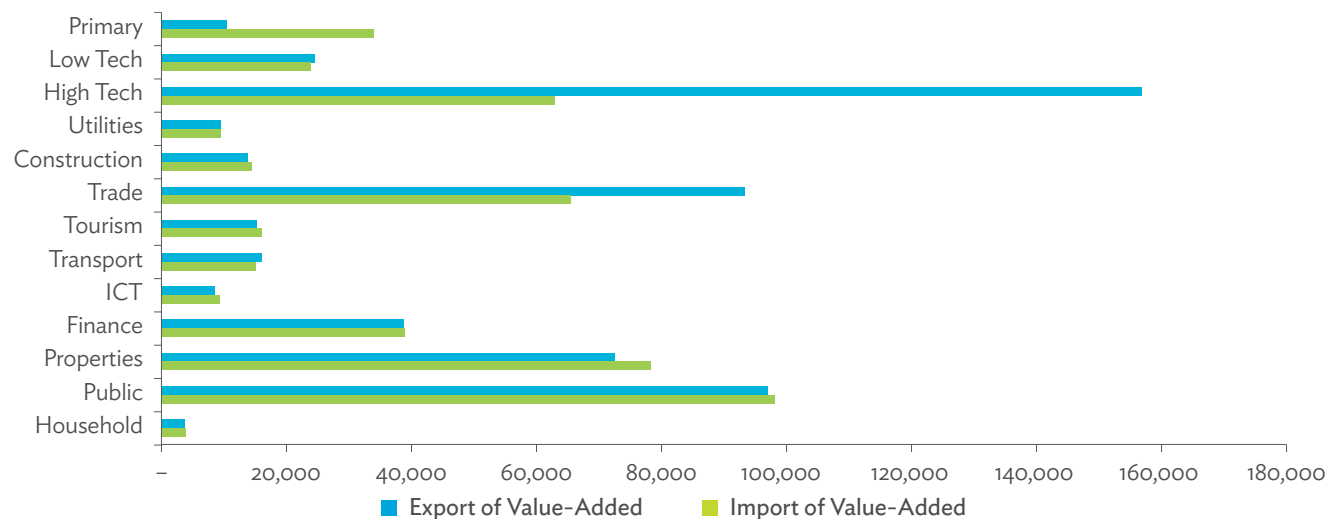
JPN = Japan; KOR = Republic of Korea; PRC = People's Republic of China; TAP = Taipei,China; USA = United States.

Note: The circle size is scaled in terms of gross domestic product; the arrow width is scaled according to the volume of trade in value-added.

Source: Asian Development Bank Multi-Regional Input-Output Database.

[Click here for figure data](#)

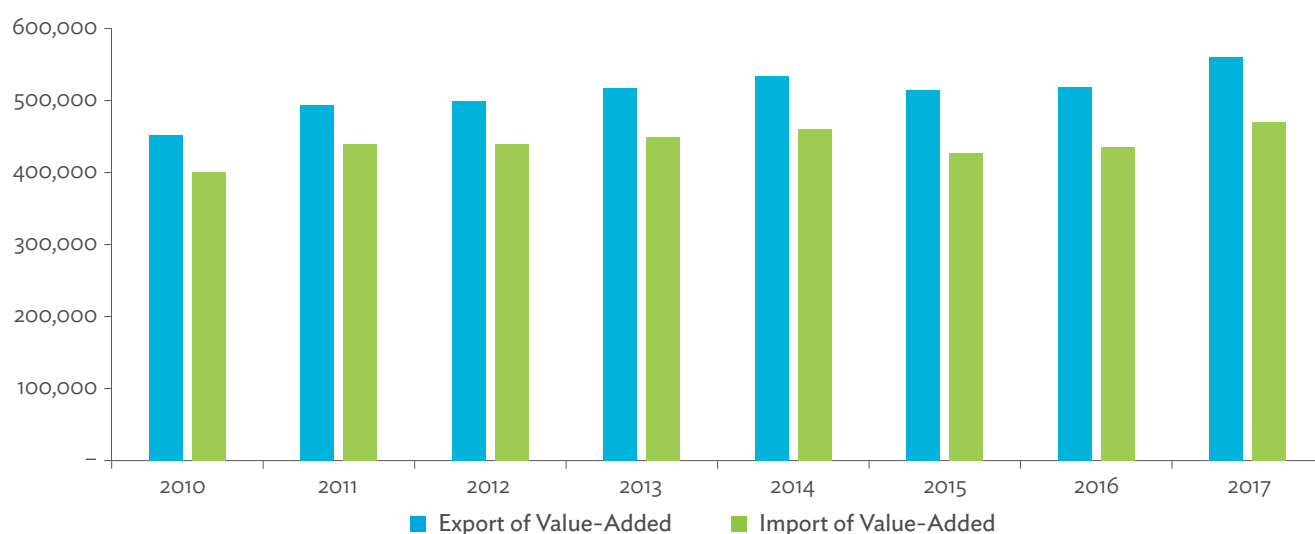
**Figure 6.4.2: Trade in Value-Added by Industry, 2017 (\$ million)**



\$ = United States dollar, ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input-Output Database.

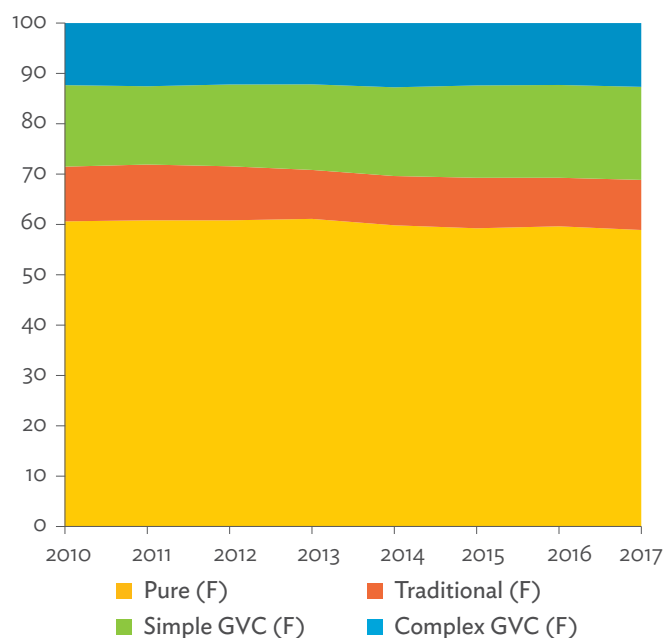
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**Figure 6.4.3: Trade in Value-Added, 2010–2017 (\$ million)**

\$ = United States dollar.

Source: Asian Development Bank Multi-Regional Input–Output Database.

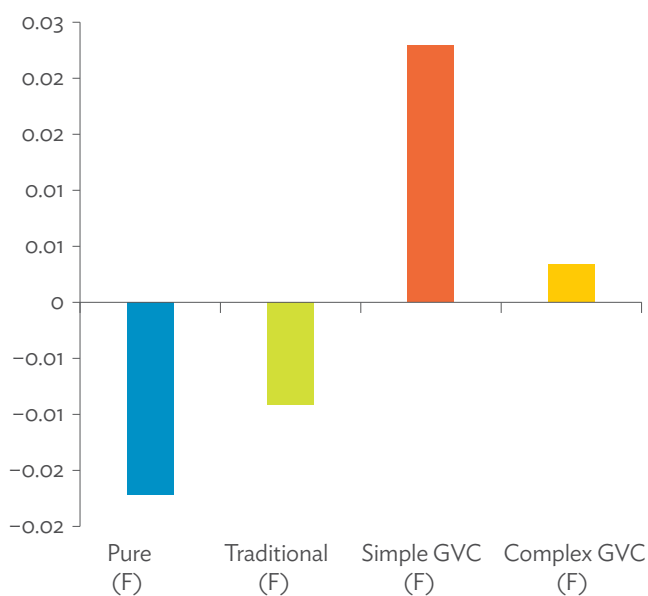
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**Figure 6.4.4: Trends in Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Forward Linkages, 2010–2017 (%)**

GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.5: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Forward Linkages (%)**

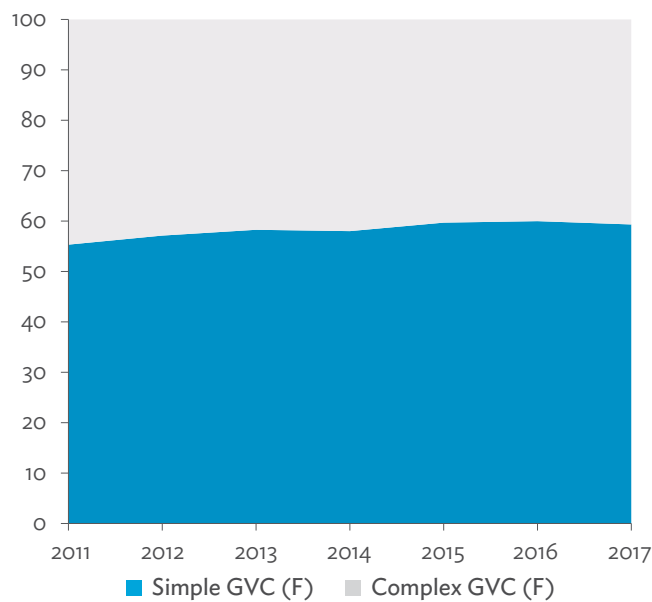
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.6: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Forward Linkages, 2010–2017 (%)**

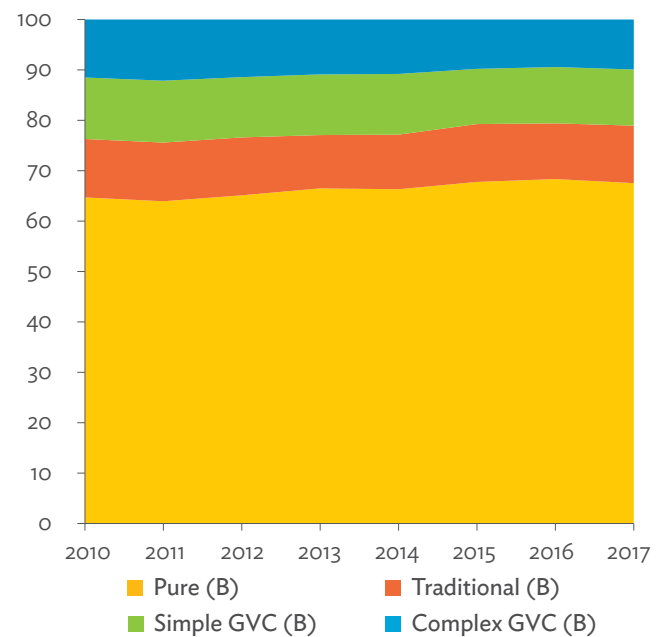


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.7: Production Activities as a Share of Gross Domestic Product, by Type of Value-Added Creation Activities Based on Backward Linkages, 2010–2017 (%)**

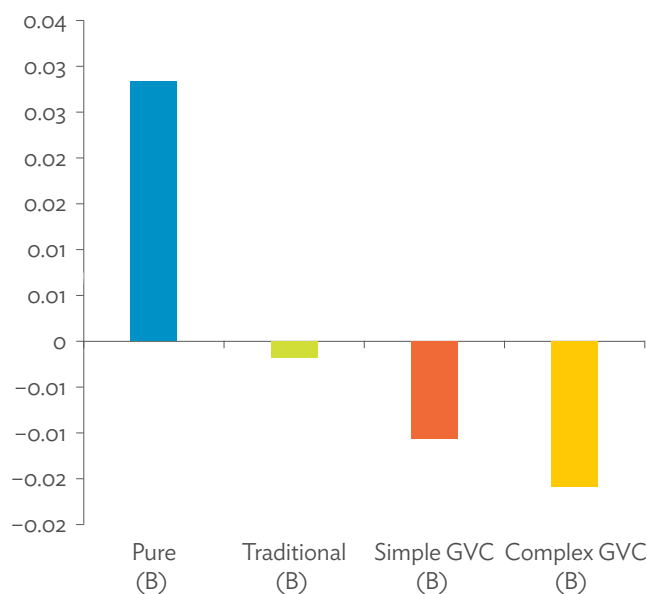


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.8: Structural Changes from 2010 to 2017 in Different Types of Value-Added Creation Activities Based on Backward Linkages (%)**



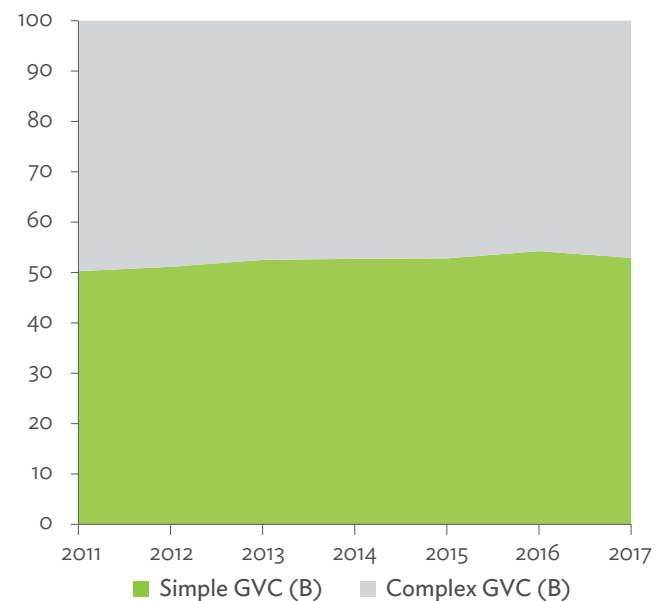
GVC = global value chain.

Note: Share in 2017 minus share in 2010, in percentage points.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.9: Simple Global Value Chain Production Activities as a Share of Total Global Value Chain Production Activities Based on Backward Linkages (%)**

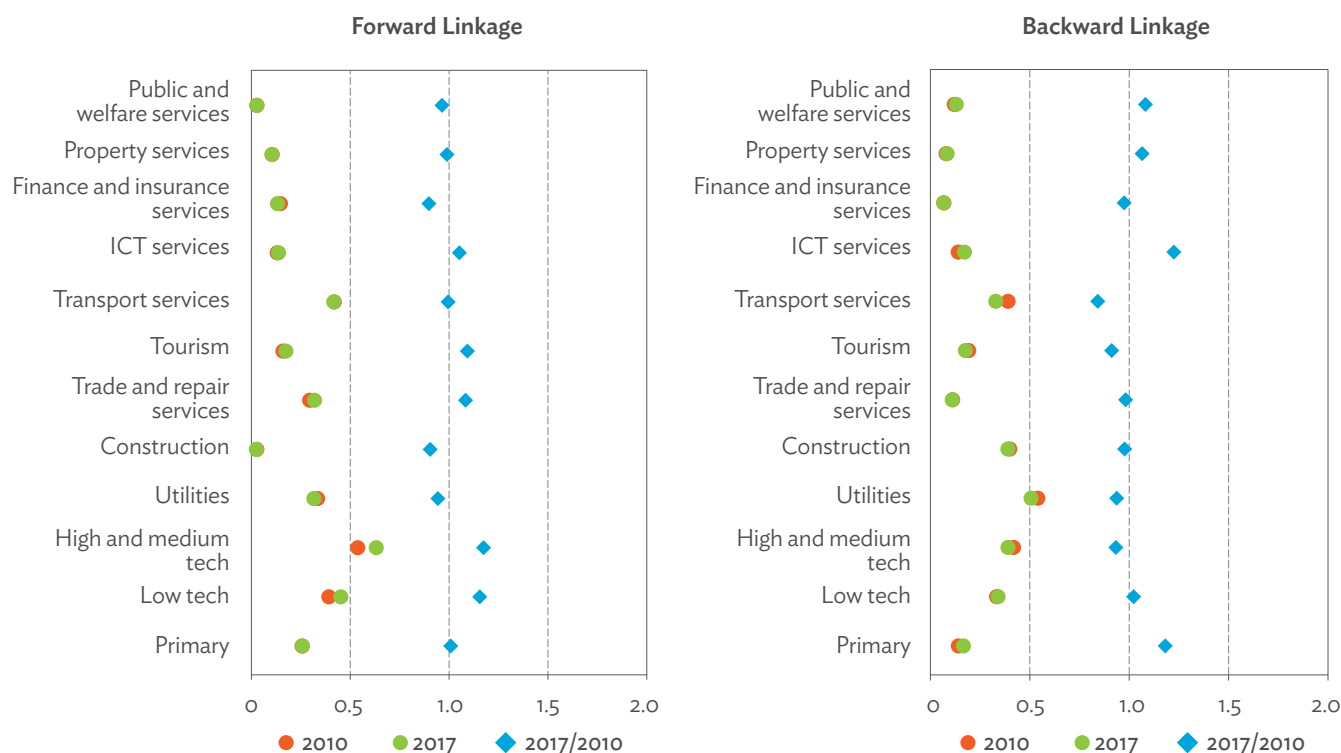


GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.10: Global Value Chain Participation Based on Forward and Backward Linkages at the Sectoral Level, 2010 and 2017**

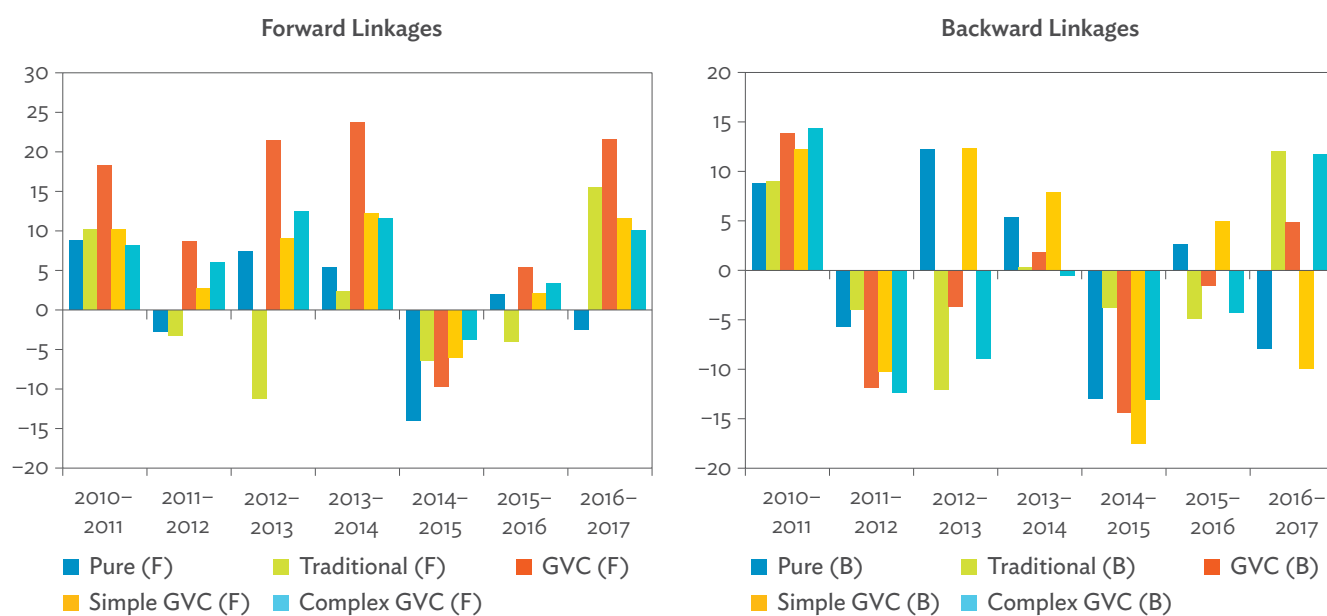


ICT = information and communication technology.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)

**Figure 6.4.11: Nominal Growth Rates of Different Value-Added Activities in the Manufacturing Sector, 2010–2017 (%)**



GVC = global value chain.

Source: Asian Development Bank Multi-Regional Input–Output Database.

[Click here for figure data](#)





# APPENDIXES

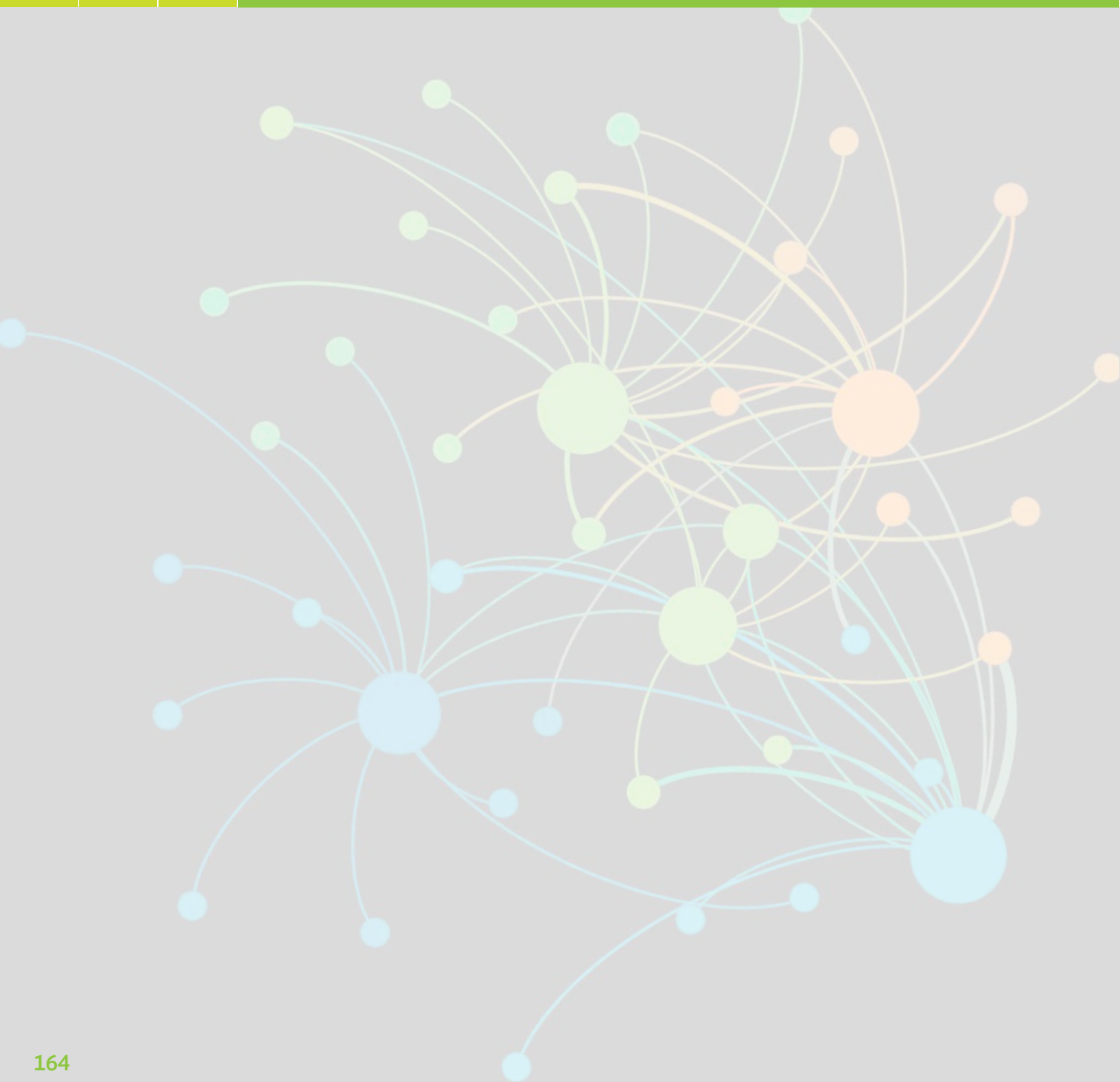
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## Eastern Asia



# A1

## APPENDIX 1: INPUT-OUTPUT TABLES FOR 2010 AND 2017— HONG KONG, CHINA



**Table A1.1: Hong Kong, China Input–Output Table, 2010** (current prices, \$ million)

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
		Domestic						
Agriculture, hunting, forestry, and fishing	c1	0	-	8	0	0	0	0
Mining and quarrying	c2	-	-	-	-	-	-	-
Food, beverages, and tobacco	c3	6	-	254	1	18	16	30
Textiles and textile products	c4	0	-	2	5	0	0	1
Leather, leather products, and footwear	c5	0	-	0	0	1	0	0
Wood and products of wood and cork	c6	1	-	9	-	-	-	-
Pulp, paper, paper products, printing, and publishing	c7	2	-	133	9	3	1	29
Coke, refined petroleum, and nuclear fuel	c8	0	-	0	0	0	0	0
Chemicals and chemical products	c9	0	-	1	1	0	0	1
Rubber and plastics	c10	0	-	2	0	0	0	0
Other nonmetallic minerals	c11	0	-	1	0	0	0	0
Basic metals and fabricated metal	c12	0	-	0	0	0	0	0
Machinery, nec	c13	0	-	0	0	0	0	0
Electrical and optical equipment	c14	0	-	0	0	0	0	0
Transport equipment	c15	0	-	0	0	0	0	0
Manufacturing, nec; recycling	c16	0	-	0	0	0	0	0
Electricity, gas, and water supply	c17	3	-	110	18	1	14	20
Construction	c18	3	-	7	0	0	1	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	47	-	944	110	42	72	99
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	8	-	191	24	9	15	21
Hotels and restaurants	c22	1	-	18	5	1	2	4
Inland transport	c23	1	-	44	12	3	7	8
Water transport	c24	0	-	22	5	1	4	5
Air transport	c25	0	-	26	6	2	4	7
Other supporting and auxiliary transport activities; activities of travel agencies	c26	0	-	1	0	0	0	0
Post and telecommunications	c27	3	-	101	14	7	16	24
Financial intermediation	c28	2	-	404	72	9	43	72
Real estate activities	c29	3	-	140	31	6	14	31
Renting of M&Eq and other business activities	c30	8	-	221	43	7	43	69
Public administration and defense; compulsory social security	c31	0	-	5	1	-	1	1
Education	c32	0	-	13	2	0	2	3
Health and social work	c33	0	-	4	0	1	1	1
Other community, social, and personal services	c34	4	-	68	13	3	8	23
Private households with employed persons	c35	-	-	-	-	-	-	-

continued on next page

Table A1.1 Domestic Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Domestic								
Agriculture, hunting, forestry, and fishing	c1	0	0	0	0	0	0	0
Mining and quarrying	c2	-	-	-	-	-	-	-
Food, beverages, and tobacco	c3	6	43	3	4	11	6	11
Textiles and textile products	c4	0	0	0	0	0	0	0
Leather, leather products, and footwear	c5	0	0	0	0	0	0	0
Wood and products of wood and cork	c6	-	-	-	-	-	-	-
Pulp, paper, paper products, printing, and publishing	c7	0	7	2	8	3	4	12
Coke, refined petroleum, and nuclear fuel	c8	5	10	1	2	7	1	1
Chemicals and chemical products	c9	1	27	9	3	3	1	5
Rubber and plastics	c10	0	2	6	1	1	2	5
Other nonmetallic minerals	c11	0	1	0	8	2	1	3
Basic metals and fabricated metal	c12	1	1	1	2	47	14	20
Machinery, nec	c13	1	1	0	1	4	15	4
Electrical and optical equipment	c14	0	1	0	0	1	8	56
Transport equipment	c15	0	0	0	0	1	2	1
Manufacturing, nec; recycling	c16	0	0	0	0	1	0	0
Electricity, gas, and water supply	c17	2	9	1	6	14	3	3
Construction	c18	0	0	0	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	65	221	100	102	179	209	520
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	12	41	19	19	33	39	96
Hotels and restaurants	c22	0	0	0	0	0	0	1
Inland transport	c23	1	1	0	1	2	1	1
Water transport	c24	0	1	0	0	1	0	1
Air transport	c25	0	1	0	0	0	1	2
Other supporting and auxiliary transport activities; activities of travel agencies	c26	0	0	0	0	0	0	0
Post and telecommunications	c27	1	3	1	1	4	3	5
Financial intermediation	c28	3	10	2	6	20	7	17
Real estate activities	c29	1	3	4	3	5	6	13
Renting of M&Eq and other business activities	c30	1	9	2	3	6	7	16
Public administration and defense; compulsory social security	c31	0	0	0	0	0	0	0
Education	c32	0	0	0	0	0	1	1
Health and social work	c33	0	0	0	0	0	0	0
Other community, social, and personal services	c34	1	3	1	1	3	2	3
Private households with employed persons	c35	-	-	-	-	-	-	-

*continued on next page*

Table A1.1 Domestic Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Domestic</b>											
0	0	1	0	-	2	0	55	1	2	9	0
-	-	-	-	-	-	-	-	-	-	-	-
4	1	27	198	-	907	52	452	46	60	159	3
0	0	1	2	-	59	4	3	2	2	5	0
0	0	0	1	-	4	0	0	0	0	1	0
-	-	0	65	-	3	0	2	3	5	2	0
2	2	2	3	-	217	12	6	8	5	17	1
0	0	0	0	-	56	1	1	3	3	8	0
1	0	0	0	-	16	0	2	0	0	0	0
3	0	0	0	-	30	1	1	0	0	0	0
1	0	0	2	-	2	0	0	0	0	0	0
10	1	0	2	-	9	0	0	0	0	0	0
5	0	0	0	-	11	0	0	0	0	1	0
5	0	1	0	-	211	4	1	0	0	0	0
36	0	0	0	-	73	1	1	2	1	3	0
0	0	0	0	-	5	0	0	0	0	0	0
2	0	423	67	-	319	283	655	145	71	114	17
0	0	7	10,740	-	30	12	16	26	19	101	1
-	-	-	-	-	-	-	-	-	-	-	-
362	24	378	719	-	5,066	497	809	258	452	886	7
67	4	66	145	-	1,383	152	214	54	85	174	2
0	0	12	35	-	514	42	208	33	111	28	6
1	0	7	79	-	653	265	67	1,058	439	24	15
1	0	2	38	-	1,153	92	14	26	1,382	1,190	25
1	0	3	45	-	1,365	104	16	30	1,629	1,403	30
0	0	0	2	-	61	5	1	1	73	63	1
2	0	26	120	-	3,357	390	171	105	2,406	367	11
6	1	228	240	-	7,223	1,674	400	434	794	273	37
3	1	102	240	-	2,529	5,222	1,800	257	205	271	110
9	1	41	274	-	7,337	434	332	277	292	640	23
0	0	3	43	-	122	63	23	10	19	119	2
0	0	5	23	-	369	37	23	16	23	31	2
0	0	3	9	-	115	12	11	9	31	7	1
3	0	56	132	-	2,270	256	172	92	143	188	12
-	-	-	-	-	-	-	-	-	-	-	-

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Table A1.1 Domestic Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Domestic						
Agriculture, hunting, forestry, and fishing	c1	0	0	0	0	0
Mining and quarrying	c2	-	-	-	-	-
Food, beverages, and tobacco	c3	121	174	68	131	40
Textiles and textile products	c4	8	11	4	8	2
Leather, leather products, and footwear	c5	1	1	1	1	0
Wood and products of wood and cork	c6	2	0	0	0	1
Pulp, paper, paper products, printing, and publishing	c7	26	45	16	29	8
Coke, refined petroleum, and nuclear fuel	c8	1	7	2	4	3
Chemicals and chemical products	c9	0	2	1	2	1
Rubber and plastics	c10	0	0	1	0	0
Other nonmetallic minerals	c11	0	0	0	0	0
Basic metals and fabricated metal	c12	0	1	2	2	0
Machinery, nec	c13	1	3	1	0	0
Electrical and optical equipment	c14	17	3	2	8	1
Transport equipment	c15	2	3	1	3	3
Manufacturing, nec; recycling	c16	0	4	1	0	0
Electricity, gas, and water supply	c17	170	291	693	103	223
Construction	c18	19	16	166	8	423
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	259	340	155	240	115
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	84	118	57	85	34
Hotels and restaurants	c22	100	198	86	85	29
Inland transport	c23	94	331	55	182	22
Water transport	c24	488	145	9	83	10
Air transport	c25	576	172	10	99	12
Other supporting and auxiliary transport activities; activities of travel agencies	c26	26	8	1	5	1
Post and telecommunications	c27	3,119	1,364	271	552	154
Financial intermediation	c28	665	11,306	3,850	1,123	108
Real estate activities	c29	554	1,919	1,730	1,139	75
Renting of M&Eq and other business activities	c30	1,050	1,478	610	1,165	347
Public administration and defense; compulsory social security	c31	23	60	15	29	151
Education	c32	56	102	39	73	59
Health and social work	c33	19	50	23	21	4
Other community, social, and personal services	c34	437	568	788	384	125
Private households with employed persons	c35	-	-	-	-	-

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Table A1.1 Domestic Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Domestic</b>										
0	1	1	-	215	-	-	0	7	88	<b>392</b>
-	-	-	-	-	-	-	-	-	-	-
31	76	68	-	2,250	-	-	216	44	3,480	<b>9,017</b>
1	2	4	-	132	-	-	10	(5)	741	<b>1,006</b>
0	0	0	-	54	-	-	8	(2)	291	<b>366</b>
1	13	2	-	147	-	-	30	(5)	540	<b>821</b>
8	29	15	-	87	-	-	13	(6)	503	<b>1,258</b>
1	0	1	-	51	-	-	0	12	268	<b>451</b>
2	5	3	-	80	-	-	3	19	1,620	<b>1,811</b>
0	0	1	-	7	-	-	1	7	581	<b>652</b>
0	0	0	-	10	-	-	1	0	698	<b>731</b>
0	0	1	-	17	-	-	35	31	1,440	<b>1,638</b>
0	1	0	-	12	-	-	277	10	1,071	<b>1,423</b>
1	0	4	-	162	-	-	103	19	2,748	<b>3,357</b>
0	0	4	-	178	-	-	410	33	1,464	<b>2,222</b>
0	0	0	-	15	-	-	6	9	102	<b>146</b>
161	209	391	-	1,963	12	-	28	(0)	621	<b>7,165</b>
27	25	19	-	0	-	-	12,788	(0)	146	<b>24,602</b>
-	-	-	-	-	-	-	-	-	-	-
120	317	320	-	11,461	-	-	3,561	398	71,290	<b>100,748</b>
30	70	75	-	2,491	-	-	727	-	14,206	<b>20,848</b>
74	37	83	-	14,671	-	-	51	-	52	<b>16,489</b>
24	34	82	-	5,872	-	-	200	-	729	<b>10,315</b>
9	12	23	-	453	-	-	18	-	9,960	<b>15,175</b>
10	14	26	-	520	-	-	17	-	11,740	<b>17,869</b>
0	1	1	-	25	-	-	1	-	527	<b>805</b>
94	132	358	-	2,571	28	-	577	-	2,404	<b>18,764</b>
332	204	715	-	15,654	-	297	409	-	12,960	<b>59,599</b>
283	427	1,597	-	18,581	-	-	8,160	-	20	<b>45,486</b>
200	302	412	-	573	-	-	1,888	-	2,050	<b>20,171</b>
14	10	26	-	1,466	-	12,175	18	-	89	<b>14,489</b>
175	29	31	-	1,848	6,840	1,302	106	-	93	<b>11,308</b>
19	118	23	-	4,600	1,548	6,314	13	-	11	<b>12,969</b>
116	122	2,000	-	6,807	459	-	574	-	901	<b>16,740</b>
-	-	-	-	-	-	-	-	-	-	-

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Table A1.1 Import Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	1	-	43	0	0	0	0
Mining and quarrying	m2	0	-	0	0	0	0	0
Food, beverages, and tobacco	m3	32	-	1,197	3	63	59	113
Textiles and textile products	m4	0	-	1	44	3	0	0
Leather, leather products, and footwear	m5	0	-	0	2	8	0	0
Wood and products of wood and cork	m6	0	-	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	m7	12	-	724	38	12	3	137
Coke, refined petroleum, and nuclear fuel	m8	0	-	0	0	0	0	0
Chemicals and chemical products	m9	0	-	1	0	0	0	3
Rubber and plastics	m10	0	-	3	0	0	0	0
Other nonmetallic minerals	m11	0	-	1	0	0	0	0
Basic metals and fabricated metal	m12	0	-	1	0	0	0	0
Machinery, nec	m13	0	-	1	0	0	0	0
Electrical and optical equipment	m14	0	-	1	0	0	0	2
Transport equipment	m15	0	-	0	0	0	0	0
Manufacturing, nec; recycling	m16	0	-	0	0	0	0	0
Electricity, gas, and water supply	m17	0	-	13	2	0	1	2
Construction	m18	0	-	0	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	-	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	119	-	1,576	196	75	128	167
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	1	-	15	2	1	2	3
Hotels and restaurants	m22	0	-	3	0	0	0	1
Inland transport	m23	0	-	1	0	0	0	0
Water transport	m24	0	-	7	4	0	3	2
Air transport	m25	0	-	7	2	0	1	2
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	-	0	0	0	0	0
Post and telecommunications	m27	1	-	38	6	3	5	9
Financial intermediation	m28	2	-	73	16	2	16	18
Real estate activities	m29	0	-	1	0	0	0	0
Renting of M&Eq and other business activities	m30	5	-	149	27	5	29	48
Public administration and defense; compulsory social security	m31	0	-	3	0	0	0	0
Education	m32	0	-	6	1	0	1	2
Health and social work	m33	0	-	1	0	0	0	0
Other community, social, and personal services	m34	1	-	28	6	1	3	9
Private households with employed persons	m35	-	-	-	-	-	-	-
Total intermediate consumption	r60	268	-	6,625	726	290	518	971
Taxes less subsidies on products	r99	4	-	39	6	2	4	4
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-	-
Direct purchases abroad by residents	r62	0	-	45	13	3	5	5
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-	-
Value added at basic prices	r64	120	-	2,308	262	71	294	278
International transport margins		-	-	-	-	-	-	-
Output at basic prices	r69	392	-	9,017	1,006	366	821	1,258

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Table A1.1 Import Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Imports</b>												
0	1	0	0	0	0	0	0	0	9	2	-	16
0	0	0	0	0	0	0	0	0	0	0	-	0
32	300	20	28	75	41	74	27	6	156	1,329	-	1,274
0	0	0	0	0	0	0	0	0	0	1	-	37
0	0	0	0	0	0	0	0	0	0	0	-	2
0	0	0	0	0	0	0	0	0	0	0	-	0
2	31	11	35	10	15	54	8	10	5	254	-	338
38	80	6	18	58	3	5	3	0	1	0	-	271
11	217	74	21	22	10	39	9	3	0	0	-	60
1	19	51	6	6	15	44	26	3	0	0	-	169
4	6	2	75	11	5	25	7	1	0	1	-	14
4	10	5	18	447	115	176	85	7	0	1	-	50
4	8	2	11	39	118	35	41	1	0	0	-	61
2	5	1	2	13	63	438	42	1	2	1	-	1,282
1	2	1	3	7	24	5	319	0	0	0	-	392
0	1	0	1	11	1	2	2	1	0	0	-	31
0	1	0	0	1	0	0	0	0	58	6	-	36
0	0	0	0	0	0	0	0	0	0	87	-	3
0	0	0	0	0	0	0	0	0	0	0	-	0
197	634	289	288	444	597	1,488	1,017	68	1,022	2,157	-	9,650
1	2	1	1	1	2	4	3	0	4	13	-	132
0	0	0	0	0	0	0	0	0	0	2	-	67
0	0	0	0	0	0	0	0	0	0	1	-	12
0	0	0	0	0	0	0	0	0	1	12	-	378
0	0	0	0	0	0	1	0	0	1	13	-	408
0	0	0	0	0	0	0	0	0	0	1	-	21
0	1	0	1	1	1	2	1	0	6	26	-	797
1	2	1	1	4	2	4	2	0	25	37	-	1,201
0	0	0	0	0	0	0	0	0	0	1	-	23
1	6	1	2	5	5	11	6	1	28	117	-	3,591
0	0	0	0	0	0	0	0	0	0	2	-	43
0	0	0	0	0	0	0	0	0	1	6	-	130
0	0	0	0	0	0	0	0	0	0	1	-	18
0	1	0	1	1	1	1	1	0	5	27	-	763
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>402</b>	<b>1,723</b>	<b>621</b>	<b>688</b>	<b>1,507</b>	<b>1,354</b>	<b>3,211</b>	<b>2,127</b>	<b>139</b>	<b>2,722</b>	<b>17,320</b>	-	<b>56,746</b>
2	3	1	1	4	2	5	3	0	38	45	-	616
-	-	-	-	-	-	-	-	-	-	-	-	-
0	1	0	0	1	0	1	1	0	42	85	-	787
-	-	-	-	-	-	-	-	-	-	-	-	-
48	85	29	41	126	67	140	92	6	4,363	7,152	-	42,600
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>451</b>	<b>1,811</b>	<b>652</b>	<b>731</b>	<b>1,638</b>	<b>1,423</b>	<b>3,357</b>	<b>2,222</b>	<b>146</b>	<b>7,165</b>	<b>24,602</b>	-	<b>100,748</b>

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Table A1.1 Import Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Imports							
Agriculture, hunting, forestry, and fishing	m1	1	308	6	12	56	0
Mining and quarrying	m2	0	0	0	0	0	0
Food, beverages, and tobacco	m3	56	2,130	117	210	556	3
Textiles and textile products	m4	2	2	4	2	4	0
Leather, leather products, and footwear	m5	0	0	1	0	1	0
Wood and products of wood and cork	m6	0	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	m7	12	3	20	19	25	1
Coke, refined petroleum, and nuclear fuel	m8	1	1	2	3	8	0
Chemicals and chemical products	m9	0	1	0	0	0	0
Rubber and plastics	m10	1	1	0	0	0	0
Other nonmetallic minerals	m11	0	0	0	0	0	0
Basic metals and fabricated metal	m12	0	0	0	0	0	0
Machinery, nec	m13	0	0	0	1	2	0
Electrical and optical equipment	m14	3	0	0	0	1	0
Transport equipment	m15	1	0	2	2	5	0
Manufacturing, nec; recycling	m16	0	0	0	0	0	0
Electricity, gas, and water supply	m17	39	80	18	8	13	2
Construction	m18	0	0	0	0	1	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	228	842	675	1,381	2,665	9
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	13	19	12	14	30	1
Hotels and restaurants	m22	5	5	3	3	7	0
Inland transport	m23	2	1	1	4	3	0
Water transport	m24	30	4	9	457	319	8
Air transport	m25	33	4	9	519	313	9
Other supporting and auxiliary transport activities; activities of travel agencies	m26	1	0	0	24	21	0
Post and telecommunications	m27	88	35	32	339	92	4
Financial intermediation	m28	186	61	57	91	75	7
Real estate activities	m29	2	2	1	2	3	0
Renting of M&Eq and other business activities	m30	257	129	170	144	285	16
Public administration and defense; compulsory social security	m31	3	4	2	2	6	0
Education	m32	10	6	8	8	12	1
Health and social work	m33	1	1	1	1	2	0
Other community, social, and personal services	m34	57	34	32	30	65	3
Private households with employed persons	m35	-	-	-	-	-	-
Total intermediate consumption	r60	10,654	9,129	4,082	11,529	10,655	371
Taxes less subsidies on products	r99	446	136	53	105	108	9
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-
Direct purchases abroad by residents	r62	58	86	104	430	21	20
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-
Value added at basic prices	r64	9,690	7,138	6,076	3,111	7,085	404
International transport margins		-	-	-	-	-	-
Output at basic prices	r69	20,848	16,489	10,315	15,175	17,869	805

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Table A1.1 Import Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Imports</b>										
1	308	6	12	56	0	7	0	–	110	–
0	0	0	0	0	0	0	0	–	16	–
56	2,130	117	210	556	3	0	0	–	207	–
2	2	4	2	4	0	0	0	–	164	0
0	0	1	0	1	0	0	0	–	0	–
0	0	0	0	0	0	0	0	–	4	–
12	3	20	19	25	1	0	1	–	42	–
1	1	2	3	8	0	2	3	–	135	–
0	1	0	0	0	0	35	0	–	93	–
1	1	0	0	0	0	0	1	–	83	–
0	0	0	0	0	0	0	0	–	52	–
0	0	0	0	0	0	1	1	–	107	–
0	0	0	1	2	0	0	7	–	18	–
3	0	0	0	1	0	1	0	–	5	0
1	0	2	2	5	0	0	0	–	91	–
0	0	0	0	0	0	1	9	–	143	0
39	80	18	8	13	2	0	0	–	0	0
0	0	0	0	1	0	0	0	–	6	0
0	0	0	0	0	0	0	0	–	0	0
228	842	675	1,381	2,665	9	0	0	–	4	0
13	19	12	14	30	1	0	0	–	0	0
5	5	3	3	7	0	3	1	–	38	0
2	1	1	4	3	0	1	3	–	80	0
30	4	9	457	319	8	0	0	–	1	–
33	4	9	519	313	9	0	0	–	2	–
1	0	0	24	21	0	0	0	–	0	0
88	35	32	339	92	4	0	0	–	2	0
186	61	57	91	75	7	0	0	–	17	–
2	2	1	2	3	0	0	0	–	0	0
257	129	170	144	285	16	2	1	–	3	1
3	4	2	2	6	0	0	0	–	0	2
10	6	8	8	12	1	0	0	–	0	0
1	1	1	1	2	0	0	0	–	0	0
57	34	32	30	65	3	0	0	–	0	0
–	–	–	–	–	–	–	–	–	–	–
<b>10,654</b>	<b>9,129</b>	<b>4,082</b>	<b>11,529</b>	<b>10,655</b>	<b>371</b>	<b>176</b>	<b>152</b>	<b>–</b>	<b>8,693</b>	<b>224</b>
446	136	53	105	108	9	5	4	–	213	8
–	–	–	–	–	–	–	–	–	–	–
58	86	104	430	21	20	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
9,690	7,138	6,076	3,111	7,085	404	381	368	–	–	–
–	–	–	–	–	–	–	–	–	–	–
<b>20,848</b>	<b>16,489</b>	<b>10,315</b>	<b>15,175</b>	<b>17,869</b>	<b>805</b>	<b>562</b>	<b>524</b>	<b>–</b>	<b>8,907</b>	<b>232</b>

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Table A1.1 Import Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	0	40	-	1,619
Mining and quarrying	m2	0	0	0	-	2
Food, beverages, and tobacco	m3	0	204	270	-	21,103
Textiles and textile products	m4	0	5	(41)	-	1,144
Leather, leather products, and footwear	m5	0	4	(14)	-	425
Wood and products of wood and cork	m6	0	0	(0)	-	(0)
Pulp, paper, paper products, printing, and publishing	m7	0	24	(40)	-	3,489
Coke, refined petroleum, and nuclear fuel	m8	-	1	61	-	948
Chemicals and chemical products	m9	0	25	156	-	1,303
Rubber and plastics	m10	0	4	54	-	459
Other nonmetallic minerals	m11	0	6	5	-	249
Basic metals and fabricated metal	m12	0	262	246	-	1,575
Machinery, nec	m13	0	2,150	81	-	2,662
Electrical and optical equipment	m14	0	769	148	-	4,078
Transport equipment	m15	-	3,347	312	-	5,880
Manufacturing, nec; recycling	m16	0	44	71	-	291
Electricity, gas, and water supply	m17	0	6	(0)	-	742
Construction	m18	0	32	0	-	129
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	-	1
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	9,879	2,894	-	63,180
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	89	0	-	707
Hotels and restaurants	m22	0	18	0	-	184
Inland transport	m23	0	9	0	-	56
Water transport	m24	-	3	(12)	-	1,698
Air transport	m25	-	4	(12)	-	1,823
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	0	(2)	-	91
Post and telecommunications	m27	0	386	(21)	-	3,588
Financial intermediation	m28	24	365	0	-	5,796
Real estate activities	m29	0	8	(0)	-	75
Renting of M&Eq and other business activities	m30	0	962	0	-	9,965
Public administration and defense; compulsory social security	m31	128	14	0	-	267
Education	m32	0	54	(1)	-	398
Health and social work	m33	0	7	0	-	55
Other community, social, and personal services	m34	0	269	0	-	2,167
Private households with employed persons	m35	-	-	-	-	-
Total intermediate consumption	r60	20,240	49,197	4,765	143,434	574,984
Taxes less subsidies on products	r99	15	597	63	-	7,538
Cif/ fob adjustments on exports	r61	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	17,357
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	(22,200)
Value added at basic prices	r64	-	-	-	-	219,795
International transport margins		-	-	-	-	-
Output at basic prices	r69	20,256	49,793	4,828	143,434	797,475

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table A1.2: Hong Kong, China Input–Output Table, 2017** (current prices, \$ million)

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
		Domestic						
Agriculture, hunting, forestry, and fishing	c1	0	–	9	0	0	0	0
Mining and quarrying	c2	–	–	–	–	–	–	–
Food, beverages, and tobacco	c3	5	–	245	1	19	15	29
Textiles and textile products	c4	0	–	2	6	0	0	1
Leather, leather products, and footwear	c5	0	–	0	0	1	0	0
Wood and products of wood and cork	c6	1	–	11	–	–	–	–
Pulp, paper, paper products, printing, and publishing	c7	2	–	150	10	3	1	30
Coke, refined petroleum, and nuclear fuel	c8	0	–	0	0	0	0	0
Chemicals and chemical products	c9	0	–	0	0	0	0	0
Rubber and plastics	c10	0	–	1	0	0	0	0
Other nonmetallic minerals	c11	0	–	0	0	0	0	0
Basic metals and fabricated metal	c12	0	–	0	0	0	0	0
Machinery, nec	c13	0	–	0	0	0	0	0
Electrical and optical equipment	c14	0	–	0	0	0	0	0
Transport equipment	c15	0	–	0	0	0	0	0
Manufacturing, nec; recycling	c16	0	–	0	0	0	0	0
Electricity, gas, and water supply	c17	3	–	111	17	1	15	18
Construction	c18	4	–	13	1	0	1	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	–	–	–	–	–	–	–
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	46	–	1,186	137	54	86	115
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	8	–	236	30	12	18	24
Hotels and restaurants	c22	1	–	20	6	1	3	4
Inland transport	c23	1	–	52	14	3	9	9
Water transport	c24	0	–	24	5	1	4	6
Air transport	c25	0	–	28	6	2	4	7
Other supporting and auxiliary transport activities; activities of travel agencies	c26	0	–	1	0	0	0	0
Post and telecommunications	c27	4	–	118	21	10	24	36
Financial intermediation	c28	2	–	546	97	12	59	96
Real estate activities	c29	4	–	192	40	8	22	37
Renting of M&Eq and other business activities	c30	11	–	239	66	11	68	102
Public administration and defense; compulsory social security	c31	0	–	7	2	–	1	1
Education	c32	0	–	14	3	0	3	5
Health and social work	c33	0	–	6	0	2	1	1
Other community, social, and personal services	c34	6	–	80	20	5	13	35
Private households with employed persons	c35	–	–	–	–	–	–	–

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Table A1.2 Domestic Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Domestic								
Agriculture, hunting, forestry, and fishing	c1	0	0	0	0	0	0	0
Mining and quarrying	c2	–	–	–	–	–	–	–
Food, beverages, and tobacco	c3	5	42	3	4	11	5	9
Textiles and textile products	c4	0	0	0	0	0	0	0
Leather, leather products, and footwear	c5	0	0	0	0	0	0	0
Wood and products of wood and cork	c6	–	–	–	–	–	–	–
Pulp, paper, paper products, printing, and publishing	c7	0	9	3	10	4	4	15
Coke, refined petroleum, and nuclear fuel	c8	4	10	1	2	7	0	1
Chemicals and chemical products	c9	1	19	6	2	2	1	3
Rubber and plastics	c10	0	2	4	1	1	1	3
Other nonmetallic minerals	c11	0	1	0	9	2	0	3
Basic metals and fabricated metal	c12	0	1	0	1	28	7	10
Machinery, nec	c13	1	1	0	2	5	14	4
Electrical and optical equipment	c14	0	1	0	0	1	8	57
Transport equipment	c15	0	0	0	0	1	3	1
Manufacturing, nec; recycling	c16	0	0	0	0	1	0	0
Electricity, gas, and water supply	c17	3	11	1	7	17	3	4
Construction	c18	0	0	0	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	–	–	–	–	–	–	–
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	73	303	131	133	235	237	625
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	14	56	24	25	44	44	115
Hotels and restaurants	c22	0	1	0	0	1	1	1
Inland transport	c23	1	2	1	1	3	1	2
Water transport	c24	0	1	0	0	1	1	1
Air transport	c25	0	1	0	0	1	1	2
Other supporting and auxiliary transport activities; activities of travel agencies	c26	0	0	0	0	0	0	0
Post and telecommunications	c27	1	6	1	3	5	7	10
Financial intermediation	c28	5	16	4	11	37	11	27
Real estate activities	c29	1	3	5	6	10	9	21
Renting of M&Eq and other business activities	c30	2	18	3	6	13	13	28
Public administration and defense; compulsory social security	c31	0	0	0	0	0	0	1
Education	c32	0	1	0	1	1	1	1
Health and social work	c33	0	0	0	0	0	0	0
Other community, social, and personal services	c34	1	5	1	3	6	4	6
Private households with employed persons	c35	–	–	–	–	–	–	–

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Table A1.2 Domestic Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Domestic</b>											
0	0	2	1	–	3	0	81	1	2	11	0
–	–	–	–	–	–	–	–	–	–	–	–
3	1	27	208	–	992	60	530	47	59	160	3
0	0	1	3	–	60	4	3	2	2	4	0
0	0	0	1	–	4	0	0	0	0	1	0
–	–	0	112	–	3	0	2	3	6	3	0
2	3	2	4	–	247	12	6	8	4	15	1
0	0	0	0	–	68	1	1	2	3	6	0
1	0	0	0	–	7	0	1	0	0	0	0
2	0	0	0	–	24	0	1	0	0	0	0
1	0	0	2	–	2	0	0	0	0	0	0
5	0	0	1	–	6	0	0	0	0	0	0
5	0	0	0	–	13	0	0	0	0	1	0
5	0	1	1	–	319	5	0	0	0	0	0
40	0	0	0	–	81	1	1	2	1	3	0
0	0	0	0	–	6	0	0	0	0	0	0
2	0	453	95	–	350	297	820	139	71	118	16
0	0	13	27,402	–	63	23	35	44	34	183	2
–	–	–	–	–	–	–	–	–	–	–	–
431	36	420	997	–	7,233	602	1,159	268	484	1,136	9
80	7	77	197	–	1,873	183	302	59	91	215	3
0	0	16	58	–	705	56	308	40	133	34	6
1	0	8	133	–	864	283	73	1,215	503	24	15
1	0	3	59	–	1,416	105	18	27	1,648	1,104	29
1	0	3	69	–	1,670	119	20	32	1,936	1,297	34
0	0	0	3	–	75	6	1	1	87	58	2
3	0	41	209	–	5,147	566	258	155	2,815	482	15
10	1	335	456	–	11,105	2,421	664	579	1,037	372	48
5	2	150	470	–	3,294	7,475	2,681	336	240	379	131
16	1	70	458	–	11,083	713	467	420	406	829	34
1	0	4	86	–	188	94	39	14	26	171	3
1	0	8	40	–	509	56	33	22	31	37	2
0	0	4	17	–	177	18	19	12	43	9	2
5	0	84	242	–	3,547	393	267	138	200	255	17
–	–	–	–	–	–	–	–	–	–	–	–

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Table A1.2 Domestic Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Domestic						
Agriculture, hunting, forestry, and fishing	c1	1	0	0	0	0
Mining and quarrying	c2	–	–	–	–	–
Food, beverages, and tobacco	c3	160	236	84	165	46
Textiles and textile products	c4	9	13	5	9	3
Leather, leather products, and footwear	c5	1	2	1	2	0
Wood and products of wood and cork	c6	2	1	0	1	0
Pulp, paper, paper products, printing, and publishing	c7	32	62	18	34	9
Coke, refined petroleum, and nuclear fuel	c8	1	7	2	4	2
Chemicals and chemical products	c9	0	1	1	2	1
Rubber and plastics	c10	0	0	0	0	0
Other nonmetallic minerals	c11	0	0	0	0	0
Basic metals and fabricated metal	c12	0	1	1	1	0
Machinery, nec	c13	1	4	1	0	0
Electrical and optical equipment	c14	20	3	2	9	1
Transport equipment	c15	2	4	0	4	3
Manufacturing, nec; recycling	c16	0	6	1	0	0
Electricity, gas, and water supply	c17	202	384	769	117	210
Construction	c18	40	35	326	17	818
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	–	–	–	–	–
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	385	571	243	348	145
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	123	183	84	118	43
Hotels and restaurants	c22	151	297	118	124	38
Inland transport	c23	126	461	55	236	27
Water transport	c24	563	179	11	98	12
Air transport	c25	662	210	12	115	14
Other supporting and auxiliary transport activities; activities of travel agencies	c26	30	10	1	5	1
Post and telecommunications	c27	4,740	2,270	461	931	241
Financial intermediation	c28	1,135	18,805	5,870	1,792	168
Real estate activities	c29	895	3,176	2,621	1,760	107
Renting of M&Eq and other business activities	c30	1,981	2,767	1,072	2,087	569
Public administration and defense; compulsory social security	c31	40	104	24	48	220
Education	c32	94	174	61	117	87
Health and social work	c33	33	86	36	34	6
Other community, social, and personal services	c34	793	1,042	1,228	682	201
Private households with employed persons	c35	–	–	–	–	–

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Table A1.2 Domestic Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Domestic</b>										
0	1	1	–	303	–	–	0	(6)	125	<b>537</b>
–	–	–	–	–	–	–	–	–	–	–
36	96	79	–	2,706	–	–	208	(36)	3,604	<b>9,868</b>
2	2	4	–	202	–	–	9	(12)	843	<b>1,179</b>
0	0	0	–	143	–	–	8	(5)	246	<b>410</b>
0	12	2	–	285	–	–	28	(6)	463	<b>931</b>
11	49	17	–	142	–	–	10	(5)	425	<b>1,346</b>
1	0	1	–	72	–	–	0	12	265	<b>474</b>
1	3	2	–	80	–	–	2	3	2,026	<b>2,166</b>
0	0	0	–	5	–	–	0	1	715	<b>762</b>
0	0	0	–	14	–	–	1	(1)	859	<b>896</b>
0	0	0	–	13	–	–	18	4	1,770	<b>1,871</b>
0	1	0	–	17	–	–	254	0	1,175	<b>1,502</b>
1	0	4	–	229	–	–	188	15	2,905	<b>3,776</b>
0	0	4	–	293	–	–	270	6	1,775	<b>2,497</b>
0	0	0	–	20	–	–	4	7	156	<b>203</b>
179	242	428	–	2,428	13	–	27	–	615	<b>8,187</b>
53	50	38	–	1	–	–	28,665	–	523	<b>58,387</b>
–	–	–	–	–	–	–	–	–	–	–
164	509	414	–	19,186	–	–	3,750	224	98,185	<b>140,260</b>
40	108	99	–	4,136	–	–	760	–	19,224	<b>28,655</b>
100	50	113	–	22,521	–	–	64	–	58	<b>25,030</b>
29	42	93	–	7,156	–	–	127	–	586	<b>12,156</b>
10	15	27	–	886	–	–	15	–	11,736	<b>18,006</b>
12	18	31	–	1,021	–	–	15	–	13,787	<b>21,133</b>
1	1	2	–	48	–	–	1	–	617	<b>950</b>
154	189	577	–	4,311	49	–	803	–	3,804	<b>28,469</b>
513	313	1,105	–	25,882	–	480	549	–	21,662	<b>96,225</b>
430	673	2,418	–	31,380	–	–	8,620	–	20	<b>67,621</b>
341	421	722	–	953	–	–	2,589	–	2,325	<b>30,905</b>
22	16	42	–	1,623	–	19,793	25	–	133	<b>22,729</b>
277	43	49	–	2,219	11,256	2,126	128	–	93	<b>17,494</b>
30	188	35	–	5,846	2,472	10,995	17	–	12	<b>20,099</b>
187	183	2,965	–	10,101	716	–	775	–	962	<b>25,169</b>
–	–	–	–	–	–	–	–	–	–	–

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Table A1.2 Imports Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	1	–	67	0	0	1	0
Mining and quarrying	m2	0	–	0	0	0	0	0
Food, beverages, and tobacco	m3	23	–	1,179	2	64	86	86
Textiles and textile products	m4	0	–	1	26	2	0	0
Leather, leather products, and footwear	m5	0	–	0	1	7	0	0
Wood and products of wood and cork	m6	0	–	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	m7	9	–	559	27	12	3	78
Coke, refined petroleum, and nuclear fuel	m8	0	–	0	0	0	0	0
Chemicals and chemical products	m9	0	–	1	0	0	0	0
Rubber and plastics	m10	0	–	2	0	0	0	0
Other nonmetallic minerals	m11	0	–	1	0	0	0	0
Basic metals and fabricated metal	m12	0	–	0	0	0	0	0
Machinery, nec	m13	0	–	0	0	0	0	0
Electrical and optical equipment	m14	0	–	0	0	0	0	0
Transport equipment	m15	0	–	0	0	0	0	0
Manufacturing, nec; recycling	m16	0	–	0	0	0	0	0
Electricity, gas, and water supply	m17	0	–	16	3	0	2	2
Construction	m18	0	–	0	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	–	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	133	–	2,306	266	73	134	305
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	–	10	1	1	2	2
Hotels and restaurants	m22	0	–	2	0	0	1	0
Inland transport	m23	0	–	0	0	0	0	0
Water transport	m24	0	–	7	1	1	1	1
Air transport	m25	0	–	8	2	1	1	2
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	–	0	0	0	0	0
Post and telecommunications	m27	1	–	19	3	3	5	5
Financial intermediation	m28	1	–	45	8	1	7	9
Real estate activities	m29	0	–	1	0	0	0	0
Renting of M&Eq and other business activities	m30	4	–	76	17	4	21	27
Public administration and defense; compulsory social security	m31	0	–	1	0	–	0	0
Education	m32	0	–	3	1	0	2	1
Health and social work	m33	0	–	0	0	0	0	0
Other community, social, and personal services	m34	1	–	18	4	1	9	8
Private households with employed persons	m35	–	–	–	–	–	–	–
Total intermediate consumption	r60	274	–	7,616	847	319	625	1,088
Taxes less subsidies on products	r99	5	–	41	6	2	4	4
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	0	–	61	17	5	7	6
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	259	–	2,149	309	85	294	249
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	537	–	9,868	1,179	410	931	1,346

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Table A1.2 Imports Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Imports</b>												
0	2	0	0	0	0	0	0	0	13	7	–	49
0	0	0	0	0	0	0	0	0	0	0	–	0
39	292	18	28	38	33	63	18	6	177	2,818	–	2,305
0	0	0	0	0	0	0	0	0	0	1	–	43
0	0	0	0	0	0	0	0	0	0	0	–	3
0	0	0	0	0	0	0	0	0	0	0	–	0
2	25	7	29	5	12	43	5	10	5	623	–	730
31	59	4	15	20	2	4	2	0	1	0	–	578
11	207	62	21	12	8	32	6	3	0	0	–	97
1	17	42	6	3	12	35	18	3	0	0	–	342
4	5	1	74	10	4	20	7	1	0	1	–	13
4	9	5	18	192	87	130	61	6	0	1	–	1,351
3	7	2	10	15	82	25	24	1	0	0	–	95
2	5	1	3	6	50	359	29	1	2	0	–	2,777
0	1	0	3	3	19	4	313	0	0	0	–	504
0	1	0	1	6	1	1	1	1	0	0	–	53
0	1	0	1	1	0	0	0	0	74	21	–	85
0	0	0	0	0	0	0	0	0	0	239	–	7
0	0	0	0	0	0	0	0	0	0	0	–	0
217	929	397	413	989	749	1,963	1,298	110	1,282	5,619	–	4,125
0	1	1	1	1	1	3	2	0	4	19	–	69
0	0	0	0	0	0	0	0	0	0	3	–	130
0	0	0	0	0	0	0	0	0	0	1	–	19
0	0	0	0	0	0	0	0	0	1	25	–	844
0	0	0	0	0	0	1	0	0	1	30	–	969
0	0	0	0	0	0	0	0	0	0	1	–	46
0	1	0	1	0	1	2	0	0	6	52	–	1,670
1	1	0	1	2	1	2	1	0	32	83	–	2,404
0	0	0	0	0	0	0	0	0	0	1	–	31
1	5	1	2	2	4	8	4	0	30	275	–	7,364
0	0	0	0	0	0	0	0	0	0	3	–	66
0	0	0	0	0	0	0	0	0	1	8	–	272
0	0	0	0	0	0	0	0	0	0	1	–	38
1	1	0	1	1	1	1	1	0	7	52	–	1,637
–	–	–	–	–	–	–	–	–	–	–	–	–
<b>432</b>	<b>2,080</b>	<b>735</b>	<b>853</b>	<b>1,745</b>	<b>1,444</b>	<b>3,646</b>	<b>2,411</b>	<b>196</b>	<b>3,363</b>	<b>41,209</b>	–	<b>79,850</b>
1	3	1	1	4	2	5	3	0	70	91	–	844
–	–	–	–	–	–	–	–	–	–	–	–	–
0	1	0	0	1	1	1	1	0	56	115	–	1,067
–	–	–	–	–	–	–	–	–	–	–	–	–
40	82	26	40	120	56	125	82	7	4,696	16,973	–	58,499
–	–	–	–	–	–	–	–	–	–	–	–	–
<b>474</b>	<b>2,166</b>	<b>762</b>	<b>896</b>	<b>1,871</b>	<b>1,502</b>	<b>3,776</b>	<b>2,497</b>	<b>203</b>	<b>8,187</b>	<b>58,387</b>	–	<b>140,260</b>

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Table A1.2 Imports Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Imports							
Agriculture, hunting, forestry, and fishing	m1	3	605	6	15	67	0
Mining and quarrying	m2	0	0	0	0	0	0
Food, beverages, and tobacco	m3	70	3,553	109	195	623	3
Textiles and textile products	m4	2	1	3	1	2	0
Leather, leather products, and footwear	m5	0	0	1	0	0	0
Wood and products of wood and cork	m6	0	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	m7	15	2	23	21	28	1
Coke, refined petroleum, and nuclear fuel	m8	1	1	2	3	8	0
Chemicals and chemical products	m9	0	1	0	0	0	0
Rubber and plastics	m10	1	0	0	0	0	0
Other nonmetallic minerals	m11	0	0	0	0	0	0
Basic metals and fabricated metal	m12	0	0	0	0	0	0
Machinery, nec	m13	0	0	0	0	1	0
Electrical and optical equipment	m14	4	0	0	0	0	0
Transport equipment	m15	1	0	1	1	3	0
Manufacturing, nec; recycling	m16	0	0	0	0	0	0
Electricity, gas, and water supply	m17	56	123	27	12	20	3
Construction	m18	1	0	0	0	1	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	71	1,437	749	1,783	3,788	11
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	5	17	11	11	21	1
Hotels and restaurants	m22	6	4	3	3	5	0
Inland transport	m23	1	0	1	5	5	0
Water transport	m24	47	5	9	557	291	10
Air transport	m25	53	6	10	582	325	11
Other supporting and auxiliary transport activities; activities of travel agencies	m26	3	0	0	31	18	1
Post and telecommunications	m27	133	41	23	266	53	2
Financial intermediation	m28	259	67	71	96	77	6
Real estate activities	m29	1	1	1	1	2	0
Renting of M&Eq and other business activities	m30	362	173	168	158	294	13
Public administration and defense; compulsory social security	m31	4	2	2	2	4	0
Education	m32	13	6	7	6	12	1
Health and social work	m33	2	1	1	1	2	0
Other community, social, and personal services	m34	76	39	42	38	74	3
Private households with employed persons	m35	–	–	–	–	–	–
Total intermediate consumption	r60	14,684	13,877	4,839	13,652	12,632	440
Taxes less subsidies on products	r99	586	205	70	132	184	11
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–
Direct purchases abroad by residents	r62	79	116	141	584	29	28
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–
Value added at basic prices	r64	13,307	10,831	7,107	3,639	8,287	472
International transport margins		–	–	–	–	–	–
Output at basic prices	r69	28,655	25,030	12,156	18,006	21,133	950

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Table A1.2 Imports Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Imports</b>										
5	2	1	4	3	5	7	13	–	2,497	0
0	0	0	0	0	0	0	0	–	1	0
142	263	68	132	50	77	315	223	–	17,826	0
4	5	2	4	1	1	1	5	–	1,344	0
0	1	0	1	0	0	0	0	–	512	0
0	0	0	0	0	0	0	0	–	0	0
38	108	19	31	6	24	200	37	–	1,491	0
2	4	1	2	7	3	0	3	–	508	–
1	1	1	2	3	7	9	14	–	1,039	0
0	0	0	0	0	0	0	3	–	68	0
1	0	0	0	2	1	0	2	–	142	0
0	1	1	2	1	1	0	4	–	189	0
1	2	0	0	0	1	1	1	–	121	0
44	2	1	5	3	4	0	16	–	1,783	0
6	3	0	3	16	0	0	24	–	2,633	0
0	5	1	0	1	1	0	2	–	203	0
32	54	109	18	31	24	33	53	–	313	0
1	2	6	1	11	1	1	1	–	0	0
0	0	0	0	0	0	0	0	–	0	0
638	717	158	475	293	387	1,049	1,114	–	45,117	0
46	67	29	48	14	8	11	18	–	124	0
15	18	7	12	4	2	2	4	–	5	0
4	3	1	2	0	0	0	1	–	3	0
227	76	4	38	5	4	5	10	–	270	–
256	90	5	45	6	5	6	11	–	314	–
12	4	0	2	0	0	0	1	–	15	0
721	516	132	228	67	37	43	89	–	404	1
200	1,401	467	236	43	51	41	109	–	1,658	–
3	5	2	3	1	1	1	1	–	1	0
850	1,201	487	866	250	138	161	294	–	279	0
7	10	4	7	4	1	1	3	–	14	–
29	38	15	30	8	5	5	10	–	11	0
4	6	2	4	1	1	1	1	–	2	0
165	233	100	179	51	29	33	76	–	124	4
–	–	–	–	–	–	–	–	–	–	–
<b>15,678</b>	<b>35,933</b>	<b>14,734</b>	<b>11,240</b>	<b>3,858</b>	<b>3,417</b>	<b>5,154</b>	<b>11,418</b>	–	<b>223,233</b>	<b>14,510</b>
136	985	522	192	15	60	63	622	–	6,468	124
–	–	–	–	–	–	–	–	–	–	–
283	818	175	209	48	304	99	945	–	20,266	–
–	–	–	–	–	–	–	–	–	(33,993)	–
12,371	58,490	52,189	19,263	18,809	13,714	14,783	12,185	–	–	–
–	–	–	–	–	–	–	–	–	–	–
<b>28,469</b>	<b>96,225</b>	<b>67,621</b>	<b>30,905</b>	<b>22,729</b>	<b>17,494</b>	<b>20,099</b>	<b>25,169</b>	–	<b>215,974</b>	<b>14,633</b>

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Table A1.2 Imports Industry *continued*

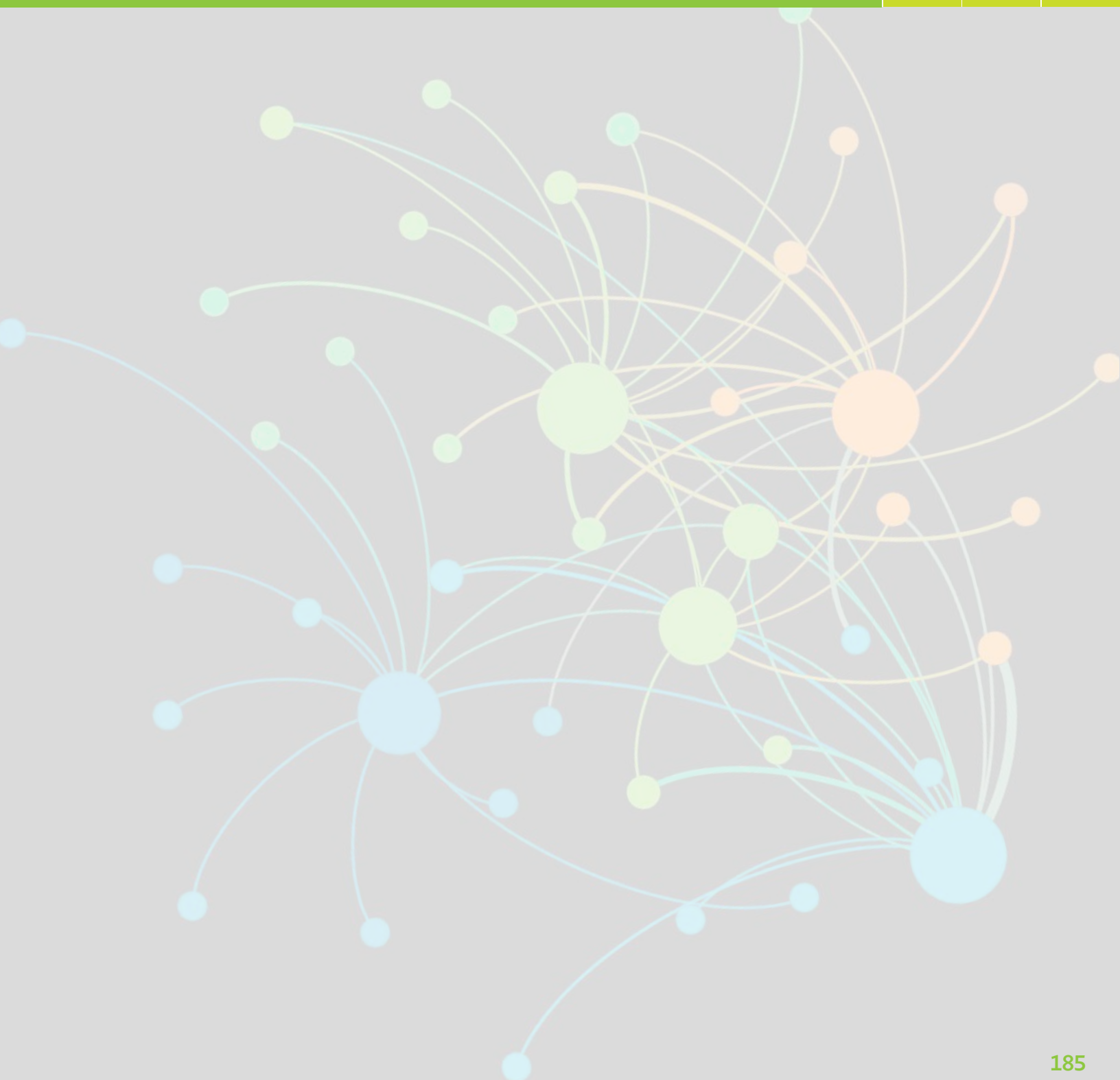
		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	0	(11)	–	3,360
Mining and quarrying	m2	0	0	0	–	5
Food, beverages, and tobacco	m3	0	162	(74)	–	31,014
Textiles and textile products	m4	0	3	(27)	–	1,425
Leather, leather products, and footwear	m5	0	2	(9)	–	521
Wood and products of wood and cork	m6	0	0	0	–	0
Pulp, paper, paper products, printing, and publishing	m7	0	14	(16)	–	4,228
Coke, refined petroleum, and nuclear fuel	m8	–	1	36	–	1,298
Chemicals and chemical products	m9	0	28	21	–	1,588
Rubber and plastics	m10	0	5	8	–	568
Other nonmetallic minerals	m11	0	8	(3)	–	295
Basic metals and fabricated metal	m12	0	304	38	–	2,408
Machinery, nec	m13	0	2,170	0	–	2,565
Electrical and optical equipment	m14	0	894	49	–	6,041
Transport equipment	m15	0	4,101	41	–	7,683
Manufacturing, nec; recycling	m16	0	48	38	–	366
Electricity, gas, and water supply	m17	0	4	(0)	–	1,121
Construction	m18	0	241	(1)	–	514
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	–	1
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	16,390	1,249	–	96,736
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	82	0	–	631
Hotels and restaurants	m22	0	17	0	–	247
Inland transport	m23	0	2	0	–	48
Water transport	m24	–	2	0	–	2,441
Air transport	m25	0	3	0	–	2,743
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	0	0	–	135
Post and telecommunications	m27	0	372	(0)	–	4,897
Financial intermediation	m28	36	205	0	–	7,622
Real estate activities	m29	0	5	(1)	–	63
Renting of M&Eq and other business activities	m30	0	991	(0)	–	14,527
Public administration and defense; compulsory social security	m31	159	10	0	–	304
Education	m32	0	42	(0)	–	528
Health and social work	m33	0	6	0	–	74
Other community, social, and personal services	m34	0	251	(0)	–	3,257
Private households with employed persons	m35	–	–	–	–	–
Total intermediate consumption	r60	33,590	74,293	1,537	191,697	849,148
Taxes less subsidies on products	r99	22	716	(76)	–	12,123
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	25,465
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	(33,993)
Value added at basic prices	r64	–	–	–	–	329,536
International transport margins		–	–	–	–	–
Output at basic prices	r69	33,612	75,009	1,460	191,697	1,182,279

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi–Regional Input–Output Database.

# APPENDIX 2: INPUT-OUTPUT TABLES FOR 2010 AND 2017—JAPAN

# A2



**Table A2.1: Japan Input–Output Table, 2010** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	16,253	29	65,090	281	34	4,420	108
Mining and quarrying	c2	25	2,775	20	10	0	15	115
Food, beverages, and tobacco	c3	13,558	65	61,892	167	208	22	570
Textiles and textile products	c4	555	126	423	7,829	125	38	721
Leather, leather products, and footwear	c5	16	34	26	164	586	4	26
Wood and products of wood and cork	c6	204	7	167	15	5	2,235	1,858
Pulp, paper, paper products, printing, and publishing	c7	1,661	102	8,478	545	73	212	44,277
Coke, refined petroleum, and nuclear fuel	c8	3,803	3,181	2,326	382	23	182	995
Chemicals and chemical products	c9	5,860	541	3,780	3,152	60	538	5,008
Rubber and plastics	c10	1,276	101	6,576	487	300	104	4,415
Other nonmetallic minerals	c11	192	182	1,599	47	2	16	215
Basic metals and fabricated metal	c12	348	797	6,897	133	58	339	603
Machinery, nec	c13	266	158	413	56	16	60	265
Electrical and optical equipment	c14	296	183	762	102	22	70	707
Transport equipment	c15	842	35	254	53	7	20	84
Manufacturing, nec; recycling	c16	145	62	381	360	66	71	316
Electricity, gas, and water supply	c17	1,077	1,033	6,348	798	44	359	5,441
Construction	c18	750	323	673	158	7	83	1,013
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	2,351	1,699	2,740	296	22	471	1,221
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	3,606	1,673	21,400	1,751	301	985	9,554
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	2,121	320	4,117	627	101	122	1,103
Hotels and restaurants	c22	516	729	3,233	369	61	176	3,321
Inland transport	c23	2,279	892	6,756	530	67	480	4,548
Water transport	c24	360	671	381	19	4	73	298
Air transport	c25	52	29	53	41	1	5	493
Other supporting and auxiliary transport activities; activities of travel agencies	c26	432	348	1,731	116	17	96	980
Post and telecommunications	c27	119	152	491	155	10	31	1,178
Financial intermediation	c28	4,763	1,539	4,084	1,850	64	446	3,608
Real estate activities	c29	33	94	340	76	5	26	428
Renting of M&Eq and other business activities	c30	886	1,123	11,145	1,037	108	215	9,071
Public administration and defense; compulsory social security	c31	51	55	594	51	9	11	284
Education	c32	5	8	85	4	1	4	48
Health and social work	c33	285	75	417	101	16	20	284
Other community, social, and personal services	c34	125	130	594	105	33	36	817
Private households with employed persons	c35	652	229	833	232	–	182	979

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Table A2.1 Domestic Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Domestic</b>												
3	811	1,477	21	54	23	93	42	771	29	1,001	14	72
19,191	670	83	882	8,041	69	713	105	29	7,182	2,254	57	17
28	2,506	339	147	494	205	677	307	84	267	599	159	837
5	300	602	222	523	252	1,181	877	412	92	1,591	147	1,322
1	34	23	15	49	20	202	59	71	71	52	9	62
0	31	43	238	323	66	98	174	2,001	140	12,082	12	310
66	7,168	1,419	1,650	2,731	1,370	7,244	2,089	1,522	1,528	2,720	380	6,624
6,067	26,152	820	1,810	2,991	537	1,366	1,444	443	10,047	8,542	376	5,974
520	92,116	25,174	2,213	5,298	1,358	6,428	4,993	1,851	1,439	3,343	859	680
37	5,182	26,794	505	2,815	4,276	14,311	16,928	2,714	862	8,327	4,560	661
211	2,370	813	4,875	4,343	520	6,295	3,708	778	264	29,020	698	159
2,213	4,629	2,602	2,078	247,232	25,943	35,276	38,609	4,338	1,720	71,089	6,112	2,202
35	661	378	299	2,880	20,304	3,319	3,655	210	845	2,068	7,622	959
60	1,519	681	372	6,474	11,553	108,693	18,614	1,211	905	8,257	10,782	2,472
9	274	268	74	1,648	1,130	1,715	221,738	159	147	1,860	17,737	225
11	600	249	277	874	332	1,715	1,191	2,293	288	6,862	237	1,097
1,458	10,139	3,565	2,815	19,633	2,286	8,744	6,546	619	14,686	3,663	1,579	3,172
111	2,405	806	1,197	4,298	639	2,347	924	191	15,292	1,738	307	3,018
457	3,608	1,676	1,788	7,530	1,684	5,472	2,669	528	11,659	7,923	742	3,523
982	9,594	6,927	2,365	21,354	7,380	17,887	15,873	3,031	4,032	28,221	7,342	6,674
99	1,683	756	616	2,852	1,648	3,796	2,669	1,080	932	4,608	979	3,997
304	4,545	1,796	1,049	5,338	2,100	6,537	2,796	697	3,022	6,857	1,790	8,878
737	5,224	2,301	2,577	10,480	2,222	5,985	6,503	1,084	2,772	16,583	1,239	7,367
1,144	633	97	367	3,105	179	306	849	62	1,099	853	109	256
23	310	67	52	270	112	370	135	33	72	153	45	1,633
2,323	1,049	555	640	2,514	350	1,310	910	283	1,271	2,786	147	4,546
149	3,374	551	317	2,016	884	2,650	1,269	356	1,331	7,615	1,035	13,891
1,134	6,038	1,274	2,450	9,707	3,026	6,631	5,067	2,936	9,391	12,587	1,520	31,387
36	820	286	179	897	359	1,073	462	96	1,182	966	207	8,393
342	19,501	4,494	3,385	13,240	7,620	24,078	14,809	2,331	15,626	50,877	2,635	36,322
67	1,050	233	177	767	292	623	360	84	619	1,113	357	647
8	171	40	49	208	137	588	179	11	267	335	13	261
24	441	162	134	566	322	825	452	186	259	872	197	1,104
52	1,388	301	324	1,138	576	1,328	777	177	1,606	2,114	346	2,202
39	1,511	653	758	3,475	1,093	2,054	1,176	168	864	5,472	459	4,118

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Table A2.1 Domestic Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Domestic							
Agriculture, hunting, forestry, and fishing	c1	107	12,322	26	4	15	12
Mining and quarrying	c2	10	65	10	2	1	3
Food, beverages, and tobacco	c3	377	71,924	278	47	80	131
Textiles and textile products	c4	1,316	588	330	208	56	130
Leather, leather products, and footwear	c5	49	45	22	5	2	8
Wood and products of wood and cork	c6	118	154	4	6	0	496
Pulp, paper, paper products, printing, and publishing	c7	6,344	1,847	1,111	159	82	2,002
Coke, refined petroleum, and nuclear fuel	c8	4,211	1,617	11,801	4,138	2,223	234
Chemicals and chemical products	c9	1,293	1,836	851	162	96	318
Rubber and plastics	c10	2,395	438	251	119	18	584
Other nonmetallic minerals	c11	326	1,001	77	10	4	33
Basic metals and fabricated metal	c12	904	1,187	761	143	64	629
Machinery, nec	c13	404	374	873	73	85	185
Electrical and optical equipment	c14	874	848	926	106	72	300
Transport equipment	c15	121	122	4,517	736	1,617	45
Manufacturing, nec; recycling	c16	874	1,309	216	65	47	172
Electricity, gas, and water supply	c17	14,648	13,534	5,740	121	164	2,712
Construction	c18	2,683	1,199	2,958	280	33	2,144
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	2,577	1,750	9,374	144	469	814
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	2,862	22,859	2,194	764	126	743
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	2,354	11,778	1,230	173	74	347
Hotels and restaurants	c22	3,691	4,845	3,294	553	216	1,540
Inland transport	c23	2,290	5,144	2,242	343	329	614
Water transport	c24	118	195	757	15,614	68	29
Air transport	c25	230	105	43	16	1,318	23
Other supporting and auxiliary transport activities; activities of travel agencies	c26	1,105	2,349	9,204	517	2,187	383
Post and telecommunications	c27	7,967	5,215	1,726	622	153	1,054
Financial intermediation	c28	19,991	6,270	12,370	2,619	630	1,939
Real estate activities	c29	4,185	2,538	697	1,756	73	1,673
Renting of M&Eq and other business activities	c30	29,135	9,189	6,952	958	1,661	9,458
Public administration and defense; compulsory social security	c31	2,042	2,665	505	1,668	2,164	319
Education	c32	177	157	340	9	9	54
Health and social work	c33	572	1,742	345	58	22	147
Other community, social, and personal services	c34	1,395	7,876	1,454	151	82	455
Private households with employed persons	c35	889	1,402	1,513	296	162	694

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Table A2.1 Domestic Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Domestic</b>										
71	58	9	120	1,075	102	1,397	676	3	35,675	0
8	7	2	22	43	5	41	25	5	303	–
765	634	88	898	3,975	108	5,157	616	88	239,449	17
152	595	21	1,219	2,205	45	1,423	1,257	252	6,025	0
228	53	3	120	158	12	48	139	3	1,458	0
11	31	4	85	75	9	22	131	30	182	0
1,657	9,400	196	28,304	11,188	3,434	5,731	4,149	403	13,709	0
518	788	563	2,990	7,809	1,353	2,704	4,338	763	59,690	0
320	348	154	2,075	5,532	381	65,444	3,885	486	28,466	0
88	981	228	1,795	2,483	71	1,192	1,220	357	4,775	0
42	49	39	280	587	269	566	328	255	2,421	0
323	284	349	1,013	3,236	362	1,269	1,172	811	5,923	0
427	426	325	1,429	1,229	497	641	878	40	3,279	0
1,222	1,091	341	2,422	5,074	504	4,553	1,718	89	64,287	0
83	95	58	300	10,293	113	182	232	18	55,466	–
438	976	192	3,042	6,369	886	1,544	2,373	63	4,624	0
1,965	1,882	1,621	5,188	14,749	4,995	9,431	10,137	366	77,185	0
1,257	1,811	32,637	1,923	11,695	3,517	2,312	3,330	2	8	–
1,204	2,302	390	11,378	6,919	1,383	2,681	4,964	466	32,095	1
876	1,905	397	4,916	8,617	1,092	19,056	4,456	469	143,390	1
1,159	1,736	461	4,631	5,250	1,226	3,682	3,820	80	285,371	1
9,038	7,496	1,048	9,760	7,208	884	4,784	6,605	98	249,033	0
3,104	6,285	478	4,213	8,905	1,733	5,178	3,977	605	96,861	1
62	86	23	162	272	48	138	147	22	2,288	–
433	249	18	1,019	465	333	348	408	72	18,432	–
169	382	134	966	3,569	223	634	1,022	118	19,259	4
14,631	8,304	817	11,945	7,511	589	3,949	3,999	382	85,630	–
3,095	46,217	40,002	22,838	4,355	450	8,136	5,232	17,954	134,512	–
1,479	3,188	1,746	4,408	628	151	2,197	2,990	64	745,291	1
19,044	57,403	12,504	89,801	42,918	6,658	30,201	19,084	1,956	23,221	314
432	1,003	154	1,049	1,553	1,090	1,438	2,550	14,855	43,871	56,401
786	247	66	1,305	194	33	258	386	12	66,214	22
699	704	132	1,249	1,305	238	14,208	964	15	170,689	10,812
1,726	2,025	653	32,502	11,234	719	9,850	27,384	960	240,682	19
2,139	1,303	1,982	2,894	1,048	2,683	2,341	1,246	54	282	–

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Table A2.1 Domestic Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Domestic						
Agriculture, hunting, forestry, and fishing	c1	34	1,839	(654)	731	144,248
Mining and quarrying	c2	0	332	(1,501)	1,857	43,492
Food, beverages, and tobacco	c3	2,544	25	(10)	3,934	414,256
Textiles and textile products	c4	0	2,330	(1,391)	4,677	38,781
Leather, leather products, and footwear	c5	0	34	(56)	258	4,112
Wood and products of wood and cork	c6	2	156	(2)	194	21,722
Pulp, paper, paper products, printing, and publishing	c7	243	69	(270)	4,717	186,333
Coke, refined petroleum, and nuclear fuel	c8	0	3	(3,966)	13,155	192,395
Chemicals and chemical products	c9	8	396	(385)	59,004	335,884
Rubber and plastics	c10	21	692	(24)	26,518	145,434
Other nonmetallic minerals	c11	0	60	(17)	10,959	73,596
Basic metals and fabricated metal	c12	2	39,995	(180)	99,376	610,843
Machinery, nec	c13	1	72,495	(10)	65,031	193,152
Electrical and optical equipment	c14	1	65,733	(524)	170,482	493,854
Transport equipment	c15	0	63,187	(17)	173,959	559,408
Manufacturing, nec; recycling	c16	2	6,538	(8)	8,253	55,403
Electricity, gas, and water supply	c17	0	-	(7)	371	258,805
Construction	c18	-	569,619	(0)	5	673,695
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	46	1,265	(0)	96	138,377
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	117	64,707	(12)	95,278	545,743
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	101	25,597	(8)	5,138	388,426
Hotels and restaurants	c22	1	14	(0)	7,947	372,166
Inland transport	c23	24	8,904	(1)	14,268	246,121
Water transport	c24	0	300	(0)	33,209	64,403
Air transport	c25	0	17	-	6,125	33,602
Other supporting and auxiliary transport activities; activities of travel agencies	c26	139	433	(0)	5,891	71,092
Post and telecommunications	c27	-	-	-	1,210	193,277
Financial intermediation	c28	-	-	-	4,565	440,677
Real estate activities	c29	121	5	(0)	197	789,349
Renting of M&Eq and other business activities	c30	16,901	99,917	(0)	14,274	710,393
Public administration and defense; compulsory social security	c31	521,636	69	(0)	834	663,747
Education	c32	151,015	161	(0)	375	224,244
Health and social work	c33	373,538	3,639	(0)	83	587,901
Other community, social, and personal services	c34	358	500	(0)	1,581	355,774
Private households with employed persons	c35	-	0	-	804	46,679

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Table A2.1 Import Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Industry								
Imports								
Agriculture, hunting, forestry, and fishing	m1	2,611	6	9,284	55	7	615	85
Mining and quarrying	m2	17	11,097	16	3	0	2	385
Food, beverages, and tobacco	m3	573	7	3,030	11	10	4	34
Textiles and textile products	m4	75	17	66	1,010	68	5	89
Leather, leather products, and footwear	m5	4	5	6	18	173	1	8
Wood and products of wood and cork	m6	65	4	53	5	2	790	601
Pulp, paper, paper products, printing, and publishing	m7	101	4	350	21	4	65	2,053
Coke, refined petroleum, and nuclear fuel	m8	639	542	362	50	4	20	174
Chemicals and chemical products	m9	1,004	91	562	490	19	85	771
Rubber and plastics	m10	95	22	482	34	24	10	313
Other nonmetallic minerals	m11	13	40	115	6	0	3	12
Basic metals and fabricated metal	m12	24	112	572	17	10	34	46
Machinery, nec	m13	9	9	28	4	1	2	16
Electrical and optical equipment	m14	36	26	118	17	7	6	125
Transport equipment	m15	135	3	20	3	1	1	8
Manufacturing, nec; recycling	m16	12	5	27	25	4	25	33
Electricity, gas, and water supply	m17	3	36	4	1	0	1	4
Construction	m18	1	8	5	0	0	1	2
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	5	1	14	3	1	1	7
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	165	485	698	77	17	35	327
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	21	17	75	10	2	3	18
Hotels and restaurants	m22	59	64	315	12	8	6	284
Inland transport	m23	58	442	182	14	3	14	88
Water transport	m24	210	396	198	9	2	31	164
Air transport	m25	43	24	55	27	1	5	402
Other supporting and auxiliary transport activities; activities of travel agencies	m26	16	18	48	4	1	11	27
Post and telecommunications	m27	2	2	12	2	0	4	17
Financial intermediation	m28	269	93	120	19	2	8	70
Real estate activities	m29	1	2	2	0	0	0	1
Renting of M&Eq and other business activities	m30	16	18	216	19	3	6	194
Public administration and defense; compulsory social security	m31	14	5	31	2	1	6	16
Education	m32	1	2	13	0	0	0	7
Health and social work	m33	1	0	2	0	0	0	2
Other community, social, and personal services	m34	4	5	14	1	0	1	9
Private households with employed persons	m35	95	33	105	5	10	6	138
Total intermediate consumption	r60	72,160	33,141	242,299	24,074	2,838	13,975	111,483
Taxes less subsidies on products	r99	–	–	–	–	–	–	–
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	71,625	8,802	170,741	14,553	1,261	7,598	74,445
International transport margins		463	1,549	1,215	154	13	150	405
Output at basic prices	r69	144,248	43,492	414,256	38,781	4,112	21,722	186,333

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Table A2.1 Import Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Imports								
Agriculture, hunting, forestry, and fishing	m1	8	122	253	5	15	5	16
Mining and quarrying	m2	76,822	1,632	29	3,176	32,061	35	46
Food, beverages, and tobacco	m3	47	247	47	12	81	15	46
Textiles and textile products	m4	10	96	91	34	110	36	159
Leather, leather products, and footwear	m5	1	8	6	3	8	4	37
Wood and products of wood and cork	m6	9	21	14	75	124	26	40
Pulp, paper, paper products, printing, and publishing	m7	11	321	68	76	89	37	227
Coke, refined petroleum, and nuclear fuel	m8	1,140	4,563	207	296	591	92	246
Chemicals and chemical products	m9	165	16,034	4,257	343	755	225	1,067
Rubber and plastics	m10	46	407	2,227	38	239	370	1,056
Other nonmetallic minerals	m11	201	164	52	630	401	44	471
Basic metals and fabricated metal	m12	551	412	291	308	27,947	2,606	3,638
Machinery, nec	m13	22	53	26	20	431	3,531	486
Electrical and optical equipment	m14	24	222	77	41	1,465	2,938	29,828
Transport equipment	m15	7	33	16	9	135	159	205
Manufacturing, nec; recycling	m16	7	53	21	19	70	23	117
Electricity, gas, and water supply	m17	238	15	3	11	145	8	25
Construction	m18	56	4	2	4	31	6	9
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	1	32	11	3	25	11	32
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	3,031	806	306	209	2,262	328	939
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	98	80	25	11	119	29	118
Hotels and restaurants	m22	27	400	117	82	469	180	575
Inland transport	m23	2,972	182	45	160	1,450	45	122
Water transport	m24	655	367	46	200	1,826	103	171
Air transport	m25	23	256	51	41	224	92	306
Other supporting and auxiliary transport activities; activities of travel agencies	m26	93	46	16	18	100	11	36
Post and telecommunications	m27	5	36	7	6	24	12	50
Financial intermediation	m28	128	209	23	48	250	68	165
Real estate activities	m29	3	3	1	1	11	2	3
Renting of M&Eq and other business activities	m30	27	407	88	68	285	154	520
Public administration and defense; compulsory social security	m31	16	36	7	6	32	10	29
Education	m32	3	27	4	5	28	18	73
Health and social work	m33	0	4	1	1	4	4	30
Other community, social, and personal services	m34	15	19	4	4	37	8	22
Private households with employed persons	m35	6	219	64	95	507	155	300
Total intermediate consumption	r60	124,416	246,045	96,812	42,974	468,512	112,263	323,144
Taxes less subsidies on products	r99	–	–	–	–	–	–	–
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	57,625	87,728	48,025	30,032	135,680	80,077	167,388
International transport margins		10,354	2,111	597	590	6,650	813	3,322
Output at basic prices	r69	192,395	335,884	145,434	73,596	610,843	193,152	493,854

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Table A2.1 Import Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Imports</b>											
9	84	8	231	2	9	16	1,381	3	1	3	4
107	47	28,732	8,313	9	4	6	183	28	12	6	1
27	33	22	46	11	26	16	3,334	12	2	4	5
118	53	17	206	20	142	150	76	39	26	7	14
13	11	8	22	2	7	13	10	7	2	1	1
57	619	48	4,107	6	74	32	45	1	2	0	120
57	135	34	408	13	187	198	72	29	6	3	98
255	68	1,694	1,391	64	415	501	238	1,859	647	402	30
832	327	136	504	144	49	45	164	46	13	9	27
1,265	204	83	612	338	41	172	58	24	9	7	44
278	61	82	2,186	53	8	14	68	2	1	0	1
4,127	505	245	6,411	468	134	51	83	25	11	3	40
535	28	23	193	1,327	26	26	21	22	4	6	6
5,174	265	108	1,895	2,971	508	288	160	119	21	11	39
10,220	18	9	147	786	11	9	9	740	122	279	2
66	165	21	509	15	56	48	77	11	4	3	12
22	1	94	42	6	2	2	4	3	54	0	1
8	1	22	26	3	1	2	2	1	0	0	1
40	3	4	31	13	281	3	11	4	1	1	1
692	113	1,246	1,371	273	2,686	113	604	81	30	16	21
54	9	47	92	31	668	11	55	13	3	2	2
246	44	266	577	156	163	204	421	274	46	25	28
113	24	1,146	608	24	71	29	106	107	40	10	15
498	30	641	470	64	119	139	82	326	9,060	51	95
112	25	62	130	38	1,038	223	84	60	68	1,063	179
32	7	50	77	5	86	26	50	194	144	152	246
17	5	24	76	10	113	75	42	18	21	4	12
145	41	115	447	28	207	207	88	406	74	47	21
3	0	4	8	1	2	2	1	2	39	0	1
317	39	346	1,156	59	536	607	193	144	26	42	152
17	3	24	47	7	15	31	39	21	29	28	5
21	1	33	25	3	10	14	17	38	1	1	2
3	1	2	7	3	2	4	3	2	1	0	1
15	2	16	28	5	13	15	26	9	65	1	4
172	16	126	762	66	3	69	160	207	40	34	1
<b>404,626</b>	<b>35,829</b>	<b>147,345</b>	<b>348,165</b>	<b>77,837</b>	<b>172,775</b>	<b>121,996</b>	<b>204,454</b>	<b>89,875</b>	<b>43,271</b>	<b>16,618</b>	<b>31,652</b>
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
152,851	19,361	107,427	322,855	60,016	372,749	266,281	167,250	155,937	21,040	16,912	39,397
1,930	213	4,034	2,675	525	218	150	462	309	91	72	43
<b>559,408</b>	<b>55,403</b>	<b>258,805</b>	<b>673,695</b>	<b>138,377</b>	<b>545,743</b>	<b>388,426</b>	<b>372,166</b>	<b>246,121</b>	<b>64,403</b>	<b>33,602</b>	<b>71,092</b>

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Table A2.1 Import Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Imports						
Agriculture, hunting, forestry, and fishing	m1	9	16	1	23	137
Mining and quarrying	m2	2	3	1	19	33
Food, beverages, and tobacco	m3	32	163	4	252	172
Textiles and textile products	m4	31	70	3	145	270
Leather, leather products, and footwear	m5	18	14	1	27	44
Wood and products of wood and cork	m6	2	8	1	19	11
Pulp, paper, paper products, printing, and publishing	m7	37	169	13	388	199
Coke, refined petroleum, and nuclear fuel	m8	78	122	90	445	1,285
Chemicals and chemical products	m9	38	47	10	301	821
Rubber and plastics	m10	6	71	17	142	179
Other nonmetallic minerals	m11	2	3	3	33	38
Basic metals and fabricated metal	m12	15	14	19	81	217
Machinery, nec	m13	22	32	14	83	117
Electrical and optical equipment	m14	265	245	44	447	1,240
Transport equipment	m15	8	57	4	340	1,638
Manufacturing, nec; recycling	m16	26	57	12	174	366
Electricity, gas, and water supply	m17	1	3	1	4	6
Construction	m18	1	2	2	3	3
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	5	6	4	10	13
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	37	73	17	168	352
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	17	20	4	29	41
Hotels and restaurants	m22	711	598	90	731	633
Inland transport	m23	43	82	8	59	125
Water transport	m24	36	48	12	81	119
Air transport	m25	346	201	15	803	384
Other supporting and auxiliary transport activities; activities of travel agencies	m26	10	17	3	27	81
Post and telecommunications	m27	318	96	11	127	61
Financial intermediation	m28	81	462	504	440	202
Real estate activities	m29	2	2	1	4	2
Renting of M&Eq and other business activities	m30	435	1,251	315	1,982	972
Public administration and defense; compulsory social security	m31	25	42	12	58	42
Education	m32	91	24	4	118	15
Health and social work	m33	4	5	1	8	7
Other community, social, and personal services	m34	16	23	6	170	29
Private households with employed persons	m35	270	168	283	345	153
Total intermediate consumption	r60	72,692	164,557	99,369	266,348	209,729
Taxes less subsidies on products	r99	–	–	–	–	–
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–
Value added at basic prices	r64	120,536	276,049	689,962	443,855	453,394
International transport margins		49	70	18	189	623
Output at basic prices	r69	193,277	440,677	789,349	710,393	663,747

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Table A2.1 Import Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Imports</b>										
17	187	115	1	5,812	0	6	34	0	–	21,195
8	38	27	11	190	0	1	65	0	–	163,165
51	256	44	4	37,441	3	401	120	0	–	46,643
7	207	153	34	26,929	0	0	150	0	–	30,733
2	10	33	0	6,558	0	0	49	0	–	7,133
1	6	38	10	365	0	5	57	0	–	7,463
59	146	90	22	605	0	10	69	0	–	6,471
209	629	708	123	3,899	0	0	42	0	–	24,122
20	11,809	580	79	3,845	0	6	214	0	–	45,933
5	106	88	26	2,987	0	14	84	0	–	11,947
18	44	20	19	447	0	0	75	0	–	5,610
14	123	74	84	2,475	0	2	2,569	0	–	54,357
20	55	82	2	600	0	2	7,067	0	–	14,949
59	1,139	372	18	18,644	0	6	43,975	74	–	113,015
8	27	21	1	3,242	0	4	5,854	0	–	24,291
50	116	138	4	6,446	0	3	3,491	0	–	12,313
1	7	3	0	71	0	0	37	0	–	861
1	3	2	0	29	0	0	55	0	–	298
5	72	6	1	168	0	1	68	0	–	898
37	1,392	161	20	5,196	0	14	1,041	10	–	25,448
4	127	22	2	868	0	5	186	0	–	2,940
72	413	554	8	6,731	0	9	1	0	–	15,598
27	138	60	9	1,597	0	4	63	0	–	10,286
26	79	77	12	1,160	0	0	173	(85)	–	17,690
268	287	334	59	3,619	0	0	10	0	–	10,955
7	23	25	3	548	0	1	18	0	–	2,277
13	38	56	4	429	0	4	24	0	–	1,780
31	155	197	129	2,891	0	0	16	0	–	8,407
1	2	2	0	16	0	0	3	0	–	129
153	798	427	44	2,517	2	89	362	0	–	14,990
16	41	44	145	198	18	178	10	0	–	1,305
3	18	38	1	139	0	175	4	0	–	980
1	17	4	0	59	0	6	38	0	–	226
22	40	107	4	1,647	0	2	15	0	–	2,423
358	342	178	8	36	0	0	0	–	–	5,537
<b>37,789</b>	<b>231,623</b>	<b>130,715</b>	<b>43,100</b>	<b>3,108,447</b>	<b>67,616</b>	<b>1,067,805</b>	<b>1,095,071</b>	<b>(9,043)</b>	<b>835,356</b>	<b>11,029,754</b>
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	22,849	–	–	–	–	–	22,849
–	–	–	–	(11,068)	–	–	–	–	–	(11,068)
186,413	355,141	224,836	3,540	–	–	–	–	–	–	5,411,385
42	1,136	223	38	10,009	0	34	5,660	–	–	57,200
<b>224,244</b>	<b>587,901</b>	<b>355,774</b>	<b>46,679</b>	<b>3,130,236</b>	<b>67,616</b>	<b>1,067,839</b>	<b>1,100,731</b>	<b>(9,043)</b>	<b>835,356</b>	<b>16,510,120</b>

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi-Regional Input–Output Database.



**Table A2.2: Japan Input–Output Table, 2017** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	14,251	19	54,812	270	28	4,841	115
Mining and quarrying	c2	15	1,194	12	7	0	9	78
Food, beverages, and tobacco	c3	12,487	39	56,009	154	214	17	508
Textiles and textile products	c4	565	88	439	8,968	107	35	759
Leather, leather products, and footwear	c5	30	26	37	398	540	5	48
Wood and products of wood and cork	c6	148	4	130	13	4	1,530	1,392
Pulp, paper, paper products, printing, and publishing	c7	1,322	57	6,959	508	41	158	37,204
Coke, refined petroleum, and nuclear fuel	c8	3,296	1,891	2,073	366	26	145	881
Chemicals and chemical products	c9	4,294	280	2,997	2,576	43	373	3,892
Rubber and plastics	c10	905	55	4,833	387	258	69	3,276
Other nonmetallic minerals	c11	135	91	1,083	35	2	11	159
Basic metals and fabricated metal	c12	221	376	4,457	107	32	199	431
Machinery, nec	c13	161	70	264	43	6	35	170
Electrical and optical equipment	c14	190	85	499	79	10	42	476
Transport equipment	c15	572	15	154	32	4	10	47
Manufacturing, nec; recycling	c16	120	36	314	350	32	50	264
Electricity, gas, and water supply	c17	877	591	5,359	723	50	270	4,487
Construction	c18	461	139	431	112	4	48	653
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	1,842	985	2,277	272	16	351	1,019
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	2,940	926	18,017	1,643	231	741	8,087
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	1,804	195	3,676	615	83	97	991
Hotels and restaurants	c22	449	434	2,786	357	45	136	2,910
Inland transport	c23	1,824	490	5,541	489	46	353	3,795
Water transport	c24	370	458	395	23	3	69	313
Air transport	c25	52	20	53	46	1	4	527
Other supporting and auxiliary transport activities; activities of travel agencies	c26	380	219	1,561	117	13	78	895
Post and telecommunications	c27	110	98	459	159	7	26	1,120
Financial intermediation	c28	3,746	889	3,321	1,598	104	327	2,959
Real estate activities	c29	29	63	330	82	3	22	421
Renting of M&Eq and other business activities	c30	673	628	8,877	914	77	153	7,462
Public administration and defense; compulsory social security	c31	45	32	521	49	7	9	250
Education	c32	5	6	86	5	0	3	48
Health and social work	c33	265	51	410	110	14	18	282
Other community, social, and personal services	c34	115	81	535	125	16	29	763
Private households with employed persons	c35	458	121	639	193	-	126	763

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Table A2.2 Domestic Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Domestic</b>												
3	979	1,467	17	48	27	82	43	762	25	1,059	14	62
15,918	494	58	570	4,001	56	459	75	22	4,704	1,586	43	11
30	2,574	337	125	459	242	614	318	86	238	648	164	742
6	361	725	211	582	348	1,220	1,041	502	85	2,011	177	1,366
1	49	48	21	69	36	249	98	86	79	122	15	105
0	29	40	168	261	64	79	154	1,809	105	11,448	12	239
63	6,719	1,370	1,254	2,421	1,436	5,893	1,963	1,446	1,206	2,764	357	5,412
6,392	28,832	827	1,495	2,608	637	1,247	1,504	451	8,695	9,135	390	5,326
497	81,993	21,363	1,612	4,175	1,388	5,108	4,636	1,630	1,213	3,269	789	572
33	4,363	23,367	343	2,385	4,307	10,863	15,216	2,312	741	7,515	4,152	498
199	1,916	658	3,351	3,131	511	4,846	2,933	643	207	26,394	560	122
2,109	3,759	2,051	1,404	193,524	24,615	27,742	34,250	3,664	1,252	55,124	4,374	1,446
27	487	278	176	1,966	16,172	2,020	2,649	146	544	1,588	5,222	611
47	1,169	523	232	4,805	9,309	69,227	12,761	859	611	5,988	7,716	1,624
6	180	169	42	1,056	809	938	142,523	106	88	1,335	11,251	136
11	569	239	214	778	350	1,402	1,125	2,179	236	6,994	221	911
1,456	10,030	3,525	2,204	15,375	2,566	7,507	6,555	600	12,700	3,722	1,542	2,689
85	1,841	613	735	2,731	561	1,592	697	145	9,795	1,350	231	1,959
450	3,550	1,637	1,379	6,208	1,841	4,574	2,641	503	9,558	7,957	719	2,940
977	9,382	6,845	1,856	18,237	8,200	15,220	16,042	2,945	3,333	28,898	7,191	5,629
105	1,728	789	512	2,682	1,945	3,422	2,744	1,096	820	4,967	1,011	3,538
310	4,550	1,821	847	4,822	2,419	5,737	2,799	690	2,609	7,201	1,798	7,682
722	5,042	2,235	1,994	8,367	2,435	5,053	6,127	1,036	2,219	16,521	1,185	6,192
1,427	791	119	363	2,852	253	331	1,046	76	1,129	1,078	134	254
27	362	80	51	291	152	382	161	39	72	187	54	1,668
2,487	1,106	588	529	2,217	420	1,234	980	293	1,111	3,042	155	4,119
163	3,628	599	273	2,009	1,091	2,533	1,387	381	1,232	8,637	1,127	13,111
1,113	5,757	1,218	1,851	7,950	3,305	5,581	4,762	2,738	7,508	12,378	1,442	25,648
41	924	325	161	906	465	1,067	519	109	1,116	1,135	233	8,149
322	17,775	4,195	2,497	11,207	8,050	19,486	13,791	2,147	12,214	49,048	2,451	28,777
66	1,075	239	143	669	327	556	365	84	547	1,165	363	575
9	202	47	46	234	185	602	213	13	263	409	16	264
27	500	186	123	592	421	822	507	208	254	1,036	225	1,082
56	1,505	318	285	1,081	712	1,226	824	183	1,506	2,359	367	2,014
36	1,354	595	545	2,746	1,131	1,638	1,063	149	655	5,103	415	3,204

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Table A2.2 Domestic Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Domestic							
Agriculture, hunting, forestry, and fishing	c1	87	9,907	21	4	11	11
Mining and quarrying	c2	6	33	6	1	1	2
Food, beverages, and tobacco	c3	317	59,371	235	39	64	121
Textiles and textile products	c4	1,293	534	325	200	53	141
Leather, leather products, and footwear	c5	78	51	31	10	3	11
Wood and products of wood and cork	c6	86	112	3	4	0	394
Pulp, paper, paper products, printing, and publishing	c7	4,903	1,415	856	121	61	1,723
Coke, refined petroleum, and nuclear fuel	c8	3,549	1,322	9,878	3,421	1,815	217
Chemicals and chemical products	c9	1,057	1,424	685	125	73	275
Rubber and plastics	c10	1,684	298	184	87	12	450
Other nonmetallic minerals	c11	235	711	55	7	2	26
Basic metals and fabricated metal	c12	583	763	485	85	38	442
Machinery, nec	c13	236	224	538	43	50	121
Electrical and optical equipment	c14	543	518	591	65	44	206
Transport equipment	c15	66	67	2,895	452	982	28
Manufacturing, nec; recycling	c16	686	1,008	167	49	34	148
Electricity, gas, and water supply	c17	11,751	10,582	4,645	95	127	2,358
Construction	c18	1,645	716	1,854	169	20	1,441
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	2,031	1,346	7,349	111	359	703
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	2,279	17,928	1,741	598	97	649
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	1,967	9,693	1,029	142	60	319
Hotels and restaurants	c22	3,017	3,886	2,694	444	171	1,380
Inland transport	c23	1,806	3,970	1,755	263	246	528
Water transport	c24	115	182	722	15,414	58	30
Air transport	c25	222	99	41	15	1,232	24
Other supporting and auxiliary transport activities; activities of travel agencies	c26	946	1,846	7,860	468	1,815	359
Post and telecommunications	c27	7,078	4,582	1,538	545	131	1,027
Financial intermediation	c28	15,422	4,614	9,747	1,990	476	1,646
Real estate activities	c29	3,839	2,282	638	1,581	65	1,682
Renting of M&Eq and other business activities	c30	21,806	6,814	5,264	706	1,232	7,771
Public administration and defense; compulsory social security	c31	1,734	2,215	420	1,399	1,797	288
Education	c32	169	147	331	8	9	57
Health and social work	c33	530	1,588	319	53	19	149
Other community, social, and personal services	c34	1,208	6,738	1,313	130	70	438
Private households with employed persons	c35	653	1,029	1,122	214	115	559

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Table A2.2 Domestic Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Domestic</b>										
66	55	10	108	1,008	102	1,273	531	2	29,745	0
5	5	2	15	29	4	28	15	3	180	-
730	612	102	842	3,838	113	4,891	515	71	193,164	16
191	665	28	1,355	2,256	55	1,596	1,199	247	718	0
221	83	5	147	253	16	94	171	9	143	0
9	27	4	73	63	9	20	96	22	232	0
1,386	8,138	213	23,538	9,143	3,248	5,108	3,112	319	10,298	0
470	761	658	2,777	7,042	1,420	2,589	3,616	645	54,231	0
285	315	171	1,758	5,093	377	62,932	2,942	355	21,835	0
71	787	223	1,332	1,920	64	985	861	254	2,281	0
33	39	38	201	460	236	445	224	180	1,655	0
233	209	306	720	2,170	296	1,025	761	577	3,588	0
292	285	277	933	765	385	436	496	25	1,927	0
852	770	304	1,681	3,389	406	3,202	1,080	54	33,097	0
52	60	47	186	6,748	82	113	131	10	22,806	-
388	880	211	2,634	5,345	874	1,404	1,861	49	1,510	0
1,730	1,718	1,764	4,458	12,643	4,838	8,454	7,929	291	61,863	0
867	1,271	27,988	1,338	7,726	2,713	1,593	2,048	1	5	-
1,067	2,083	427	9,932	5,852	1,369	2,419	3,886	369	25,369	1
778	1,739	440	4,295	7,490	1,087	17,214	3,535	375	113,751	1
1,086	1,663	537	4,270	4,762	1,280	3,535	3,180	67	238,456	1
8,356	7,012	1,187	8,895	6,376	902	4,469	5,399	80	202,918	0
2,532	5,693	515	3,655	7,479	1,691	4,619	3,155	484	76,526	1
65	97	32	174	280	59	155	144	22	2,237	-
429	274	24	1,084	477	391	390	405	70	15,983	-
158	373	160	905	3,264	238	616	860	102	16,521	4
14,761	8,366	1,005	11,444	7,002	631	3,993	3,706	339	76,630	-
2,702	41,146	43,059	20,387	3,700	441	7,172	4,009	13,878	107,855	-
1,478	3,353	2,217	4,237	607	177	2,316	2,733	59	680,020	1
15,983	49,190	13,058	73,447	34,231	6,294	25,812	14,609	1,478	16,715	249
412	917	170	953	1,443	1,142	1,359	2,059	12,757	38,594	59,796
848	269	88	1,332	201	40	279	382	11	62,121	26
731	746	170	1,282	1,313	275	14,689	892	14	157,655	12,652
1,682	2,001	790	30,307	10,923	782	9,778	24,359	831	207,649	20
1,781	1,083	2,028	2,360	848	2,500	1,938	1,011	40	206	-

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Table A2.2 Domestic Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Domestic						
Agriculture, hunting, forestry, and fishing	c1	26	2,739	(439)	1,093	125,282
Mining and quarrying	c2	0	193	(105)	2,508	32,243
Food, beverages, and tobacco	c3	2,091	36	(149)	5,089	348,114
Textiles and textile products	c4	0	4,122	(201)	5,709	40,082
Leather, leather products, and footwear	c5	0	163	(19)	546	4,078
Wood and products of wood and cork	c6	4	166	(45)	240	19,147
Pulp, paper, paper products, printing, and publishing	c7	187	84	(60)	5,219	157,565
Coke, refined petroleum, and nuclear fuel	c8	0	5	(580)	19,975	190,027
Chemicals and chemical products	c9	7	455	(125)	72,223	314,961
Rubber and plastics	c10	10	756	(52)	27,858	125,945
Other nonmetallic minerals	c11	0	64	(36)	10,100	61,663
Basic metals and fabricated metal	c12	1	40,258	(249)	110,891	524,320
Machinery, nec	c13	0	76,726	(96)	70,017	186,314
Electrical and optical equipment	c14	0	44,883	(73)	170,863	378,728
Transport equipment	c15	0	50,123	(149)	190,032	434,203
Manufacturing, nec; recycling	c16	1	8,712	(22)	8,559	50,892
Electricity, gas, and water supply	c17	0	-	(1)	539	218,612
Construction	c18	-	568,856	(0)	75	644,510
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	35	1,705	(0)	99	117,232
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	90	89,324	(94)	84,164	504,819
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	83	37,124	(6)	4,683	346,750
Hotels and restaurants	c22	1	19	(0)	4,480	312,088
Inland transport	c23	19	11,625	(39)	13,904	212,092
Water transport	c24	0	520	(4)	22,953	54,736
Air transport	c25	0	25	(0)	4,320	29,736
Other supporting and auxiliary transport activities; activities of travel agencies	c26	113	638	(5)	4,270	63,052
Post and telecommunications	c27	-	-	-	1,008	181,936
Financial intermediation	c28	-	-	-	4,029	376,467
Real estate activities	c29	112	8	(0)	124	723,628
Renting of M&Eq and other business activities	c30	13,042	125,060	(0)	11,913	635,421
Public administration and defense; compulsory social security	c31	457,581	91	(0)	626	592,840
Education	c32	134,602	269	(0)	561	204,407
Health and social work	c33	344,609	5,830	(0)	218	550,865
Other community, social, and personal services	c34	315	752	(0)	1,355	315,541
Private households with employed persons	c35	-	0	-	693	39,117

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Table A2.2 Imports Industry *continued*

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	2,438	4	8,167	62	13	710	147
Mining and quarrying	m2	19	10,774	11	2	0	2	649
Food, beverages, and tobacco	m3	789	9	4,541	18	15	3	49
Textiles and textile products	m4	98	12	88	1,315	63	5	107
Leather, leather products, and footwear	m5	9	4	10	74	257	1	13
Wood and products of wood and cork	m6	71	3	56	5	2	627	593
Pulp, paper, paper products, printing, and publishing	m7	98	3	358	25	3	50	2,164
Coke, refined petroleum, and nuclear fuel	m8	831	438	418	55	6	27	191
Chemicals and chemical products	m9	903	127	529	446	11	66	696
Rubber and plastics	m10	113	21	593	43	30	8	369
Other nonmetallic minerals	m11	15	48	121	6	0	2	16
Basic metals and fabricated metal	m12	29	122	665	18	13	28	52
Machinery, nec	m13	8	8	30	5	2	2	14
Electrical and optical equipment	m14	42	18	127	28	20	6	133
Transport equipment	m15	207	3	22	3	1	1	7
Manufacturing, nec; recycling	m16	13	4	34	31	6	19	34
Electricity, gas, and water supply	m17	4	34	5	2	0	1	4
Construction	m18	1	54	4	0	0	0	4
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	5	1	11	4	1	1	4
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	150	414	585	83	17	30	265
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	24	22	77	14	1	3	18
Hotels and restaurants	m22	48	22	203	6	8	6	154
Inland transport	m23	43	425	140	12	1	10	71
Water transport	m24	142	138	136	7	1	20	107
Air transport	m25	30	9	38	18	1	4	252
Other supporting and auxiliary transport activities; activities of travel agencies	m26	12	15	35	3	1	6	19
Post and telecommunications	m27	2	2	12	2	0	2	18
Financial intermediation	m28	195	36	73	13	2	8	43
Real estate activities	m29	1	1	2	1	0	0	1
Renting of M&Eq and other business activities	m30	19	114	211	22	2	4	187
Public administration and defense; compulsory social security	m31	13	22	27	1	1	10	13
Education	m32	1	0	8	0	0	0	4
Health and social work	m33	1	0	3	0	0	0	1
Other community, social, and personal services	m34	5	22	14	2	0	1	10
Private households with employed persons	m35	60	11	52	2	3	9	71
Total intermediate consumption	r60	61,597	23,689	207,752	24,253	2,550	12,059	93,926
Taxes less subsidies on products	r99	-	-	-	-	-	-	-
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-	-
Value added at basic prices	r64	63,686	8,554	140,362	15,829	1,528	7,088	63,638
International transport margins		-	-	-	-	-	-	-
Output at basic prices	r69	125,282	32,243	348,114	40,082	4,078	19,147	157,565

*continued on next page*

Table A2.2 Imports Industry *continued*

Industry		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
		c8	c9	c10	c11	c12	c13	c14
Imports								
Agriculture, hunting, forestry, and fishing	m1	9	144	266	4	16	8	15
Mining and quarrying	m2	81,778	3,343	37	5,885	43,771	50	27
Food, beverages, and tobacco	m3	56	567	96	36	133	24	53
Textiles and textile products	m4	13	112	116	37	116	49	171
Leather, leather products, and footwear	m5	2	13	12	6	35	9	23
Wood and products of wood and cork	m6	17	29	19	71	140	35	45
Pulp, paper, paper products, printing, and publishing	m7	10	356	81	67	109	44	193
Coke, refined petroleum, and nuclear fuel	m8	871	6,989	229	367	725	119	175
Chemicals and chemical products	m9	688	16,962	4,034	325	977	282	914
Rubber and plastics	m10	99	548	2,766	45	347	562	1,209
Other nonmetallic minerals	m11	290	217	61	656	450	69	492
Basic metals and fabricated metal	m12	812	549	329	286	25,551	3,320	3,518
Machinery, nec	m13	39	58	30	20	536	4,862	469
Electrical and optical equipment	m14	27	284	99	42	1,981	3,715	29,605
Transport equipment	m15	11	41	21	9	178	292	225
Manufacturing, nec; recycling	m16	13	80	31	23	115	45	124
Electricity, gas, and water supply	m17	285	22	3	21	171	14	25
Construction	m18	450	20	2	31	228	7	8
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	2	35	11	3	25	16	41
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	2,848	891	298	277	2,551	384	903
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	107	112	31	16	193	52	211
Hotels and restaurants	m22	10	298	107	51	301	100	78
Inland transport	m23	2,912	229	36	245	1,791	42	94
Water transport	m24	233	290	38	125	994	78	90
Air transport	m25	10	185	38	26	142	71	161
Other supporting and auxiliary transport activities; activities of travel agencies	m26	79	43	13	16	96	10	25
Post and telecommunications	m27	5	33	7	6	23	15	40
Financial intermediation	m28	50	168	20	32	166	49	48
Real estate activities	m29	1	2	1	1	5	2	2
Renting of M&Eq and other business activities	m30	898	461	93	117	677	170	435
Public administration and defense; compulsory social security	m31	177	37	6	15	103	8	10
Education	m32	0	21	4	3	19	14	21
Health and social work	m33	0	5	1	0	3	3	10
Other community, social, and personal services	m34	171	25	5	16	112	13	26
Private households with employed persons	m35	2	162	64	59	316	79	14
Total intermediate consumption	r60	128,200	238,906	88,500	36,570	396,536	111,396	250,050
Taxes less subsidies on products	r99	-	-	-	-	-	-	-
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-	-
Value added at basic prices	r64	61,827	76,055	37,445	25,093	127,785	74,919	128,678
International transport margins		-	-	-	-	-	-	-
Output at basic prices	r69	190,027	314,961	125,945	61,663	524,320	186,314	378,728

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Table A2.2 Imports Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Imports</b>											
9	86	9	243	2	7	16	1,107	3	1	2	3
134	57	48,195	14,667	10	5	8	222	24	9	4	1
42	75	44	71	13	29	20	4,024	14	3	4	6
138	75	19	310	24	149	189	79	47	28	7	17
24	13	12	41	3	17	30	13	9	4	1	2
66	821	50	5,698	9	74	38	42	2	2	1	142
62	122	29	502	15	171	205	62	28	6	4	96
287	69	2,033	1,976	66	600	781	265	2,116	754	521	34
836	340	466	690	159	52	51	135	54	16	10	22
1,800	285	139	911	448	43	213	41	33	11	3	45
301	83	176	3,116	58	9	16	69	3	1	1	1
4,077	631	489	8,318	595	133	62	83	31	12	4	45
684	37	34	254	1,613	28	29	16	19	4	4	8
6,065	340	115	2,640	3,299	451	192	152	129	23	15	46
13,761	25	11	207	1,017	11	10	8	1,121	169	345	3
88	277	25	651	21	53	58	71	11	4	2	13
24	2	154	60	7	1	2	3	3	15	0	0
8	1	245	90	3	1	1	2	1	0	0	0
45	3	3	30	15	88	3	6	4	1	1	1
744	112	1,814	1,607	363	2,315	85	444	85	36	19	20
90	12	91	148	55	343	15	49	19	6	4	3
125	14	152	380	66	150	174	253	140	25	13	44
88	22	1,838	814	17	42	22	73	170	45	32	42
314	21	381	370	30	85	37	50	198	5,375	31	25
79	18	43	109	20	590	114	50	50	74	832	68
26	7	65	75	4	47	16	28	190	150	255	187
16	5	25	72	8	70	64	29	13	20	5	7
87	21	69	325	10	166	167	50	233	47	27	27
2	1	1	7	1	1	1	1	1	10	0	0
301	52	758	1,362	47	516	528	154	122	34	70	149
11	2	106	59	4	11	26	25	12	18	16	4
13	1	19	18	2	8	12	10	22	1	1	2
3	1	3	7	2	3	4	2	1	1	0	1
15	5	104	60	3	10	26	18	6	23	2	4
83	3	70	480	25	80	67	88	102	22	16	28
<b>314,960</b>	<b>33,776</b>	<b>146,457</b>	<b>339,540</b>	<b>64,150</b>	<b>145,038</b>	<b>96,909</b>	<b>165,738</b>	<b>72,356</b>	<b>36,007</b>	<b>13,596</b>	<b>26,819</b>
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
119,243	17,115	72,155	304,970	53,082	359,781	249,840	146,350	139,736	18,729	16,140	36,233
-	-	-	-	-	-	-	-	-	-	-	-
<b>434,203</b>	<b>50,892</b>	<b>218,612</b>	<b>644,510</b>	<b>117,232</b>	<b>504,819</b>	<b>346,750</b>	<b>312,088</b>	<b>212,092</b>	<b>54,736</b>	<b>29,736</b>	<b>63,052</b>

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Table A2.2 Imports Industry *continued*

		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
Industry		c27	c28	c29	c30	c31
Imports						
Agriculture, hunting, forestry, and fishing	m1	9	26	1	34	128
Mining and quarrying	m2	2	2	2	21	32
Food, beverages, and tobacco	m3	41	292	6	436	214
Textiles and textile products	m4	46	97	5	198	330
Leather, leather products, and footwear	m5	19	15	1	28	57
Wood and products of wood and cork	m6	3	9	1	22	13
Pulp, paper, paper products, printing, and publishing	m7	38	182	15	324	191
Coke, refined petroleum, and nuclear fuel	m8	101	152	138	485	1,392
Chemicals and chemical products	m9	43	51	12	305	933
Rubber and plastics	m10	8	94	26	176	224
Other nonmetallic minerals	m11	3	5	5	41	44
Basic metals and fabricated metal	m12	16	19	24	102	281
Machinery, nec	m13	17	28	11	79	123
Electrical and optical equipment	m14	322	276	59	548	1,357
Transport equipment	m15	7	74	4	342	2,484
Manufacturing, nec; recycling	m16	33	71	16	205	389
Electricity, gas, and water supply	m17	1	3	1	4	5
Construction	m18	1	1	2	2	3
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	3	4	5	14
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	39	67	20	161	343
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	14	14	5	27	51
Hotels and restaurants	m22	452	231	65	298	308
Inland transport	m23	29	49	6	43	79
Water transport	m24	29	37	10	57	82
Air transport	m25	223	137	13	500	238
Other supporting and auxiliary transport activities; activities of travel agencies	m26	12	12	3	20	48
Post and telecommunications	m27	291	83	10	120	55
Financial intermediation	m28	57	289	420	238	112
Real estate activities	m29	1	2	1	3	1
Renting of M&Eq and other business activities	m30	467	1,239	325	1,905	775
Public administration and defense; compulsory social security	m31	18	26	9	35	25
Education	m32	63	14	4	61	8
Health and social work	m33	4	8	2	9	6
Other community, social, and personal services	m34	33	22	7	178	24
Private households with employed persons	m35	168	53	202	118	70
Total intermediate consumption	r60	65,345	146,367	99,692	230,186	176,576
Taxes less subsidies on products	r99	-	-	-	-	-
Cif/ fob adjustments on exports	r61	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-
Value added at basic prices	r64	116,591	230,100	623,937	405,236	416,264
International transport margins		-	-	-	-	-
Output at basic prices	r69	181,936	376,467	723,628	635,421	592,840

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Table A2.2 Imports Industry *continued*

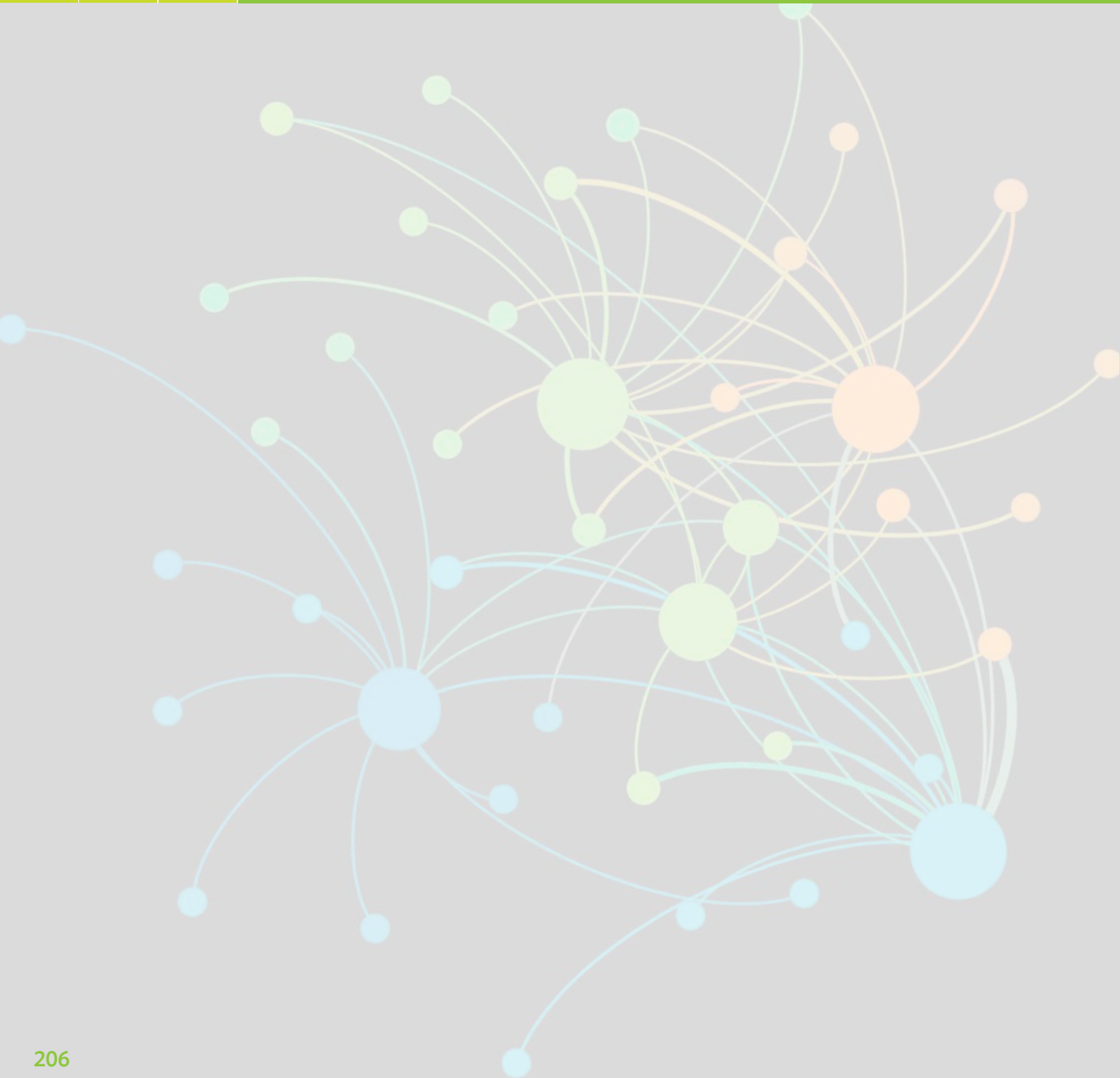
Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Imports</b>										
21	173	99	1	4,143	0	6	15	0	-	18,147
15	37	32	21	158	0	1	73	0	-	210,078
113	474	73	6	41,395	4	527	44	0	-	54,361
12	257	191	45	28,650	0	0	427	0	-	33,645
2	21	42	2	6,708	0	0	15	(0)	-	7,548
1	9	39	11	239	0	3	141	0	-	9,149
67	140	85	25	628	0	6	76	0	-	6,640
321	670	823	173	4,162	0	0	23	0	-	29,382
26	14,098	557	80	3,532	0	5	450	0	-	49,885
8	149	111	35	3,172	0	18	152	0	-	14,896
25	61	25	22	502	0	0	73	0	-	7,082
17	132	90	91	2,696	0	2	3,923	0	-	57,164
17	54	78	2	608	0	2	8,461	0	-	18,291
96	1,295	460	24	16,761	0	5	67,748	0	-	138,543
9	34	25	2	5,028	0	4	10,509	0	-	36,232
69	151	152	5	6,444	0	3	3,716	0	-	13,100
2	11	4	0	71	0	0	57	0	-	1,020
1	3	1	0	22	0	0	52	0	-	1,251
4	85	4	1	180	0	1	124	0	-	786
41	1,464	141	20	4,387	0	18	1,561	0	-	25,601
6	156	22	3	922	0	7	427	0	-	3,368
55	195	306	6	14,321	0	10	1	0	-	19,177
24	108	39	7	1,894	0	5	89	0	-	11,629
23	57	51	8	736	0	0	152	0	-	10,557
198	192	213	40	2,347	0	0	13	0	-	7,143
6	18	16	2	479	0	1	17	0	-	2,056
21	32	51	3	341	0	3	26	0	-	1,537
27	90	121	95	1,193	0	0	17	0	-	4,791
1	2	2	0	7	0	0	5	0	-	70
172	735	436	39	1,632	1	74	500	0	-	15,806
13	43	28	116	91	16	133	9	-	-	1,303
4	10	24	0	60	0	121	6	0	-	581
2	20	4	0	90	0	4	47	0	-	249
43	29	158	3	1,138	0	2	22	0	-	2,355
275	140	105	5	5	0	0	0	-	-	3,108
<b>36,275</b>	<b>218,084</b>	<b>106,522</b>	<b>34,983</b>	<b>2,633,223</b>	<b>72,791</b>	<b>953,890</b>	<b>1,170,297</b>	<b>(2,550)</b>	<b>860,935</b>	<b>9,933,944</b>
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
168,132	332,781	209,019	4,134	-	-	-	-	-	-	4,872,056
-	-	-	-	-	-	-	-	-	-	-
<b>204,407</b>	<b>550,865</b>	<b>315,541</b>	<b>39,117</b>	<b>2,633,223</b>	<b>72,791</b>	<b>953,890</b>	<b>1,170,297</b>	<b>(2,550)</b>	<b>860,935</b>	<b>14,805,999</b>

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi-Regional Input–Output Database.

# A3

## APPENDIX 3: INPUT-OUTPUT TABLES FOR 2010 AND 2017—MONGOLIA



**Table A3.1: Mongolia Input–Output Table, 2010** (current prices, \$ million)

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	147	3	362	106	15	1	0
Mining and quarrying	c2	22	197	7	2	0	1	2
Food, beverages, and tobacco	c3	7	2	69	0	0	0	0
Textiles and textile products	c4	0	3	1	29	1	0	0
Leather, leather products, and footwear	c5	0	0	0	2	2	0	0
Wood and products of wood and cork	c6	0	1	0	0	0	6	0
Pulp, paper, paper products, printing, and publishing	c7	0	2	5	0	0	0	5
Coke, refined petroleum, and nuclear fuel	c8	1	5	0	0	0	0	0
Chemicals and chemical products	c9	2	8	1	0	0	0	1
Rubber and plastics	c10	0	2	1	0	0	0	0
Other nonmetallic minerals	c11	0	4	6	0	0	0	0
Basic metals and fabricated metal	c12	1	12	0	0	0	0	0
Machinery, nec	c13	1	2	0	0	0	0	0
Electrical and optical equipment	c14	0	1	0	0	0	0	0
Transport equipment	c15	0	0	0	0	0	0	0
Manufacturing, nec; recycling	c16	2	0	0	0	0	1	0
Electricity, gas, and water supply	c17	13	44	3	1	0	0	1
Construction	c18	1	191	3	1	0	0	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	3	6	5	2	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	25	54	50	17	2	1	2
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	19	41	39	13	2	1	1
Hotels and restaurants	c22	0	22	1	0	0	0	1
Inland transport	c23	13	68	7	2	1	1	1
Water transport	c24	0	0	0	0	0	0	0
Air transport	c25	0	7	0	0	0	0	0
Other supporting and auxiliary transport activities; activities of travel agencies	c26	3	11	1	0	0	0	0
Post and telecommunications	c27	1	11	2	0	0	0	0
Financial intermediation	c28	21	61	5	2	1	2	0
Real estate activities	c29	1	7	1	1	0	1	2
Renting of M&Eq and other business activities	c30	18	54	4	1	0	0	2
Public administration and defense; compulsory social security	c31	0	9	8	0	0	0	0
Education	c32	0	5	0	0	0	0	0
Health and social work	c33	0	4	1	0	0	0	0
Other community, social, and personal services	c34	1	6	1	0	0	0	0
Private households with employed persons	c35	–	–	–	–	–	–	–

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Table A3.1 Domestic Industry *continued*

Industry		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
		c8	c9	c10	c11	c12	c13	c14
Domestic								
Agriculture, hunting, forestry, and fishing	c1	0	0	0	0	2	0	0
Mining and quarrying	c2	0	1	0	6	20	2	0
Food, beverages, and tobacco	c3	0	0	0	0	0	0	0
Textiles and textile products	c4	0	0	0	0	0	0	0
Leather, leather products, and footwear	c5	0	0	0	0	0	0	0
Wood and products of wood and cork	c6	0	0	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	c7	0	0	0	0	0	0	0
Coke, refined petroleum, and nuclear fuel	c8	0	0	0	0	0	0	0
Chemicals and chemical products	c9	0	1	0	0	1	0	0
Rubber and plastics	c10	0	0	1	0	0	0	0
Other nonmetallic minerals	c11	0	0	0	7	1	0	0
Basic metals and fabricated metal	c12	0	0	0	1	8	0	0
Machinery, nec	c13	0	0	0	0	0	0	0
Electrical and optical equipment	c14	0	0	0	0	0	0	0
Transport equipment	c15	0	0	0	0	0	0	0
Manufacturing, nec; recycling	c16	0	0	0	0	0	0	0
Electricity, gas, and water supply	c17	0	0	0	3	1	1	0
Construction	c18	0	0	0	1	1	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	0	0	0	0	1	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	1	1	1	3	5	0	1
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	1	1	1	2	4	0	0
Hotels and restaurants	c22	0	0	0	0	0	0	0
Inland transport	c23	2	0	0	1	1	0	0
Water transport	c24	0	0	0	0	0	0	0
Air transport	c25	0	0	0	0	0	0	0
Other supporting and auxiliary transport activities; activities of travel agencies	c26	0	0	0	0	0	0	0
Post and telecommunications	c27	0	0	0	1	0	0	0
Financial intermediation	c28	0	0	0	2	1	0	0
Real estate activities	c29	0	0	0	1	1	0	0
Renting of M&Eq and other business activities	c30	0	0	0	1	2	1	0
Public administration and defense; compulsory social security	c31	0	1	0	1	0	0	0
Education	c32	0	0	0	0	0	0	0
Health and social work	c33	0	0	0	0	0	0	0
Other community, social, and personal services	c34	0	0	0	0	0	0	0
Private households with employed persons	c35	-	-	-	-	-	-	-

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Table A3.1 Domestic Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Domestic</b>											
–	0	1	7	0	0	0	8	0	0	0	0
0	1	64	101	3	25	14	6	10	0	5	3
0	0	0	0	0	1	1	36	0	0	0	0
0	0	1	4	0	2	4	1	1	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
–	1	0	15	0	3	2	0	1	0	0	0
0	0	0	1	0	1	0	0	0	0	0	0
–	0	0	1	0	0	0	0	4	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0
–	0	0	2	0	2	1	0	0	0	0	0
0	0	3	70	0	0	0	0	0	0	0	0
0	0	2	26	0	1	1	0	0	0	0	0
0	0	0	1	0	1	0	0	0	0	0	0
0	0	0	1	0	0	0	0	0	0	0	0
–	0	0	0	0	0	0	0	0	0	0	0
0	0	0	3	0	0	0	0	0	0	0	0
0	0	217	9	2	12	7	3	6	0	3	2
0	0	2	57	1	5	2	3	1	0	0	0
0	0	1	4	0	1	1	1	2	0	0	0
0	0	9	42	1	5	6	8	19	0	2	1
0	0	7	26	1	6	4	6	14	0	2	1
0	0	0	3	2	4	5	1	2	0	1	0
0	0	6	13	6	58	50	3	57	0	1	64
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	11	0
0	0	1	5	2	9	10	1	4	0	1	1
0	0	0	13	4	23	24	1	7	0	2	0
–	0	6	12	6	12	23	1	15	–	2	0
0	0	0	5	3	5	7	6	1	0	1	1
0	0	10	9	2	17	11	4	8	0	4	3
–	0	4	28	1	1	4	5	5	0	1	1
0	0	0	2	0	1	1	1	0	0	0	0
0	0	0	3	0	1	0	0	3	0	0	0
0	0	5	4	0	2	1	1	1	0	0	0
–	–	–	–	–	–	–	–	–	–	–	–

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Table A3.1 Domestic Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Domestic						
Agriculture, hunting, forestry, and fishing	c1	0	0	2	2	2
Mining and quarrying	c2	6	11	18	27	21
Food, beverages, and tobacco	c3	1	0	0	2	4
Textiles and textile products	c4	0	1	3	4	4
Leather, leather products, and footwear	c5	0	0	0	0	0
Wood and products of wood and cork	c6	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	c7	0	2	0	3	2
Coke, refined petroleum, and nuclear fuel	c8	0	0	0	0	0
Chemicals and chemical products	c9	0	0	0	1	2
Rubber and plastics	c10	0	0	0	1	0
Other nonmetallic minerals	c11	0	0	1	1	0
Basic metals and fabricated metal	c12	0	0	2	3	0
Machinery, nec	c13	0	0	0	1	1
Electrical and optical equipment	c14	1	0	0	0	0
Transport equipment	c15	0	0	0	0	0
Manufacturing, nec; recycling	c16	0	0	0	0	0
Electricity, gas, and water supply	c17	3	6	5	12	12
Construction	c18	1	1	14	3	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	0	0	1	1	1
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	4	2	5	8	7
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	2	1	3	6	5
Hotels and restaurants	c22	1	3	1	4	4
Inland transport	c23	7	2	1	7	2
Water transport	c24	0	0	0	0	0
Air transport	c25	0	0	1	5	4
Other supporting and auxiliary transport activities; activities of travel agencies	c26	6	3	3	6	9
Post and telecommunications	c27	19	7	3	12	25
Financial intermediation	c28	2	10	4	15	1
Real estate activities	c29	14	12	52	12	2
Renting of M&Eq and other business activities	c30	5	9	9	16	17
Public administration and defense; compulsory social security	c31	4	1	2	8	6
Education	c32	2	1	2	1	6
Health and social work	c33	1	0	0	1	1
Other community, social, and personal services	c34	1	1	1	3	3
Private households with employed persons	c35	–	–	–	–	–

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Table A3.1 Domestic Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Domestic</b>										
5	1	1	–	293	0	0	12	210	104	<b>1,287</b>
15	7	7	–	39	0	15	466	(81)	1,994	<b>3,036</b>
16	4	1	–	708	0	0	0	88	37	<b>979</b>
6	3	2	–	95	0	0	0	45	48	<b>257</b>
0	0	0	–	13	0	0	0	5	15	<b>38</b>
0	0	0	–	2	0	0	0	4	1	<b>38</b>
2	0	1	–	18	0	0	5	2	1	<b>54</b>
0	0	0	–	3	–	–	–	0	0	<b>16</b>
0	2	0	–	4	0	0	0	1	0	<b>28</b>
0	0	0	–	1	0	0	0	3	0	<b>16</b>
0	0	0	–	5	0	0	4	(5)	6	<b>106</b>
0	0	0	–	1	0	0	2	16	50	<b>127</b>
0	0	0	–	1	0	0	5	0	1	<b>18</b>
0	0	0	–	0	0	0	5	0	0	<b>10</b>
0	0	0	–	0	–	–	0	(0)	–	<b>0</b>
0	0	0	–	1	–	0	1	1	0	<b>12</b>
9	4	4	–	30	5	34	87	0	9	<b>548</b>
2	1	1	–	13	0	0	648	1	14	<b>972</b>
1	1	0	–	21	0	0	9	1	24	<b>88</b>
6	5	2	–	201	0	1	71	6	225	<b>798</b>
5	3	1	–	141	0	0	53	5	175	<b>593</b>
0	1	1	–	56	0	0	1	0	57	<b>173</b>
1	1	2	–	365	0	0	11	1	79	<b>834</b>
0	0	0	–	0	–	–	0	0	0	<b>0</b>
0	0	0	–	1	–	–	0	0	69	<b>100</b>
3	2	1	–	41	0	2	16	0	4	<b>147</b>
4	4	2	–	95	0	0	1	0	6	<b>270</b>
0	1	1	–	52	–	–	–	(0)	12	<b>273</b>
3	4	4	–	506	0	11	1	0	1	<b>667</b>
12	5	5	–	44	1	11	124	0	15	<b>427</b>
8	9	1	–	35	–	383	–	(0)	–	<b>527</b>
1	1	2	–	142	5	239	0	0	4	<b>416</b>
0	0	0	–	42	9	155	1	0	1	<b>226</b>
1	1	1	–	32	22	22	8	0	1	<b>124</b>
–	–	–	0	0	–	–	–	–	–	<b>0</b>

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Table A3.1 Import Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	20	1	15	4	1	0	0
Mining and quarrying	m2	4	31	1	0	0	0	1
Food, beverages, and tobacco	m3	2	1	21	0	0	0	0
Textiles and textile products	m4	0	2	0	19	1	0	0
Leather, leather products, and footwear	m5	0	0	0	1	1	0	0
Wood and products of wood and cork	m6	0	0	0	0	0	2	0
Pulp, paper, paper products, printing, and publishing	m7	0	2	6	0	0	0	6
Coke, refined petroleum, and nuclear fuel	m8	50	202	5	0	0	0	1
Chemicals and chemical products	m9	12	51	3	1	0	0	3
Rubber and plastics	m10	1	14	9	0	0	0	1
Other nonmetallic minerals	m11	0	3	6	0	0	0	0
Basic metals and fabricated metal	m12	1	10	1	0	0	0	0
Machinery, nec	m13	5	104	6	2	0	1	1
Electrical and optical equipment	m14	0	21	1	0	0	0	0
Transport equipment	m15	9	48	1	0	0	1	0
Manufacturing, nec; recycling	m16	2	2	0	0	0	0	0
Electricity, gas, and water supply	m17	2	12	2	0	0	0	0
Construction	m18	0	2	2	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	0	0	0	0	0	0
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	0	0	0	0	0	0
Hotels and restaurants	m22	0	8	0	0	0	0	0
Inland transport	m23	2	8	2	0	0	0	0
Water transport	m24	0	0	0	0	0	0	0
Air transport	m25	0	2	0	0	0	0	0
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	1	0	0	0	0	0
Post and telecommunications	m27	0	1	0	0	0	0	0
Financial intermediation	m28	3	9	1	0	0	0	0
Real estate activities	m29	0	0	0	0	0	0	0
Renting of M&Eq and other business activities	m30	2	8	1	0	0	0	0
Public administration and defense; compulsory social security	m31	–	–	–	–	–	–	–
Education	m32	0	1	0	0	0	0	0
Health and social work	m33	0	0	0	0	0	0	0
Other community, social, and personal services	m34	0	0	0	0	0	0	0
Private households with employed persons	m35	–	–	–	–	–	–	–
Total intermediate consumption	r60	421	1,392	666	211	28	24	35
Taxes less subsidies on products	r99	22	95	21	2	0	1	2
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	844	1,549	292	44	10	13	17
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	1,287	3,036	979	257	38	38	54

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Table A3.1 Import Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Imports</b>												
0	0	0	0	1	0	0	–	0	0	6	0	0
0	1	0	1	11	0	0	0	0	4	34	1	4
0	0	0	0	0	0	0	–	0	0	0	0	0
0	0	0	0	0	0	0	–	0	1	3	0	1
0	0	0	0	0	0	0	–	0	0	0	0	0
0	0	0	0	0	0	0	–	0	0	6	0	1
0	0	1	0	0	0	0	–	0	0	2	0	1
7	0	0	5	4	1	1	–	0	13	38	3	17
0	8	3	1	4	0	2	–	0	2	5	0	0
0	0	3	2	1	0	0	–	0	1	10	2	10
0	0	0	8	1	0	0	0	0	1	75	0	0
0	0	0	1	5	0	0	–	0	1	17	0	1
0	0	0	0	2	0	0	–	0	9	15	1	7
0	0	0	0	1	1	1	–	0	2	12	0	3
0	0	0	1	1	1	0	0	0	4	19	2	15
0	0	0	0	0	0	0	–	0	0	3	0	0
0	0	0	0	0	0	0	0	0	13	2	0	2
0	0	0	1	0	0	0	0	0	0	10	0	0
0	0	0	0	0	0	0	–	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	–	0	0	1	1	2
0	0	0	0	0	0	0	0	0	1	2	0	7
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	–	0	0	1	0	2
0	0	0	0	0	0	0	–	0	1	2	1	2
0	0	0	0	0	0	0	–	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	2	0	2
–	–	–	–	–	–	–	–	–	–	–	–	–
0	0	0	0	0	0	0	–	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
–	–	–	–	–	–	–	–	–	–	–	–	–
<b>11</b>	<b>17</b>	<b>12</b>	<b>53</b>	<b>83</b>	<b>11</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>400</b>	<b>737</b>	<b>47</b>	<b>279</b>
2	1	1	3	5	1	1	0	0	(15)	51	2	17
–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–
3	10	3	50	39	7	2	–	4	163	184	38	501
–	–	–	–	–	–	–	–	–	–	–	–	–
<b>16</b>	<b>28</b>	<b>16</b>	<b>106</b>	<b>127</b>	<b>18</b>	<b>10</b>	<b>0</b>	<b>12</b>	<b>548</b>	<b>972</b>	<b>88</b>	<b>798</b>

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Table A3.1 Import Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Imports							
Agriculture, hunting, forestry, and fishing	m1	0	1	0	0	0	0
Mining and quarrying	m2	2	1	4	0	1	1
Food, beverages, and tobacco	m3	0	11	0	0	0	0
Textiles and textile products	m4	3	0	1	0	0	0
Leather, leather products, and footwear	m5	0	0	0	0	0	0
Wood and products of wood and cork	m6	1	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	m7	1	0	0	0	0	0
Coke, refined petroleum, and nuclear fuel	m8	16	5	158	0	15	6
Chemicals and chemical products	m9	0	2	0	0	0	0
Rubber and plastics	m10	5	1	2	0	0	0
Other nonmetallic minerals	m11	0	0	0	0	0	0
Basic metals and fabricated metal	m12	1	0	0	0	0	0
Machinery, nec	m13	1	1	0	0	1	0
Electrical and optical equipment	m14	2	1	1	0	1	0
Transport equipment	m15	9	2	25	0	2	0
Manufacturing, nec; recycling	m16	0	0	0	0	0	0
Electricity, gas, and water supply	m17	1	0	1	0	0	0
Construction	m18	0	0	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	0	0	0	0	0
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	0	0	0	0	0
Hotels and restaurants	m22	2	1	1	0	0	0
Inland transport	m23	4	0	6	0	0	9
Water transport	m24	0	0	0	0	0	0
Air transport	m25	0	0	0	0	4	0
Other supporting and auxiliary transport activities; activities of travel agencies	m26	1	0	0	0	0	0
Post and telecommunications	m27	2	0	1	0	0	0
Financial intermediation	m28	3	0	2	–	0	0
Real estate activities	m29	0	0	0	0	0	0
Renting of M&Eq and other business activities	m30	1	1	1	0	1	0
Public administration and defense; compulsory social security	m31	–	–	–	–	–	–
Education	m32	0	0	0	0	0	0
Health and social work	m33	0	0	0	0	0	0
Other community, social, and personal services	m34	0	0	0	0	0	0
Private households with employed persons	m35	–	–	–	–	–	–
Total intermediate consumption	r60	239	125	367	0	64	97
Taxes less subsidies on products	r99	10	9	45	0	4	3
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–
Value added at basic prices	r64	344	39	421	0	31	47
International transport margins		–	–	–	–	–	–
Output at basic prices	r69	593	173	834	0	100	147

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Table A3.1 Import Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Imports</b>										
0	0	2	2	1	1	0	0	–	21	0
1	2	3	7	4	2	2	1	–	15	0
0	0	0	1	1	5	1	0	–	199	0
0	1	2	3	2	4	2	1	–	66	0
0	0	0	0	0	0	0	0	–	6	0
0	0	0	0	0	0	0	0	–	1	0
0	2	0	3	2	2	0	1	–	23	0
1	2	2	7	13	4	4	1	–	140	–
0	1	1	5	15	3	11	1	–	28	0
1	0	0	3	0	2	1	1	–	6	0
0	0	1	1	0	0	0	0	–	4	0
2	0	1	3	0	0	1	1	–	1	0
2	1	2	5	4	1	1	3	–	16	0
19	2	4	5	0	0	4	2	–	5	0
0	2	2	10	7	1	4	0	–	72	–
1	0	0	1	0	0	0	0	–	1	–
0	1	1	2	2	1	0	1	–	3	0
0	0	0	0	0	0	0	0	–	1	0
0	0	0	0	0	0	0	0	–	0	0
0	0	0	0	0	0	0	0	–	0	0
0	0	0	0	0	0	0	0	–	1	0
0	1	0	1	2	0	1	0	–	20	0
1	0	0	1	0	0	0	0	–	50	0
0	0	0	0	0	0	0	0	–	0	–
0	0	0	2	1	0	0	0	–	0	–
1	0	0	1	1	0	0	0	–	3	0
2	1	0	1	2	0	0	0	–	11	0
0	2	1	2	0	0	0	0	–	8	–
0	0	0	0	0	0	0	0	–	0	0
2	1	1	2	2	1	1	1	–	3	0
–	–	–	–	–	–	–	–	–	–	–
0	0	0	0	1	0	0	0	–	16	1
0	0	0	0	0	0	0	0	–	1	0
0	0	0	0	0	0	0	0	–	0	0
–	–	–	–	–	–	–	–	–	–	–
<b>117</b>	<b>94</b>	<b>157</b>	<b>234</b>	<b>204</b>	<b>130</b>	<b>97</b>	<b>56</b>	<b>0</b>	<b>3,723</b>	<b>43</b>
4	2	3	10	10	6	6	2	–	204	0
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	158	–
–	–	–	–	–	–	–	–	–	(165)	–
149	177	507	183	313	280	123	66	0	–	–
–	–	–	–	–	–	–	–	–	–	–
<b>270</b>	<b>273</b>	<b>667</b>	<b>427</b>	<b>527</b>	<b>416</b>	<b>226</b>	<b>124</b>	<b>0</b>	<b>3,920</b>	<b>44</b>

*continued on next page*

Table A3.1 Import Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	9	13	–	99
Mining and quarrying	m2	0	17	23	–	181
Food, beverages, and tobacco	m3	0	0	32	–	276
Textiles and textile products	m4	0	0	30	–	143
Leather, leather products, and footwear	m5	0	0	3	–	12
Wood and products of wood and cork	m6	0	0	1	–	14
Pulp, paper, paper products, printing, and publishing	m7	0	3	3	–	60
Coke, refined petroleum, and nuclear fuel	m8	–	–	2	–	726
Chemicals and chemical products	m9	0	0	3	–	166
Rubber and plastics	m10	0	0	15	–	90
Other nonmetallic minerals	m11	0	0	(4)	–	98
Basic metals and fabricated metal	m12	0	14	11	–	73
Machinery, nec	m13	0	287	27	–	506
Electrical and optical equipment	m14	0	103	6	–	198
Transport equipment	m15	–	312	39	–	589
Manufacturing, nec; recycling	m16	–	8	1	–	21
Electricity, gas, and water supply	m17	0	29	3	–	80
Construction	m18	0	3	0	–	23
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	–	–	1
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	0	0	–	2
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	1	0	–	3
Hotels and restaurants	m22	0	0	0	–	42
Inland transport	m23	0	2	0	–	97
Water transport	m24	–	0	0	–	0
Air transport	m25	–	0	0	–	11
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	2	0	–	13
Post and telecommunications	m27	0	0	–	–	27
Financial intermediation	m28	–	–	–	–	39
Real estate activities	m29	0	0	0	–	0
Renting of M&Eq and other business activities	m30	0	22	1	–	59
Public administration and defense; compulsory social security	m31	–	–	–	–	–
Education	m32	3	0	0	–	23
Health and social work	m33	0	0	0	–	2
Other community, social, and personal services	m34	0	1	0	–	3
Private households with employed persons	m35	–	–	–	–	–
Total intermediate consumption	r60	879	2,346	512	2,955	16,879
Taxes less subsidies on products	r99	4	133	35	–	705
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	158
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	(165)
Value added at basic prices	r64	–	–	–	–	6,454
International transport margins		–	–	–	–	–
Output at basic prices	r69	883	2,479	546	2,955	24,031

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi–Regional Input–Output Database.

**Table A3.2: Mongolia Input–Output Table, 2017** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	74	5	626	30	15	10	0
Mining and quarrying	c2	7	169	8	1	0	1	1
Food, beverages, and tobacco	c3	14	7	122	0	0	0	0
Textiles and textile products	c4	1	6	1	41	1	0	0
Leather, leather products, and footwear	c5	0	1	0	3	1	0	0
Wood and products of wood and cork	c6	1	1	0	0	0	7	0
Pulp, paper, paper products, printing, and publishing	c7	1	6	19	0	0	0	7
Coke, refined petroleum, and nuclear fuel	c8	2	16	1	0	0	0	0
Chemicals and chemical products	c9	4	16	2	1	0	0	1
Rubber and plastics	c10	0	4	4	0	0	0	0
Other nonmetallic minerals	c11	0	10	16	0	0	1	0
Basic metals and fabricated metal	c12	0	27	1	0	0	0	0
Machinery, nec	c13	1	8	0	0	0	0	0
Electrical and optical equipment	c14	0	3	0	0	0	0	0
Transport equipment	c15	0	0	0	0	0	0	0
Manufacturing, nec; recycling	c16	2	2	0	0	0	0	0
Electricity, gas, and water supply	c17	10	219	4	2	0	0	1
Construction	c18	20	181	6	1	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	3	17	12	2	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	19	104	83	13	2	3	3
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	14	77	62	10	2	2	2
Hotels and restaurants	c22	0	18	1	0	0	0	1
Inland transport	c23	39	177	15	3	0	1	1
Water transport	c24	0	0	0	0	0	0	0
Air transport	c25	0	18	0	0	0	0	0
Other supporting and auxiliary transport activities; activities of travel agencies	c26	7	39	2	1	0	0	1
Post and telecommunications	c27	9	30	3	0	0	0	0
Financial intermediation	c28	108	240	20	2	0	1	2
Real estate activities	c29	3	37	2	1	0	0	2
Renting of M&Eq and other business activities	c30	26	178	7	4	0	1	2
Public administration and defense; compulsory social security	c31	0	14	14	0	0	0	0
Education	c32	0	3	0	0	0	0	0
Health and social work	c33	0	6	2	0	0	0	0
Other community, social, and personal services	c34	4	31	1	1	0	0	0
Private households with employed persons	c35	-	-	-	-	-	-	-

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Table A3.2 Domestic Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Domestic								
Agriculture, hunting, forestry, and fishing	c1	0	0	0	0	1	0	0
Mining and quarrying	c2	42	1	0	9	30	1	1
Food, beverages, and tobacco	c3	0	0	0	2	1	0	0
Textiles and textile products	c4	0	0	0	0	0	0	0
Leather, leather products, and footwear	c5	0	0	0	0	0	0	0
Wood and products of wood and cork	c6	0	0	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	c7	0	0	0	0	0	0	0
Coke, refined petroleum, and nuclear fuel	c8	0	0	0	0	1	0	0
Chemicals and chemical products	c9	0	3	1	0	1	0	0
Rubber and plastics	c10	0	0	0	0	0	0	0
Other nonmetallic minerals	c11	0	0	0	16	1	0	0
Basic metals and fabricated metal	c12	0	0	0	1	6	0	0
Machinery, nec	c13	0	0	0	0	0	0	0
Electrical and optical equipment	c14	0	0	0	0	0	0	0
Transport equipment	c15	0	0	0	0	0	0	0
Manufacturing, nec; recycling	c16	0	0	0	0	0	0	0
Electricity, gas, and water supply	c17	1	1	1	3	1	0	0
Construction	c18	0	0	0	3	1	1	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	0	0	0	1	1	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	2	2	1	6	8	2	1
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	1	2	1	4	6	1	1
Hotels and restaurants	c22	1	1	0	1	0	0	0
Inland transport	c23	1	1	0	2	2	1	0
Water transport	c24	0	0	0	0	0	0	0
Air transport	c25	0	0	0	0	0	0	0
Other supporting and auxiliary transport activities; activities of travel agencies	c26	0	0	0	1	1	0	0
Post and telecommunications	c27	0	0	0	1	0	0	0
Financial intermediation	c28	2	0	0	7	2	1	0
Real estate activities	c29	1	1	0	2	1	1	1
Renting of M&Eq and other business activities	c30	1	2	2	3	4	1	0
Public administration and defense; compulsory social security	c31	0	1	0	1	0	0	0
Education	c32	0	0	0	0	0	0	0
Health and social work	c33	0	0	0	0	0	0	0
Other community, social, and personal services	c34	0	0	0	2	1	0	0
Private households with employed persons	c35	–	–	–	–	–	–	–

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Table A3.2 Domestic Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Domestic</b>											
0	0	2	5	0	1	0	9	0	0	0	0
0	1	39	121	1	9	3	1	3	0	1	2
0	0	1	1	0	15	0	50	0	0	0	0
0	0	1	4	0	3	2	0	0	0	0	0
0	0	0	0	0	1	0	0	0	0	0	0
0	2	1	18	0	0	0	0	0	0	0	0
0	0	0	4	0	3	1	0	1	0	0	0
0	0	1	3	0	2	1	0	13	–	1	2
0	0	0	3	0	0	0	1	0	0	0	0
0	0	0	4	0	3	0	0	0	0	0	0
0	0	2	92	0	1	0	0	0	0	0	0
0	0	2	23	0	1	0	0	0	0	0	0
0	0	0	2	0	1	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	3	0	0	0	0	0	0	0	0
0	0	204	16	1	11	5	2	4	0	2	3
0	0	4	187	1	7	2	1	2	0	0	1
0	0	1	9	0	2	1	1	5	0	1	1
0	1	8	61	1	14	6	7	37	0	3	8
0	1	6	45	1	10	4	5	27	0	2	6
0	0	2	5	2	9	5	1	3	0	1	0
0	1	7	30	10	47	36	3	36	0	2	19
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	0	4	3	0	1	0	17	0
0	0	2	11	2	16	15	2	6	0	2	2
0	0	2	16	4	36	28	1	12	0	4	4
0	1	14	33	8	23	23	2	19	–	3	2
0	1	3	7	5	9	32	4	3	0	1	1
0	1	9	38	2	26	13	6	10	0	7	7
0	0	4	14	0	2	2	1	1	0	1	0
0	0	0	1	0	1	0	0	0	0	0	0
0	0	0	5	0	5	0	0	2	0	1	0
0	0	6	11	0	6	2	2	2	0	1	1
–	–	–	–	–	–	–	–	–	–	–	–

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Table A3.2 Domestic Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Domestic						
Agriculture, hunting, forestry, and fishing	c1	0	0	1	1	4
Mining and quarrying	c2	3	3	6	16	12
Food, beverages, and tobacco	c3	0	1	0	7	4
Textiles and textile products	c4	0	1	0	1	0
Leather, leather products, and footwear	c5	0	0	0	0	0
Wood and products of wood and cork	c6	0	0	0	1	1
Pulp, paper, paper products, printing, and publishing	c7	0	4	1	2	2
Coke, refined petroleum, and nuclear fuel	c8	0	1	0	1	2
Chemicals and chemical products	c9	0	0	0	1	1
Rubber and plastics	c10	0	0	0	0	0
Other nonmetallic minerals	c11	0	0	0	2	0
Basic metals and fabricated metal	c12	1	0	1	2	0
Machinery, nec	c13	0	0	0	1	0
Electrical and optical equipment	c14	3	0	0	1	0
Transport equipment	c15	0	0	0	0	0
Manufacturing, nec; recycling	c16	1	0	1	1	1
Electricity, gas, and water supply	c17	4	5	5	20	21
Construction	c18	1	1	27	4	4
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	1	1	1	3	2
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	9	4	5	13	8
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	6	3	3	9	5
Hotels and restaurants	c22	3	5	0	11	3
Inland transport	c23	4	9	6	31	2
Water transport	c24	0	0	0	0	0
Air transport	c25	0	1	2	6	6
Other supporting and auxiliary transport activities; activities of travel agencies	c26	6	6	4	14	10
Post and telecommunications	c27	16	14	3	22	6
Financial intermediation	c28	5	17	7	30	2
Real estate activities	c29	10	14	44	15	19
Renting of M&Eq and other business activities	c30	12	14	13	54	56
Public administration and defense; compulsory social security	c31	4	2	1	4	1
Education	c32	1	1	0	1	1
Health and social work	c33	1	0	0	0	0
Other community, social, and personal services	c34	2	2	2	9	9
Private households with employed persons	c35	–	–	–	–	–

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Table A3.2 Domestic Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Domestic</b>										
6	1	1	0	259	–	0	419	41	246	<b>1,760</b>
4	2	3	0	30	0	9	156	189	4,278	<b>5,165</b>
17	4	5	0	1,290	–	0	1	204	43	<b>1,790</b>
3	0	1	0	127	–	0	1	91	49	<b>337</b>
0	0	0	0	15	–	0	0	5	9	<b>37</b>
0	0	0	0	4	–	0	2	14	3	<b>61</b>
1	0	1	0	24	–	0	2	(2)	1	<b>82</b>
0	1	0	–	9	–	–	–	11	6	<b>77</b>
1	6	0	0	11	–	0	0	11	0	<b>68</b>
0	0	0	0	2	–	0	0	0	0	<b>22</b>
0	0	0	0	8	–	0	4	10	8	<b>176</b>
0	0	0	0	2	–	0	15	25	104	<b>214</b>
0	0	0	0	1	–	0	13	6	3	<b>39</b>
0	1	1	0	1	–	0	6	11	0	<b>31</b>
0	0	0	0	1	–	0	0	(0)	0	<b>3</b>
0	0	0	0	5	–	0	7	7	3	<b>37</b>
5	2	11	0	44	6	44	16	0	33	<b>708</b>
5	1	2	0	17	0	0	1,097	5	52	<b>1,637</b>
1	1	1	0	35	–	0	14	2	37	<b>159</b>
6	8	4	0	253	–	0	98	14	261	<b>1,078</b>
4	7	3	0	178	–	0	71	12	190	<b>784</b>
3	1	5	0	91	0	1	1	0	57	<b>234</b>
16	2	4	0	194	0	0	13	2	162	<b>876</b>
0	0	0	0	0	–	–	0	0	0	<b>0</b>
0	0	1	0	41	–	0	0	0	52	<b>157</b>
3	1	3	0	78	–	3	6	0	22	<b>267</b>
4	1	4	0	169	–	0	0	0	14	<b>404</b>
4	1	3	0	96	–	3	–	0	16	<b>697</b>
3	1	4	0	528	–	1	0	0	114	<b>872</b>
14	6	13	0	82	1	21	45	9	88	<b>780</b>
4	3	1	0	23	0	634	0	0	–	<b>733</b>
1	0	1	0	221	7	351	0	(0)	10	<b>600</b>
0	4	1	0	109	0	204	0	0	4	<b>345</b>
2	2	29	0	65	23	59	6	(0)	28	<b>309</b>
–	–	–	0	2	–	–	–	0	–	<b>2</b>

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Table A3.2 Imports Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	8	1	20	3	0	0	0
Mining and quarrying	m2	2	78	2	1	0	1	1
Food, beverages, and tobacco	m3	4	1	40	0	0	0	0
Textiles and textile products	m4	0	6	2	46	1	0	0
Leather, leather products, and footwear	m5	0	2	0	3	1	0	0
Wood and products of wood and cork	m6	1	3	0	0	0	8	0
Pulp, paper, paper products, printing, and publishing	m7	1	4	24	1	0	0	8
Coke, refined petroleum, and nuclear fuel	m8	31	174	13	3	0	0	1
Chemicals and chemical products	m9	22	69	11	4	1	0	4
Rubber and plastics	m10	4	25	27	1	0	0	0
Other nonmetallic minerals	m11	0	10	19	0	0	1	0
Basic metals and fabricated metal	m12	0	25	1	0	0	0	0
Machinery, nec	m13	7	137	6	2	0	0	1
Electrical and optical equipment	m14	0	51	1	0	0	0	1
Transport equipment	m15	0	29	1	0	0	0	0
Manufacturing, nec; recycling	m16	2	6	0	1	0	1	0
Electricity, gas, and water supply	m17	2	38	1	0	0	0	0
Construction	m18	1	27	2	0	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	10	2	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	2	0	0	0	0	0
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	1	3	1	0	0	0	0
Hotels and restaurants	m22	2	9	1	1	0	0	1
Inland transport	m23	2	17	2	1	0	0	0
Water transport	m24	1	6	1	0	0	0	0
Air transport	m25	0	1	0	0	0	0	0
Other supporting and auxiliary transport activities; activities of travel agencies	m26	1	7	0	0	0	0	0
Post and telecommunications	m27	1	4	0	0	0	0	0
Financial intermediation	m28	21	30	3	1	0	0	0
Real estate activities	m29	5	6	1	0	0	0	0
Renting of M&Eq and other business activities	m30	6	61	3	2	0	0	1
Public administration and defense; compulsory social security	m31	2	13	0	1	0	0	0
Education	m32	0	1	0	0	0	0	0
Health and social work	m33	0	1	0	0	0	0	0
Other community, social, and personal services	m34	1	6	0	0	0	0	0
Private households with employed persons	m35	0	3	0	0	0	0	0
Total intermediate consumption	r60	500	2,538	1,222	189	29	41	48
Taxes less subsidies on products	r99	25	115	34	5	1	2	3
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	1,235	2,512	535	142	8	19	30
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	1,760	5,165	1,790	337	37	61	82

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Table A3.2 Imports Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Imports</b>												
0	0	0	0	0	0	0	0	0	1	2	0	0
0	1	0	1	13	1	1	0	0	7	52	0	4
0	0	0	0	0	0	0	0	0	0	5	0	1
0	0	0	0	0	0	0	0	0	1	2	0	2
0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	2	0	14	0	0
0	0	0	0	0	0	0	0	0	0	3	0	3
2	0	0	7	6	3	2	0	1	14	45	3	31
1	14	3	1	3	0	0	0	1	1	9	1	2
0	0	2	2	1	0	0	0	0	1	16	1	14
0	0	0	15	1	0	0	0	0	2	81	0	1
0	0	0	1	5	0	1	0	0	2	23	0	1
1	0	0	0	2	1	1	0	0	1	24	1	17
1	0	0	1	0	2	4	0	0	2	25	0	3
0	0	0	0	0	4	0	0	0	0	17	1	6
0	0	0	0	0	0	0	0	0	1	5	0	1
0	0	0	1	0	0	0	0	0	63	3	0	2
0	0	0	1	0	0	0	0	0	7	8	0	2
0	0	0	1	0	0	0	0	0	0	12	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0
0	1	0	0	0	0	0	0	0	0	1	0	1
0	0	0	0	0	0	0	0	0	0	4	1	4
0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	2	0	3
0	0	0	0	0	0	0	0	0	0	2	0	4
0	0	0	1	0	0	0	0	0	2	5	1	5
0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	0	1	1	1	0	0	0	2	14	1	10
0	0	0	0	0	0	0	0	0	0	1	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0
0	0	0	0	0	0	0	0	0	0	1	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0
<b>60</b>	<b>38</b>	<b>15</b>	<b>103</b>	<b>107</b>	<b>25</b>	<b>16</b>	<b>2</b>	<b>20</b>	<b>436</b>	<b>1,156</b>	<b>55</b>	<b>391</b>
0	3	1	7	8	2	2	0	1	15	82	2	23
–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–	–
16	27	5	66	99	12	13	1	16	257	400	102	664
–	–	–	–	–	–	–	–	–	–	–	–	–
<b>77</b>	<b>68</b>	<b>22</b>	<b>176</b>	<b>214</b>	<b>39</b>	<b>31</b>	<b>3</b>	<b>37</b>	<b>708</b>	<b>1,637</b>	<b>159</b>	<b>1,078</b>

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Table A3.2 Imports Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Imports							
Agriculture, hunting, forestry, and fishing	m1	0	0	0	0	0	0
Mining and quarrying	m2	1	1	2	0	0	1
Food, beverages, and tobacco	m3	0	11	0	0	0	0
Textiles and textile products	m4	1	1	0	0	0	0
Leather, leather products, and footwear	m5	0	0	0	0	0	0
Wood and products of wood and cork	m6	0	0	0	0	0	0
Pulp, paper, paper products, printing, and publishing	m7	1	0	1	0	0	0
Coke, refined petroleum, and nuclear fuel	m8	22	3	172	0	11	32
Chemicals and chemical products	m9	1	2	2	0	0	0
Rubber and plastics	m10	3	1	3	0	0	0
Other nonmetallic minerals	m11	0	0	0	0	0	0
Basic metals and fabricated metal	m12	0	0	0	0	0	0
Machinery, nec	m13	1	2	3	0	1	0
Electrical and optical equipment	m14	2	0	1	0	1	0
Transport equipment	m15	3	1	49	0	5	16
Manufacturing, nec; recycling	m16	0	0	1	0	0	0
Electricity, gas, and water supply	m17	1	1	1	0	0	0
Construction	m18	0	0	1	0	0	0
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	0	0	0	0	0
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	0	0	0	0	0
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	0	0	0	0	0
Hotels and restaurants	m22	1	0	1	0	0	0
Inland transport	m23	2	0	5	0	0	3
Water transport	m24	0	0	0	0	0	0
Air transport	m25	0	0	0	0	1	0
Other supporting and auxiliary transport activities; activities of travel agencies	m26	1	0	1	0	0	0
Post and telecommunications	m27	3	0	2	0	0	0
Financial intermediation	m28	4	0	5	0	0	0
Real estate activities	m29	0	0	0	0	0	0
Renting of M&Eq and other business activities	m30	5	2	5	0	2	2
Public administration and defense; compulsory social security	m31	0	0	0	0	0	0
Education	m32	0	0	0	0	0	0
Health and social work	m33	0	0	0	0	0	0
Other community, social, and personal services	m34	0	0	1	0	0	0
Private households with employed persons	m35	0	0	0	0	0	0
Total intermediate consumption	r60	241	129	445	0	76	119
Taxes less subsidies on products	r99	11	11	83	0	7	16
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–
Value added at basic prices	r64	532	94	348	0	75	131
International transport margins		–	–	–	–	–	–
Output at basic prices	r69	784	234	876	0	157	267

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Table A3.2 Imports Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Imports</b>										
0	0	1	1	0	1	0	0	0	23	0
1	1	2	8	5	2	2	1	–	6	0
0	0	1	2	1	4	1	2	–	320	0
0	0	0	1	0	3	0	1	–	92	0
0	0	0	0	0	0	0	0	–	8	0
0	0	0	1	0	0	0	0	–	4	0
1	4	0	2	2	1	0	1	–	28	0
4	12	1	17	21	6	13	4	–	150	–
1	1	2	4	3	2	28	0	–	53	0
1	0	0	2	0	2	1	0	–	16	0
0	0	0	1	0	0	0	0	–	8	0
2	0	0	2	0	0	0	1	–	2	0
11	0	1	9	1	1	1	1	–	46	0
36	1	2	15	3	0	8	9	–	19	0
2	0	7	12	0	4	1	1	–	160	0
3	0	2	2	1	1	1	1	–	10	0
1	2	1	5	4	1	1	1	–	10	0
0	0	2	1	2	1	0	0	–	1	0
0	0	2	1	0	0	0	0	–	0	0
0	0	0	1	1	0	0	0	–	1	0
0	0	0	0	0	0	1	0	–	6	0
0	1	0	3	1	1	3	1	–	28	0
1	1	0	2	1	1	1	1	–	34	0
0	0	0	0	0	0	0	0	–	0	–
0	0	0	0	0	0	0	0	–	3	–
1	1	1	3	2	1	0	1	–	14	0
2	1	1	3	1	1	0	1	–	22	0
1	2	1	4	0	1	0	2	–	17	–
0	0	0	0	0	0	0	0	–	6	0
6	6	7	21	19	5	2	6	–	26	1
1	0	2	1	2	0	0	0	–	–	–
0	0	0	0	0	0	0	0	–	32	3
0	0	0	0	0	0	0	0	–	16	1
0	1	1	2	2	1	0	1	–	3	0
0	0	0	0	0	0	0	0	–	–	–
<b>170</b>	<b>148</b>	<b>172</b>	<b>413</b>	<b>254</b>	<b>149</b>	<b>124</b>	<b>141</b>	<b>0</b>	<b>5,181</b>	<b>42</b>
9	8	8	24	16	8	14	6	0	381	0
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	194	–
–	–	–	–	–	–	–	–	–	(148)	–
224	541	692	344	462	442	206	162	2	–	–
–	–	–	–	–	–	–	–	–	–	–
<b>404</b>	<b>697</b>	<b>872</b>	<b>780</b>	<b>733</b>	<b>600</b>	<b>345</b>	<b>309</b>	<b>2</b>	<b>5,608</b>	<b>43</b>

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Table A3.2 Imports Industry *continued*

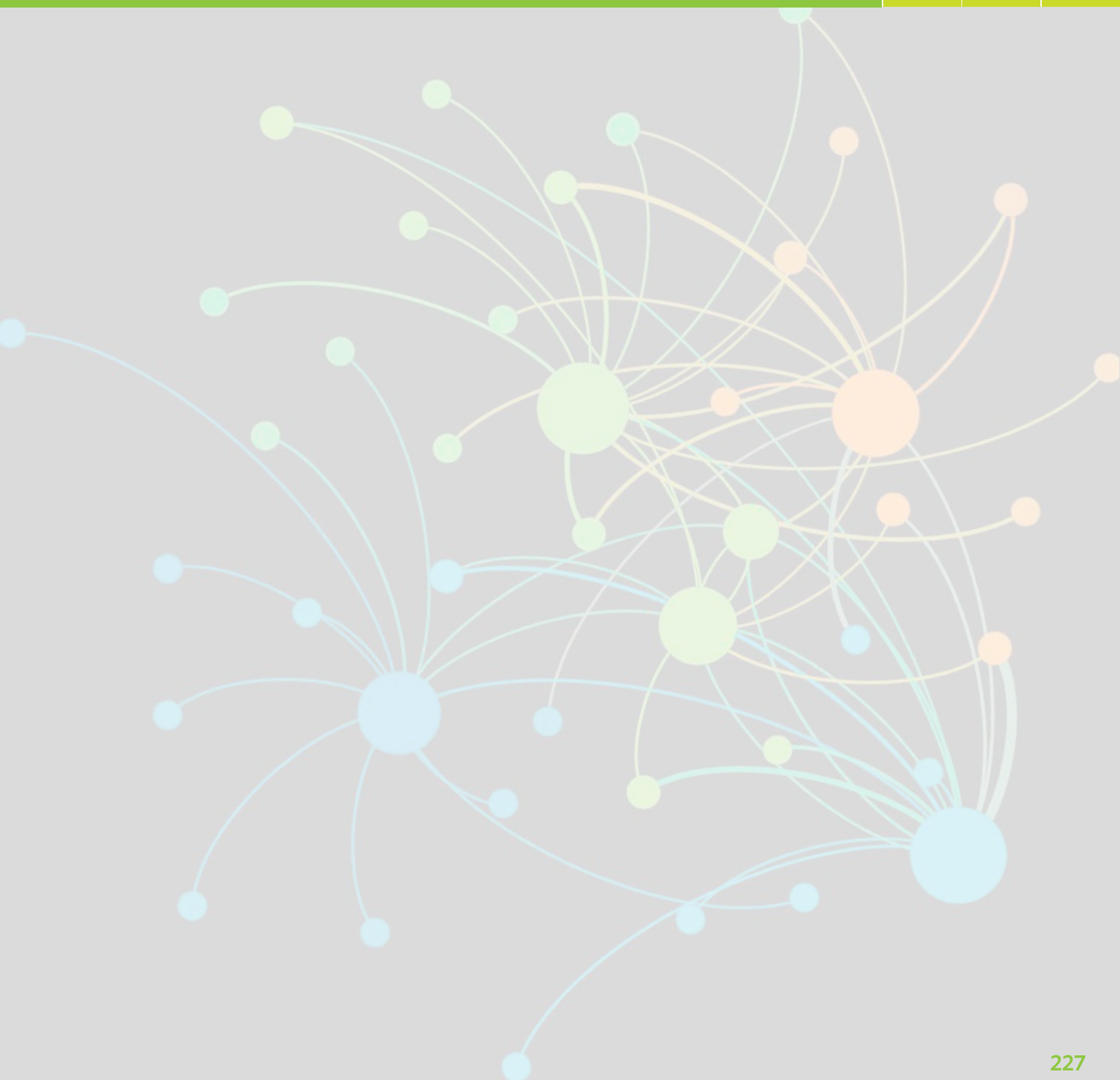
		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	13	19	–	94
Mining and quarrying	m2	2	23	77	–	299
Food, beverages, and tobacco	m3	0	0	45	–	442
Textiles and textile products	m4	0	3	31	–	196
Leather, leather products, and footwear	m5	0	0	(1)	–	15
Wood and products of wood and cork	m6	0	1	10	–	49
Pulp, paper, paper products, printing, and publishing	m7	0	1	7	–	94
Coke, refined petroleum, and nuclear fuel	m8	–	–	247	–	1,050
Chemicals and chemical products	m9	0	0	14	–	264
Rubber and plastics	m10	0	0	29	–	153
Other nonmetallic minerals	m11	0	0	28	–	170
Basic metals and fabricated metal	m12	0	11	45	–	125
Machinery, nec	m13	0	310	125	–	716
Electrical and optical equipment	m14	0	105	26	–	319
Transport equipment	m15	0	111	30	–	461
Manufacturing, nec; recycling	m16	0	12	6	–	58
Electricity, gas, and water supply	m17	2	5	(0)	–	150
Construction	m18	0	54	3	–	117
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	0	1	–	–	32
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	0	0	(0)	–	8
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	0	0	(2)	–	14
Hotels and restaurants	m22	0	0	(0)	–	58
Inland transport	m23	0	3	(0)	–	89
Water transport	m24	–	0	(0)	–	12
Air transport	m25	0	0	(0)	–	6
Other supporting and auxiliary transport activities; activities of travel agencies	m26	1	2	(0)	–	46
Post and telecommunications	m27	0	0	–	–	48
Financial intermediation	m28	–	–	–	–	109
Real estate activities	m29	0	0	(0)	–	23
Renting of M&Eq and other business activities	m30	8	25	0	–	251
Public administration and defense; compulsory social security	m31	–	–	–	–	27
Education	m32	37	0	(0)	–	74
Health and social work	m33	25	0	(0)	–	46
Other community, social, and personal services	m34	1	2	(0)	–	26
Private households with employed persons	m35	–	–	–	–	5
Total intermediate consumption	r60	1,410	2,673	1,410	5,894	26,182
Taxes less subsidies on products	r99	3	57	14	–	1,007
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	194
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	(148)
Value added at basic prices	r64	–	–	–	–	10,414
International transport margins		–	–	–	–	–
Output at basic prices	r69	1,413	2,730	1,424	5,894	37,648

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi-Regional Input–Output Database.

# APPENDIX 4: INPUT-OUTPUT TABLES FOR 2010 AND 2017— PEOPLE'S REPUBLIC OF CHINA

## A4





**Table A4.1: People's Republic of China Input–Output Table, 2010** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	140,354	857	330,168	67,682	14,232	28,638	12,028
Mining and quarrying	c2	838	58,477	1,971	1,777	192	682	2,086
Food, beverages, and tobacco	c3	97,579	3,007	196,240	3,743	13,647	857	1,627
Textiles and textile products	c4	614	2,739	1,710	265,979	11,214	679	1,926
Leather, leather products, and footwear	c5	370	72	59	13,220	34,820	188	191
Wood and products of wood and cork	c6	435	7,131	728	1,266	323	76,310	4,038
Pulp, paper, paper products, printing, and publishing	c7	615	943	11,458	4,195	949	1,825	66,670
Coke, refined petroleum, and nuclear fuel	c8	18,806	24,984	2,159	3,545	893	1,557	1,805
Chemicals and chemical products	c9	54,131	16,573	5,797	37,108	4,345	9,458	16,226
Rubber and plastics	c10	5,843	5,238	12,358	5,672	4,587	1,521	5,402
Other nonmetallic minerals	c11	709	4,779	3,427	686	110	363	368
Basic metals and fabricated metal	c12	1,914	29,552	2,990	1,897	717	3,673	2,403
Machinery, nec	c13	6,199	29,785	2,500	4,531	736	2,120	2,535
Electrical and optical equipment	c14	990	10,791	1,221	1,659	246	626	1,543
Transport equipment	c15	3,087	5,336	669	1,009	154	492	1,196
Manufacturing, nec; recycling	c16	214	582	291	541	85	186	2,146
Electricity, gas, and water supply	c17	9,230	45,399	8,185	10,368	609	3,838	5,642
Construction	c18	173	1,700	943	571	116	229	326
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	14,769	9,501	37,679	24,871	6,365	3,604	5,191
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	3,055	1,966	7,795	5,145	1,317	746	1,074
Hotels and restaurants	c22	1,935	5,061	4,239	2,088	458	733	1,139
Inland transport	c23	7,126	12,100	15,584	6,701	1,269	3,307	3,823
Water transport	c24	1,108	3,020	2,693	1,353	205	440	530
Air transport	c25	151	273	295	270	62	64	104
Other supporting and auxiliary transport activities; activities of travel agencies	c26	2,626	1,577	3,634	1,910	251	661	823
Post and telecommunications	c27	2,442	1,330	1,200	1,002	237	253	372
Financial intermediation	c28	8,951	16,309	7,229	5,634	754	2,037	3,473
Real estate activities	c29	65	301	543	1,146	334	141	403
Renting of M&Eq and other business activities	c30	6,833	15,171	12,356	5,871	733	1,591	2,698
Public administration and defense; compulsory social security	c31	548	363	341	161	31	95	98
Education	c32	620	973	324	193	35	63	106
Health and social work	c33	562	908	325	208	159	132	204
Other community, social, and personal services	c34	3,812	6,430	3,109	1,994	686	573	1,717
Private households with employed persons	c35	-	-	-	-	-	-	-

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Table A4.1 Domestic Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Domestic</b>												
25	33,777	9,107	202	290	131	26	49	2,893	58	14,732	-	196
225,503	37,634	2,039	44,471	156,601	5,001	4,461	2,648	505	85,977	16,483	-	196
3,434	25,093	1,835	2,483	6,977	3,732	7,089	2,710	598	2,654	6,489	-	3,469
521	6,972	10,362	3,911	6,120	3,799	4,289	4,053	4,486	1,524	9,782	-	3,069
12	668	1,145	134	88	177	884	7,354	1,741	20	310	-	12
273	1,421	1,235	3,410	7,027	4,598	3,869	2,783	11,361	173	58,261	-	135
409	6,942	2,662	7,678	3,058	3,462	12,273	2,006	2,097	978	2,525	-	9,162
40,652	89,268	7,840	20,882	64,607	6,151	8,054	4,531	663	28,381	33,012	-	3,183
10,679	231,238	87,523	24,123	26,141	11,131	45,058	11,626	3,411	3,895	46,419	-	1,375
1,394	20,792	62,466	6,778	7,350	18,295	53,564	30,990	3,192	997	22,876	-	1,926
3,402	5,187	1,441	71,148	18,273	4,670	23,022	7,121	707	977	288,925	-	123
4,880	11,465	6,386	20,891	434,060	133,361	187,640	95,806	6,956	4,461	280,287	-	567
4,936	9,477	3,177	12,723	41,752	135,195	40,204	52,690	775	4,932	28,335	-	845
2,104	5,334	1,796	3,019	12,612	73,690	518,596	50,514	1,348	40,318	79,062	-	11,541
886	2,180	1,100	3,724	9,498	22,931	7,161	360,228	508	3,540	7,847	-	6,039
127	676	499	973	11,413	1,426	1,787	1,637	981	233	2,132	-	404
11,887	45,290	7,098	28,708	69,964	15,442	18,087	9,512	1,099	210,286	27,217	-	10,189
719	1,094	296	912	1,805	1,160	2,279	1,162	137	2,387	53,196	-	2,906
-	-	-	-	-	-	-	-	-	-	-	-	-
6,656	21,482	10,221	10,807	20,755	22,479	55,058	38,403	2,467	7,047	39,737	-	25,644
1,377	4,444	2,114	2,236	4,294	4,650	11,390	7,945	510	1,458	8,221	-	-
730	5,471	1,314	3,274	5,684	6,068	8,030	3,520	370	1,778	13,071	-	9,774
6,393	14,694	4,822	11,699	19,775	11,829	15,963	11,746	1,017	5,466	42,955	-	16,790
1,149	2,316	704	2,014	4,869	2,226	3,010	2,452	191	1,283	2,487	-	5,977
46	592	168	247	434	858	1,936	691	47	174	1,244	-	1,469
1,062	2,656	826	2,336	3,970	2,112	3,378	4,730	237	552	19,475	-	8,603
670	2,041	443	853	4,232	2,074	3,814	989	148	1,832	25,515	-	4,809
4,400	12,807	3,444	9,176	27,185	10,235	25,303	9,016	793	23,600	34,730	-	27,240
88	450	592	506	835	1,024	2,096	518	209	160	385	-	39,039
3,217	19,978	4,142	6,289	14,498	17,227	38,980	22,759	1,260	5,751	61,064	-	69,233
46	397	149	236	685	538	1,427	1,560	24	149	839	-	513
89	380	102	254	421	621	594	423	36	283	1,404	-	1,430
425	449	60	549	1,327	1,374	1,276	1,087	32	705	792	-	425
1,271	5,077	1,319	2,997	6,519	4,743	6,742	5,630	258	8,391	11,886	-	10,852
-	-	-	-	-	-	-	-	-	-	-	-	-

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Table A4.1 Domestic Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Domestic							
Agriculture, hunting, forestry, and fishing	c1	40	37,372	34	5	4	6,634
Mining and quarrying	c2	41	337	1,256	300	218	272
Food, beverages, and tobacco	c3	718	95,477	1,581	1,343	1,542	1,454
Textiles and textile products	c4	635	3,096	977	302	355	828
Leather, leather products, and footwear	c5	2	21	16	3	4	7
Wood and products of wood and cork	c6	28	246	152	53	5	23
Pulp, paper, paper products, printing, and publishing	c7	1,895	923	538	71	74	157
Coke, refined petroleum, and nuclear fuel	c8	658	1,453	40,859	17,014	12,412	13,930
Chemicals and chemical products	c9	285	2,061	1,775	804	473	1,886
Rubber and plastics	c10	399	811	3,258	35	37	319
Other nonmetallic minerals	c11	26	216	283	25	43	182
Basic metals and fabricated metal	c12	117	408	1,167	336	144	1,905
Machinery, nec	c13	175	324	1,336	1,590	1,781	2,876
Electrical and optical equipment	c14	2,387	999	851	298	162	635
Transport equipment	c15	1,249	876	28,535	5,750	5,143	702
Manufacturing, nec; recycling	c16	84	138	135	18	14	110
Electricity, gas, and water supply	c17	2,108	5,439	7,876	147	201	639
Construction	c18	601	1,313	2,823	8	118	717
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	-	15,908	4,455	1,228	1,141	1,756
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	5,305	3,291	922	254	236	363
Hotels and restaurants	c22	2,022	1,359	5,151	222	1,045	983
Inland transport	c23	3,474	2,929	12,460	202	270	5,330
Water transport	c24	1,237	423	223	4,109	38	806
Air transport	c25	304	154	104	19	2,222	690
Other supporting and auxiliary transport activities; activities of travel agencies	c26	1,780	731	14,031	4,903	1,078	2,160
Post and telecommunications	c27	995	1,654	1,512	2,319	249	613
Financial intermediation	c28	5,635	3,601	19,122	3,537	1,709	4,764
Real estate activities	c29	8,076	3,653	517	19	278	931
Renting of M&Eq and other business activities	c30	14,323	3,232	1,753	1,161	649	1,517
Public administration and defense; compulsory social security	c31	106	91	146	20	30	81
Education	c32	296	264	460	34	201	75
Health and social work	c33	88	86	227	55	21	27
Other community, social, and personal services	c34	2,245	3,455	6,029	391	352	4,569
Private households with employed persons	c35	-	-	-	-	-	-

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Table A4.1 Domestic Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Domestic</b>										
385	4	57	6,921	–	2,056	1,174	1,738	–	219,085	–
60	84	59	829	667	708	1,099	686	–	1,200	–
1,523	1,052	1,044	6,743	5,529	8,310	5,108	12,228	–	345,543	–
346	1,629	760	6,243	10,536	1,280	7,382	5,289	–	72,516	–
28	29	16	71	2,011	114	186	240	–	30,508	–
64	51	16	454	1,236	1,829	1,010	1,027	–	3,242	–
1,130	6,189	759	28,565	9,782	8,042	1,757	6,781	–	1,864	–
810	1,764	1,008	24,487	9,281	4,236	6,419	4,562	–	15,819	–
263	470	567	15,840	3,270	5,448	78,186	11,758	–	27,516	–
89	45	268	1,706	259	386	552	2,252	–	2,936	–
169	54	37	1,176	1,385	1,276	820	791	–	3,225	–
203	297	716	13,197	1,079	1,301	1,206	2,584	–	6,292	–
868	886	335	2,471	794	1,097	9,978	1,775	–	4,202	–
17,647	625	1,157	56,742	3,818	6,394	2,426	12,282	–	57,439	–
2,001	834	371	21,591	9,283	1,890	1,169	13,296	–	64,995	–
94	931	228	1,778	1,149	1,065	293	989	–	5,893	–
3,350	2,161	1,891	3,746	4,840	6,129	3,262	5,378	–	40,572	–
1,325	2,843	7,829	2,684	6,992	2,937	3,307	3,078	–	4,994	–
–	–	–	–	–	–	–	–	–	–	–
3,773	3,635	1,171	21,555	8,403	4,694	12,183	9,889	–	124,842	–
780	752	242	4,459	1,738	971	2,520	2,046	–	25,827	–
1,397	16,618	2,071	24,003	24,231	12,115	2,795	6,955	–	131,391	–
799	2,489	497	10,799	6,869	3,319	2,236	3,679	–	34,295	–
43	41	47	1,119	196	159	173	332	–	2,925	–
348	732	324	2,980	3,936	2,699	244	934	–	1,734	–
243	107	117	2,277	219	172	302	1,226	–	3,085	–
14,809	10,055	1,391	9,817	17,348	7,298	4,516	2,346	–	60,574	–
3,066	21,363	20,498	24,944	8,666	11,578	3,111	6,060	–	71,774	–
2,597	19,725	8,749	6,844	4,199	3,541	1,723	11,024	–	189,457	–
5,866	26,964	9,755	49,174	6,897	7,325	1,444	5,631	–	11,650	–
349	563	595	4,178	3,523	726	263	579	–	4,403	–
327	3,264	187	1,145	8,859	11,172	1,491	810	–	116,622	–
58	305	84	171	2,061	790	1,995	322	–	140,953	–
1,886	6,251	1,768	9,267	16,388	8,849	3,703	14,568	–	110,349	–
–	–	–	–	–	–	–	–	–	–	–

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Table A4.1 Domestic Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Domestic						
Agriculture, hunting, forestry, and fishing	c1	4,561	32,415	40,817	12,985	1,021,728
Mining and quarrying	c2	7	1,836	5,994	9,624	672,820
Food, beverages, and tobacco	c3	3	244	26,442	37,242	936,387
Textiles and textile products	c4	1	133	5,088	177,812	638,959
Leather, leather products, and footwear	c5	–	50	764	40,631	136,166
Wood and products of wood and cork	c6	0	551	809	10,976	206,545
Pulp, paper, paper products, printing, and publishing	c7	1	257	889	8,592	218,174
Coke, refined petroleum, and nuclear fuel	c8	3	97	3,156	16,584	535,521
Chemicals and chemical products	c9	10	2,158	5,695	79,833	884,556
Rubber and plastics	c10	0	379	1,944	39,792	326,709
Other nonmetallic minerals	c11	0	452	13	24,916	470,529
Basic metals and fabricated metal	c12	17	25,180	8,994	103,206	1,398,249
Machinery, nec	c13	11	210,084	2,938	136,754	763,722
Electrical and optical equipment	c14	4	75,089	5,179	561,086	1,622,230
Transport equipment	c15	8	314,027	9,879	89,946	1,009,131
Manufacturing, nec; recycling	c16	1	4,903	2,872	48,348	95,375
Electricity, gas, and water supply	c17	45	585	592	2,189	629,199
Construction	c18	–	1,579,931	–	8,402	1,702,013
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	–	–	–	–	–
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	–	45,266	6,187	99,007	727,828
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	–	9,364	1,280	20,482	150,570
Hotels and restaurants	c22	–	–	–	10,112	317,209
Inland transport	c23	10,349	9,941	1,696	20,164	344,858
Water transport	c24	938	1,910	353	30,134	83,234
Air transport	c25	299	151	16	22,277	49,294
Other supporting and auxiliary transport activities; activities of travel agencies	c26	129	1,411	344	3,055	98,788
Post and telecommunications	c27	–	–	–	2,251	192,003
Financial intermediation	c28	4,209	–	–	3,563	449,516
Real estate activities	c29	–	93,443	–	7	403,619
Renting of M&Eq and other business activities	c30	62,968	70,505	–	65,646	656,114
Public administration and defense; compulsory social security	c31	411,411	–	–	843	436,104
Education	c32	163,815	–	–	558	317,932
Health and social work	c33	98,530	–	–	660	257,431
Other community, social, and personal services	c34	15,260	1,769	18	10,075	301,198
Private households with employed persons	c35	–	–	–	–	–

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Table A4.1 Import Industry *continued*

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	8,906	139	16,689	3,019	822	3,997	1,325
Mining and quarrying	m2	87	19,943	548	252	132	194	766
Food, beverages, and tobacco	m3	2,408	94	5,033	95	369	30	60
Textiles and textile products	m4	27	87	52	6,434	1,050	23	71
Leather, leather products, and footwear	m5	20	17	9	606	3,572	7	26
Wood and products of wood and cork	m6	30	134	16	21	7	1,381	132
Pulp, paper, paper products, printing, and publishing	m7	27	50	698	256	63	244	4,958
Coke, refined petroleum, and nuclear fuel	m8	972	1,199	103	170	54	91	129
Chemicals and chemical products	m9	8,809	2,636	697	5,037	808	1,588	2,900
Rubber and plastics	m10	352	309	693	349	283	122	374
Other nonmetallic minerals	m11	26	130	72	32	5	18	19
Basic metals and fabricated metal	m12	101	2,012	141	74	39	143	181
Machinery, nec	m13	647	3,161	249	403	75	209	272
Electrical and optical equipment	m14	157	2,212	215	196	36	90	261
Transport equipment	m15	210	375	50	61	14	29	101
Manufacturing, nec; recycling	m16	123	325	155	145	69	143	1,678
Electricity, gas, and water supply	m17	8	84	13	7	2	4	8
Construction	m18	9	71	31	11	3	10	15
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	13	18	12	17	3	3	11
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	306	960	463	868	116	87	242
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	73	73	107	90	28	12	36
Hotels and restaurants	m22	178	214	351	38	58	30	61
Inland transport	m23	200	912	406	197	49	77	114
Water transport	m24	57	99	150	145	23	49	58
Air transport	m25	121	219	237	229	54	65	98
Other supporting and auxiliary transport activities; activities of travel agencies	m26	19	27	40	29	4	14	11
Post and telecommunications	m27	31	25	25	28	7	6	8
Financial intermediation	m28	71	134	96	161	20	32	48
Real estate activities	m29	1	2	2	1	0	1	1
Renting of M&Eq and other business activities	m30	97	860	915	434	48	103	188
Public administration and defense; compulsory social security	m31	55	39	53	17	6	51	27
Education	m32	21	42	19	6	2	3	6
Health and social work	m33	14	30	11	4	5	5	13
Other community, social, and personal services	m34	48	158	89	42	10	18	41
Private households with employed persons	m35	2	2	1	2	0	0	1
Total intermediate consumption	r60	420,928	360,021	708,660	503,472	108,710	156,560	164,156
Taxes less subsidies on products	r99	-	-	-	-	-	-	-
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-	-
Value added at basic prices	r64	598,762	309,276	225,648	133,727	26,888	49,090	52,910
International transport margins		2,038	3,522	2,079	1,760	569	896	1,108
Output at basic prices	r69	1,021,728	672,820	936,387	638,959	136,166	206,545	218,174

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Table A4.1 Import Industry *continued*

Industry		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
		c8	c9	c10	c11	c12	c13	c14
Imports								
Agriculture, hunting, forestry, and fishing	m1	19	2,336	1,291	28	53	19	20
Mining and quarrying	m2	78,146	12,173	414	14,699	52,145	874	734
Food, beverages, and tobacco	m3	108	794	124	83	227	111	231
Textiles and textile products	m4	27	269	324	136	255	119	127
Leather, leather products, and footwear	m5	2	45	102	12	10	25	88
Wood and products of wood and cork	m6	13	37	35	68	214	92	110
Pulp, paper, paper products, printing, and publishing	m7	22	419	192	532	206	248	977
Coke, refined petroleum, and nuclear fuel	m8	2,023	4,494	534	1,009	3,051	304	463
Chemicals and chemical products	m9	1,563	35,975	14,873	3,880	3,857	1,698	7,701
Rubber and plastics	m10	86	1,258	3,798	396	457	1,173	3,141
Other nonmetallic minerals	m11	251	169	56	1,446	437	102	522
Basic metals and fabricated metal	m12	544	756	351	1,184	38,724	9,936	14,333
Machinery, nec	m13	520	932	307	1,297	4,029	14,424	4,728
Electrical and optical equipment	m14	547	1,071	298	456	1,692	15,492	167,117
Transport equipment	m15	64	145	87	221	721	1,663	1,429
Manufacturing, nec; recycling	m16	48	366	282	551	2,900	783	1,231
Electricity, gas, and water supply	m17	222	67	9	57	211	34	60
Construction	m18	80	48	13	45	111	72	98
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	13	41	19	14	56	53	122
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	2,805	1,161	459	708	2,702	859	2,574
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	140	146	57	59	241	127	544
Hotels and restaurants	m22	34	249	53	134	241	251	337
Inland transport	m23	2,816	753	134	720	2,205	290	446
Water transport	m24	116	202	74	155	327	199	534
Air transport	m25	39	474	134	196	349	685	1,841
Other supporting and auxiliary transport activities; activities of travel agencies	m26	46	51	17	33	70	30	80
Post and telecommunications	m27	14	43	14	15	70	49	249
Financial intermediation	m28	41	179	63	91	153	118	1,186
Real estate activities	m29	1	3	1	1	3	3	6
Renting of M&Eq and other business activities	m30	272	1,228	255	427	861	1,024	2,927
Public administration and defense; compulsory social security	m31	19	51	27	23	66	44	107
Education	m32	8	33	8	13	39	51	100
Health and social work	m33	14	19	3	18	65	58	174
Other community, social, and personal services	m34	36	111	38	82	181	144	223
Private households with employed persons	m35	0	3	1	1	4	1	3
Total intermediate consumption	r60	430,160	693,845	262,875	338,440	1,110,051	583,563	1,331,900
Taxes less subsidies on products	r99	–	–	–	–	–	–	–
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	95,344	184,504	61,498	129,258	277,306	176,336	275,743
International transport margins		10,017	6,208	2,336	2,831	10,892	3,823	14,586
Output at basic prices	r69	535,521	884,556	326,709	470,529	1,398,249	763,722	1,622,233

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Table A4.1 Import Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Imports</b>											
14	248	17	1,785	–	27	41	1,172	7	2	3	375
337	106	29,358	3,698	–	36	7	82	209	15	10	14
87	34	69	194	–	101	34	2,277	39	30	36	37
120	168	44	307	–	102	19	97	29	8	10	25
293	89	2	35	–	6	1	9	7	2	2	4
61	218	7	1,153	–	8	3	5	4	1	0	1
138	182	43	210	–	219	47	58	19	2	2	8
232	52	1,322	1,592	–	152	36	68	1,860	694	552	625
1,855	543	338	7,209	–	207	40	249	79	44	14	243
1,769	216	63	1,312	–	118	62	47	182	5	9	30
125	36	91	4,416	–	7	4	6	33	2	1	6
7,410	481	308	20,275	–	57	19	16	75	18	8	86
5,502	72	507	2,590	–	112	30	29	133	168	190	303
9,871	253	7,088	7,957	–	2,120	375	122	166	44	37	156
17,578	39	241	624	–	344	86	43	1,366	418	385	59
913	473	88	1,087	–	250	38	80	75	9	8	63
25	7	183	61	–	38	8	5	6	1	0	2
56	5	89	1,401	–	99	16	35	73	1	3	19
61	8	13	49	–	16	3	4	6	2	2	3
751	92	1,170	944	–	197	40	76	57	27	23	32
115	19	77	131	–	48	9	35	16	5	5	8
149	22	77	539	–	405	60	151	209	9	38	41
282	30	1,116	923	–	293	60	70	217	8	8	92
137	35	48	230	–	258	39	16	9	173	33	33
554	56	140	989	–	1,167	220	122	83	56	1,687	541
30	7	22	55	–	35	17	7	17	13	27	39
31	10	30	281	–	78	25	21	18	24	5	8
97	39	124	212	–	227	65	30	153	59	27	113
3	0	1	7	–	11	2	1	1	0	0	0
1,171	104	400	746	–	5,598	1,149	293	142	82	126	142
78	12	24	83	–	88	16	12	15	2	3	9
49	2	13	52	–	72	13	9	13	1	4	3
48	3	24	29	–	17	4	3	7	1	1	1
139	11	114	342	–	367	75	107	116	9	7	93
1	3	3	1	–	3	5	1	0	0	1	0
<b>808,970</b>	<b>54,734</b>	<b>493,677</b>	<b>1,303,215</b>	<b>–</b>	<b>290,019</b>	<b>59,998</b>	<b>197,699</b>	<b>166,000</b>	<b>48,506</b>	<b>35,516</b>	<b>61,156</b>
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
196,550	40,358	131,174	393,836	–	437,527	90,514	119,187	178,512	34,602	13,676	37,462
3,611	283	4,348	4,961	–	281	58	323	345	126	102	170
<b>1,009,131</b>	<b>95,375</b>	<b>629,199</b>	<b>1,702,013</b>	<b>–</b>	<b>727,828</b>	<b>150,570</b>	<b>317,209</b>	<b>344,858</b>	<b>83,234</b>	<b>49,294</b>	<b>98,788</b>

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Table A4.1 Import Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Imports						
Agriculture, hunting, forestry, and fishing	m1	23	6	4	363	5
Mining and quarrying	m2	9	11	9	120	157
Food, beverages, and tobacco	m3	38	34	24	182	138
Textiles and textile products	m4	8	57	136	207	206
Leather, leather products, and footwear	m5	6	12	4	24	235
Wood and products of wood and cork	m6	2	9	4	22	31
Pulp, paper, paper products, printing, and publishing	m7	33	196	36	1,182	339
Coke, refined petroleum, and nuclear fuel	m8	38	84	43	1,139	432
Chemicals and chemical products	m9	17	68	84	2,449	427
Rubber and plastics	m10	11	16	26	130	25
Other nonmetallic minerals	m11	4	4	13	33	24
Basic metals and fabricated metal	m12	26	36	41	516	62
Machinery, nec	m13	106	106	35	275	85
Electrical and optical equipment	m14	3,405	193	200	15,436	1,117
Transport equipment	m15	166	64	34	1,100	445
Manufacturing, nec; recycling	m16	63	585	96	1,090	723
Electricity, gas, and water supply	m17	6	14	6	20	8
Construction	m18	38	85	130	82	186
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	5	12	2	26	12
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	67	98	34	362	100
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	15	37	8	103	44
Hotels and restaurants	m22	60	685	58	962	1,006
Inland transport	m23	19	50	35	212	131
Water transport	m24	18	15	8	78	31
Air transport	m25	278	584	240	2,361	3,141
Other supporting and auxiliary transport activities; activities of travel agencies	m26	5	21	11	38	36
Post and telecommunications	m27	167	134	30	143	224
Financial intermediation	m28	27	296	152	233	71
Real estate activities	m29	1	5	2	5	2
Renting of M&Eq and other business activities	m30	559	2,473	828	2,871	526
Public administration and defense; compulsory social security	m31	20	67	21	186	153
Education	m32	11	91	7	64	206
Health and social work	m33	4	15	2	27	67
Other community, social, and personal services	m34	48	522	53	249	466
Private households with employed persons	m35	1	2	0	4	1
Total intermediate consumption	r60	72,002	139,496	67,030	400,272	196,308
Taxes less subsidies on products	r99	-	-	-	-	-
Cif/ fob adjustments on exports	r61	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-
Value added at basic prices	r64	119,715	309,926	336,536	254,007	239,459
International transport margins		287	94	53	1,835	338
Output at basic prices	r69	192,003	449,516	403,619	656,114	436,104

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Table A4.1 Import Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Imports</b>										
101	69	104	–	5,138	0	111	535	79	–	48,891
190	187	184	–	1,130	–	15	131	24	–	217,145
207	119	314	–	18,378	–	19	83	86	–	32,327
52	219	164	–	4,126	–	2	51	11	–	15,167
18	22	65	–	1,827	–	1	9	61	–	7,277
42	18	28	–	104	–	2	44	23	–	4,082
365	60	263	–	351	–	39	115	12	–	12,813
205	60	247	–	5,772	–	5	44	72	–	29,919
887	1,210	2,038	–	11,089	–	79	454	111	–	121,756
33	41	144	–	1,817	–	9	303	39	–	19,198
24	18	20	–	228	–	6	79	54	–	8,515
78	40	146	–	550	–	27	3,991	305	–	103,089
128	1,032	202	–	583	0	59	76,929	969	–	121,397
2,380	381	3,833	–	15,026	–	182	90,869	8,448	–	359,499
126	77	798	–	14,073	–	107	27,203	845	–	71,390
672	153	687	–	3,727	–	11	3,271	1,736	–	24,699
7	4	7	–	109	–	26	75	4	–	1,408
80	88	93	–	447	–	21	628	4	–	4,296
8	10	14	–	187	–	13	306	24	–	1,183
92	133	147	–	2,483	–	129	4,623	359	–	26,349
33	21	42	–	661	0	31	827	85	–	4,109
507	119	334	–	4,057	–	11	3	5	–	11,738
71	55	84	–	2,158	0	565	307	23	–	16,127
17	8	15	–	620	–	197	40	2	–	4,249
2,152	194	773	–	1,375	–	240	127	13	–	21,833
24	5	13	–	133	–	30	43	4	–	1,103
92	50	36	–	864	–	36	85	7	–	2,983
57	16	71	–	1,353	–	80	61	4	–	5,961
1	1	2	–	21	–	8	4	0	–	106
527	124	473	–	9,205	–	5,198	195	10	–	42,580
53	18	41	–	243	–	438	12	6	–	2,183
261	36	27	–	312	0	398	53	1	–	2,051
30	61	16	–	276	0	126	78	12	–	1,282
207	82	376	–	4,439	–	2,331	55	4	–	11,431
1	2	3	–	74	–	1	0	1	–	131
<b>139,632</b>	<b>168,767</b>	<b>164,934</b>	<b>–</b>	<b>2,050,658</b>	<b>0</b>	<b>783,136</b>	<b>2,693,763</b>	<b>145,399</b>	<b>1,697,752</b>	<b>19,411,981</b>
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	54,880	–	–	–	–	–	54,880
–	–	–	–	(45,814)	–	–	–	–	–	(45,814)
177,886	88,348	135,580	–	–	–	–	–	–	–	5,931,147
414	316	684	–	6,281	–	9	18,600	1,213	–	107,397
<b>317,932</b>	<b>257,431</b>	<b>301,198</b>	<b>–</b>	<b>2,066,006</b>	<b>0</b>	<b>783,145</b>	<b>2,712,363</b>	<b>146,611</b>	<b>1,697,752</b>	<b>25,459,592</b>

\$ = United States dollar; (–) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi–Regional Input–Output Database.

**Table A4.2: People’s Republic of China Input–Output Table, 2017** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	195,759	577	621,378	96,472	23,355	46,648	18,029
Mining and quarrying	c2	1,453	124,977	4,118	2,703	174	1,247	4,239
Food, beverages, and tobacco	c3	188,466	7,417	527,973	1,371	31,615	1,900	3,690
Textiles and textile products	c4	1,529	4,812	3,917	509,935	27,624	1,470	3,249
Leather, leather products, and footwear	c5	449	832	851	29,427	106,223	689	463
Wood and products of wood and cork	c6	620	18,272	1,741	2,752	837	190,907	7,875
Pulp, paper, paper products, printing, and publishing	c7	733	1,570	22,870	5,185	1,824	3,412	120,899
Coke, refined petroleum, and nuclear fuel	c8	34,458	43,471	3,912	4,673	1,002	2,981	2,710
Chemicals and chemical products	c9	105,952	36,200	13,913	68,874	8,002	21,262	33,455
Rubber and plastics	c10	11,879	9,418	27,657	11,571	8,778	4,183	11,838
Other nonmetallic minerals	c11	1,054	9,048	8,770	1,122	230	1,033	933
Basic metals and fabricated metal	c12	2,884	65,418	7,244	3,186	1,436	10,262	5,301
Machinery, nec	c13	12,789	62,760	6,640	8,671	956	5,417	5,247
Electrical and optical equipment	c14	1,913	20,023	2,315	2,279	419	1,459	2,909
Transport equipment	c15	5,088	8,845	987	1,240	256	670	1,105
Manufacturing, nec; recycling	c16	315	1,110	671	1,172	222	428	4,054
Electricity, gas, and water supply	c17	16,980	82,421	18,614	17,661	1,408	8,301	10,073
Construction	c18	345	5,918	4,073	1,953	416	945	1,241
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	29,433	22,452	116,471	58,460	23,186	8,977	11,916
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	6,089	4,645	24,094	12,093	4,796	1,857	2,465
Hotels and restaurants	c22	2,415	6,947	9,369	3,297	433	1,528	2,210
Inland transport	c23	12,004	21,441	41,655	13,262	2,926	8,132	8,516
Water transport	c24	2,948	6,526	8,124	2,787	786	761	962
Air transport	c25	294	604	832	638	172	191	318
Other supporting and auxiliary transport activities; activities of travel agencies	c26	4,928	3,771	11,781	4,057	749	1,938	2,106
Post and telecommunications	c27	3,467	2,992	2,984	1,215	613	608	886
Financial intermediation	c28	21,294	48,052	22,717	12,335	1,540	5,978	9,574
Real estate activities	c29	26	335	575	607	124	213	350
Renting of M&Eq and other business activities	c30	12,644	45,108	36,970	11,975	2,093	4,982	7,321
Public administration and defense; compulsory social security	c31	1,853	1,474	1,815	734	-	510	457
Education	c32	699	1,981	1,008	476	69	181	327
Health and social work	c33	868	1,322	510	124	385	191	271
Other community, social, and personal services	c34	6,027	13,359	10,063	4,884	1,136	1,738	4,677
Private households with employed persons	c35	-	-	-	-	-	-	-

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Table A4.2 Domestic Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Domestic</b>												
48	66,092	12,725	344	551	195	41	66	3,506	115	23,885	–	281
474,282	72,271	3,946	92,669	314,838	7,520	8,040	4,364	1,124	175,477	25,716	–	271
8,552	66,258	4,040	6,286	16,674	7,186	14,040	4,765	1,357	5,663	11,866	–	5,685
1,139	18,226	22,212	9,558	11,351	6,646	7,589	15,261	11,865	1,626	17,872	–	2,106
244	2,994	5,290	1,721	4,043	1,432	2,535	7,121	3,564	252	4,266	–	145
755	3,589	2,875	7,378	14,791	9,096	7,185	5,036	26,728	270	126,170	–	199
526	12,118	3,678	14,094	5,099	5,673	19,840	2,857	4,587	1,340	4,657	–	17,539
88,826	178,882	12,846	44,251	122,551	7,627	12,055	6,554	1,261	49,875	50,641	–	5,069
28,409	575,139	172,315	57,509	64,185	20,850	86,239	19,814	7,637	7,837	94,773	–	866
3,380	48,252	117,471	16,319	15,824	30,957	94,268	55,292	6,930	2,080	47,208	–	3,029
10,415	13,374	3,699	191,959	46,118	8,864	48,733	15,765	1,490	2,076	623,217	–	194
12,498	26,905	13,377	51,889	976,979	231,696	350,789	178,816	16,583	8,922	573,248	–	874
10,839	22,063	5,684	32,538	94,198	254,859	80,665	89,212	1,855	9,816	47,568	–	954
5,887	11,952	3,288	6,984	28,834	149,601	1,112,083	102,963	3,191	89,548	169,028	–	26,364
1,250	4,116	1,367	9,511	17,149	50,453	12,681	741,690	690	1,339	13,880	–	6,417
430	1,733	846	1,921	29,894	2,006	3,391	3,524	2,412	396	5,663	–	519
24,279	98,971	11,999	62,161	143,079	23,666	31,126	15,176	2,169	399,462	51,143	–	18,326
2,768	4,299	1,048	3,700	7,063	3,542	7,774	3,585	592	9,152	171,173	–	7,910
–	–	–	–	–	–	–	–	–	–	–	–	–
15,992	59,887	25,271	27,121	45,073	43,982	118,078	80,561	7,008	16,866	80,326	–	67,045
3,308	12,389	5,228	5,610	9,324	9,098	24,426	16,665	1,450	3,489	16,616	–	–
1,228	12,321	2,441	6,927	9,687	10,160	14,008	5,813	695	3,111	20,950	–	11,352
13,641	35,930	10,185	27,683	47,034	21,471	30,654	22,906	2,346	11,923	81,435	–	22,846
3,038	6,533	1,538	4,844	11,825	5,290	7,202	6,862	427	3,745	6,301	–	11,741
149	1,939	466	793	1,430	2,146	5,491	1,851	145	446	3,654	–	3,309
2,998	7,633	1,919	6,630	10,586	4,582	8,094	11,274	694	1,292	8,019	–	18,364
434	3,845	848	2,220	3,405	4,005	6,416	1,842	313	2,933	54,157	–	7,255
13,664	38,833	8,805	25,755	83,402	24,806	59,714	22,139	2,307	61,149	97,014	–	67,284
197	414	647	762	1,160	1,079	2,388	521	208	197	320	–	91,524
8,970	60,511	11,223	19,750	44,161	40,305	92,060	51,263	3,877	13,220	158,416	–	183,664
195	2,110	670	1,191	3,505	2,180	6,578	6,860	120	525	3,580	–	1,964
291	1,188	276	876	1,318	1,256	1,481	992	110	517	4,678	–	3,019
1,664	672	126	810	2,041	1,433	1,467	1,119	58	1,037	2,140	–	1,427
3,867	15,331	3,536	8,774	18,575	11,894	18,493	14,865	777	17,425	30,512	–	21,406
–	–	–	–	–	–	–	–	–	–	–	–	–

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Table A4.2 Domestic Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Domestic							
Agriculture, hunting, forestry, and fishing	c1	58	51,611	49	7	7	9,475
Mining and quarrying	c2	56	217	1,734	436	430	459
Food, beverages, and tobacco	c3	1,176	184,063	2,992	2,948	3,383	3,559
Textiles and textile products	c4	436	5,996	1,345	51	523	1,434
Leather, leather products, and footwear	c5	30	591	270	9	103	290
Wood and products of wood and cork	c6	41	409	199	47	15	56
Pulp, paper, paper products, printing, and publishing	c7	3,629	1,404	514	30	82	206
Coke, refined petroleum, and nuclear fuel	c8	1,049	1,889	64,534	22,116	20,636	20,701
Chemicals and chemical products	c9	179	3,874	3,486	1,159	1,043	3,705
Rubber and plastics	c10	627	1,593	6,073	66	79	592
Other nonmetallic minerals	c11	40	269	357	48	117	492
Basic metals and fabricated metal	c12	181	682	2,197	689	360	3,959
Machinery, nec	c13	197	466	1,923	2,794	4,277	5,976
Electrical and optical equipment	c14	5,454	566	1,502	590	275	1,067
Transport equipment	c15	1,328	1,112	63,198	11,811	11,508	1,381
Manufacturing, nec; recycling	c16	107	296	306	25	38	302
Electricity, gas, and water supply	c17	3,791	6,973	15,009	184	352	1,373
Construction	c18	1,636	3,836	8,039	14	401	2,233
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	-	-	-
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	-	38,154	9,765	2,508	2,669	3,996
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	13,869	7,893	2,020	519	552	827
Hotels and restaurants	c22	2,348	1,206	9,600	285	1,617	1,672
Inland transport	c23	4,726	6,777	23,789	481	637	11,699
Water transport	c24	2,429	1,139	721	10,206	102	3,337
Air transport	c25	685	250	266	26	6,939	2,213
Other supporting and auxiliary transport activities; activities of travel agencies	c26	3,799	1,101	34,396	12,481	1,958	4,927
Post and telecommunications	c27	1,501	3,503	3,175	5,001	719	1,520
Financial intermediation	c28	13,919	7,389	45,307	10,730	4,773	11,950
Real estate activities	c29	18,934	6,382	736	36	644	1,915
Renting of M&Eq and other business activities	c30	37,996	6,497	3,977	3,551	1,436	4,226
Public administration and defense; compulsory social security	c31	406	285	504	29	139	343
Education	c32	624	525	988	68	153	179
Health and social work	c33	295	191	549	140	19	80
Other community, social, and personal services	c34	4,428	5,416	13,194	829	758	10,459
Private households with employed persons	c35	-	-	-	-	-	-

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Table A4.2 Domestic Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Domestic</b>										
754	9	80	11,471	–	4,196	1,913	2,011	–	306,475	–
106	175	75	1,638	1,076	1,137	2,105	1,016	–	3,754	–
3,781	2,790	1,836	15,221	15,434	22,515	14,592	25,316	–	709,118	–
666	3,817	997	11,118	29,072	2,343	19,194	9,904	–	152,785	–
68	430	172	1,975	4,946	511	3,338	654	–	63,035	–
146	144	26	984	257	172	641	1,531	–	7,365	–
2,174	13,744	1,261	59,768	17,731	12,387	2,741	12,025	–	3,691	–
1,363	2,859	752	48,888	17,496	7,116	11,656	5,638	–	37,366	–
576	782	345	34,324	7,167	14,449	208,571	21,889	–	66,918	–
152	97	267	3,448	528	99	1,289	4,644	–	4,379	–
420	143	57	2,914	3,206	2,107	1,310	1,775	–	7,822	–
383	737	766	32,375	2,799	2,578	2,850	5,527	–	13,401	–
923	1,573	412	4,588	1,049	1,415	25,041	2,615	–	9,210	–
39,720	1,431	1,006	131,815	8,214	10,438	5,902	28,522	–	132,260	–
4,347	1,647	187	53,029	22,353	486	3,338	32,194	–	161,789	–
227	2,623	433	4,821	2,444	2,097	474	2,240	–	12,398	–
5,611	3,894	3,129	6,669	9,202	7,236	6,284	11,038	–	85,245	–
4,046	9,962	18,894	8,232	21,336	8,578	4,163	8,443	–	–	–
–	–	–	–	–	–	–	–	–	–	–
6,635	9,792	2,098	52,884	23,080	11,483	33,115	24,148	–	251,137	–
1,373	2,026	434	10,940	4,774	2,375	6,850	4,995	–	51,951	–
2,375	37,784	2,532	44,219	45,067	21,511	5,485	12,438	–	256,078	–
1,582	4,069	764	21,495	16,437	6,566	7,059	7,664	–	74,127	–
131	130	131	4,424	599	384	646	1,194	–	7,948	–
759	1,922	763	8,370	12,771	8,470	934	2,535	–	4,916	–
597	252	201	5,713	557	417	944	3,271	–	6,384	–
42,282	26,411	2,668	23,542	46,695	19,610	13,823	5,238	–	140,658	–
8,781	70,675	44,784	67,502	25,570	32,391	10,957	14,525	–	186,794	–
5,433	48,304	16,444	13,590	10,873	9,312	5,422	25,405	–	419,215	–
15,237	78,078	20,453	127,733	20,496	14,376	2,077	13,806	–	29,010	–
1,577	2,908	2,019	20,153	19,668	4,078	1,544	2,818	–	22,026	–
746	9,923	444	3,119	21,809	37,334	5,443	2,201	–	345,843	–
147	704	182	361	6,540	1,163	8,698	543	–	466,662	–
4,316	17,936	2,698	21,841	44,975	22,627	11,646	31,257	–	277,064	–
–	–	–	–	–	–	–	–	–	–	–

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Table A4.2 Domestic Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Domestic						
Agriculture, hunting, forestry, and fishing	c1	3,881	36,041	189,583	12,251	1,739,938
Mining and quarrying	c2	8	3,174	23,523	11,930	1,372,478
Food, beverages, and tobacco	c3	3	542	109,338	51,983	2,085,392
Textiles and textile products	c4	0	154	16,703	232,261	1,166,782
Leather, leather products, and footwear	c5	0	134	6,315	55,257	310,670
Wood and products of wood and cork	c6	0	1,269	4,469	17,765	462,614
Pulp, paper, paper products, printing, and publishing	c7	1	458	3,978	15,884	400,207
Coke, refined petroleum, and nuclear fuel	c8	3	116	26,453	27,182	991,453
Chemicals and chemical products	c9	12	4,218	11,968	113,167	1,921,062
Rubber and plastics	c10	0	715	4,825	57,806	613,614
Other nonmetallic minerals	c11	0	1,107	(3,220)	46,236	1,053,299
Basic metals and fabricated metal	c12	17	49,867	18,640	166,177	2,842,491
Machinery, nec	c13	17	368,459	588	180,830	1,365,083
Electrical and optical equipment	c14	2	148,309	36,897	749,449	3,044,460
Transport equipment	c15	8	562,405	14,081	112,921	1,937,855
Manufacturing, nec; recycling	c16	1	6,833	18,608	91,370	206,351
Electricity, gas, and water supply	c17	61	987	4,341	3,091	1,211,484
Construction	c18	–	3,162,509	–	13,523	3,513,341
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	–	–	–	–	–
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	–	72,204	47,093	149,187	1,598,052
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	–	14,936	9,741	30,880	330,598
Hotels and restaurants	c22	–	–	–	8,227	577,334
Inland transport	c23	10,799	17,847	14,777	27,743	695,027
Water transport	c24	1,732	4,890	2,231	28,307	162,920
Air transport	c25	372	235	84	22,438	99,815
Other supporting and auxiliary transport activities; activities of travel agencies	c26	230	2,415	2,727	3,800	197,587
Post and telecommunications	c27	–	–	–	2,196	438,978
Financial intermediation	c28	6,690	–	–	7,854	1,196,956
Real estate activities	c29	–	147,280	–	0	831,575
Renting of M&Eq and other business activities	c30	105,781	139,671	–	81,578	1,514,492
Public administration and defense; compulsory social security	c31	958,169	–	–	1,163	1,074,148
Education	c32	317,472	–	–	726	768,339
Health and social work	c33	187,740	–	–	718	692,393
Other community, social, and personal services	c34	22,611	169	222	11,999	711,784
Private households with employed persons	c35	–	–	–	–	–

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Table A4.2 Imports Industry *continued*

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
		Imports						
Agriculture, hunting, forestry, and fishing	m1	9,738	201	22,570	3,546	1,014	7,547	1,655
Mining and quarrying	m2	46	27,526	682	247	8	207	775
Food, beverages, and tobacco	m3	2,498	159	6,845	66	467	48	87
Textiles and textile products	m4	33	77	63	7,934	999	23	91
Leather, leather products, and footwear	m5	9	40	18	243	4,354	16	21
Wood and products of wood and cork	m6	38	261	25	32	11	2,603	138
Pulp, paper, paper products, printing, and publishing	m7	23	71	796	189	77	363	5,391
Coke, refined petroleum, and nuclear fuel	m8	1,030	1,413	120	178	40	111	135
Chemicals and chemical products	m9	7,546	3,061	778	4,552	666	1,730	2,720
Rubber and plastics	m10	350	345	799	392	297	142	475
Other nonmetallic minerals	m11	28	193	93	32	7	25	28
Basic metals and fabricated metal	m12	97	2,717	158	69	38	188	265
Machinery, nec	m13	523	3,002	275	345	41	233	256
Electrical and optical equipment	m14	139	2,233	185	139	32	116	284
Transport equipment	m15	161	353	52	46	20	25	116
Manufacturing, nec; recycling	m16	111	473	285	250	124	241	2,137
Electricity, gas, and water supply	m17	15	126	22	12	2	6	12
Construction	m18	9	214	50	13	5	14	19
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	14	24	17	23	5	6	13
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	346	1,349	619	1,080	145	159	296
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	88	135	162	164	31	27	61
Hotels and restaurants	m22	160	328	530	59	34	67	95
Inland transport	m23	237	1,333	725	264	41	145	163
Water transport	m24	90	196	237	156	31	59	62
Air transport	m25	139	293	387	287	87	103	166
Other supporting and auxiliary transport activities; activities of travel agencies	m26	23	47	56	25	6	17	16
Post and telecommunications	m27	33	42	35	25	8	8	12
Financial intermediation	m28	109	260	123	228	26	42	68
Real estate activities	m29	1	4	3	1	0	1	1
Renting of M&Eq and other business activities	m30	91	1,770	1,332	459	82	166	305
Public administration and defense; compulsory social security	m31	76	106	92	29	9	86	39
Education	m32	12	51	27	8	2	5	8
Health and social work	m33	12	34	12	3	9	6	13
Other community, social, and personal services	m34	142	369	231	108	31	45	132
Private households with employed persons	m35	4	4	2	2	0	0	2
Total intermediate consumption	r60	711,621	732,903	1,605,022	918,397	262,532	355,577	305,724
Taxes less subsidies on products	r99	–	–	–	–	–	–	–
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	1,028,317	639,575	480,370	248,386	48,138	107,038	94,483
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	1,739,938	1,372,478	2,085,392	1,166,782	310,670	462,614	400,207

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Table A4.2 Imports Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Imports								
Agriculture, hunting, forestry, and fishing	m1	23	3,821	1,876	54	100	28	30
Mining and quarrying	m2	98,442	13,704	391	20,048	68,288	609	842
Food, beverages, and tobacco	m3	184	1,360	196	156	457	142	316
Textiles and textile products	m4	27	376	358	161	416	134	191
Leather, leather products, and footwear	m5	13	49	142	68	195	51	66
Wood and products of wood and cork	m6	26	70	52	114	468	133	160
Pulp, paper, paper products, printing, and publishing	m7	26	440	179	641	340	266	935
Coke, refined petroleum, and nuclear fuel	m8	2,902	5,724	586	1,402	3,751	254	487
Chemicals and chemical products	m9	2,537	43,239	14,003	4,773	5,345	1,693	7,812
Rubber and plastics	m10	165	1,598	4,315	545	763	1,415	3,372
Other nonmetallic minerals	m11	420	270	74	2,058	751	132	610
Basic metals and fabricated metal	m12	923	1,057	387	1,795	50,481	10,443	16,189
Machinery, nec	m13	488	960	243	1,499	4,346	12,822	4,420
Electrical and optical equipment	m14	809	1,023	254	545	2,492	17,659	192,410
Transport equipment	m15	58	155	69	328	1,264	2,000	1,366
Manufacturing, nec; recycling	m16	90	670	313	937	16,649	616	1,335
Electricity, gas, and water supply	m17	318	102	10	94	339	47	84
Construction	m18	544	124	16	162	457	79	114
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	15	63	25	24	98	91	374
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	3,652	1,703	571	1,067	4,261	1,306	5,487
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	213	292	109	104	493	331	2,619
Hotels and restaurants	m22	58	556	91	336	468	424	575
Inland transport	m23	3,870	1,098	184	1,137	3,278	397	689
Water transport	m24	136	273	80	199	411	215	502
Air transport	m25	74	951	227	399	707	1,106	2,971
Other supporting and auxiliary transport activities; activities of travel agencies	m26	102	72	19	44	126	33	79
Post and telecommunications	m27	13	53	16	27	60	62	204
Financial intermediation	m28	60	252	88	138	359	169	1,555
Real estate activities	m29	1	4	1	2	5	4	7
Renting of M&Eq and other business activities	m30	1,359	2,034	380	944	2,041	1,282	3,002
Public administration and defense; compulsory social security	m31	211	127	34	76	236	50	105
Education	m32	8	47	9	22	53	56	104
Health and social work	m33	45	22	4	24	111	50	145
Other community, social, and personal services	m34	267	446	83	284	629	298	440
Private households with employed persons	m35	0	7	2	2	7	1	6
Total intermediate consumption	r60	862,242	1,569,513	497,271	790,746	2,375,990	1,059,953	2,545,225
Taxes less subsidies on products	r99	-	-	-	-	-	-	-
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-	-
Value added at basic prices	r64	129,211	351,549	116,343	262,553	466,502	305,131	499,235
International transport margins		-	-	-	-	-	-	-
Output at basic prices	r69	991,453	1,921,062	613,614	1,053,299	2,842,491	1,365,083	3,044,460

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Table A4.2 Imports Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Imports</b>											
20	351	30	3,511	–	50	78	1,061	12	3	6	422
292	137	38,037	3,217	–	17	3	12	91	6	9	8
114	66	102	283	–	120	38	2,590	45	38	47	56
263	273	20	374	–	42	9	89	30	2	7	21
195	109	14	87	–	6	1	12	12	0	4	13
91	432	13	1,952	–	8	3	6	5	1	0	3
136	236	50	333	–	252	54	48	20	2	3	9
229	46	1,501	1,677	–	147	36	56	1,958	574	622	577
1,679	636	581	7,577	–	76	17	191	70	20	14	237
1,945	277	100	1,620	–	124	78	51	204	4	5	29
192	54	159	6,497	–	9	4	7	37	2	2	7
8,667	742	453	26,673	–	61	20	18	89	20	11	96
4,498	96	458	2,053	–	88	25	19	98	139	206	288
11,444	370	8,681	8,662	–	2,608	480	57	156	37	16	141
23,557	68	132	769	–	262	56	35	1,966	512	481	64
1,482	1,131	149	2,302	–	257	37	81	132	7	14	155
38	21	255	91	–	60	12	4	9	2	1	3
62	9	288	1,741	–	94	15	21	68	1	5	23
109	15	23	79	–	25	4	4	10	3	3	5
1,353	146	1,623	1,563	–	359	73	91	88	44	43	46
292	38	180	283	–	87	18	38	30	8	9	15
261	37	145	976	–	434	54	79	372	8	60	74
426	46	1,600	1,355	–	318	71	99	317	13	14	157
232	34	121	307	–	395	66	29	22	295	22	94
936	80	217	1,879	–	1,639	295	98	125	53	3,084	1,035
42	10	46	70	–	37	16	8	21	21	40	56
37	12	36	529	–	111	28	32	32	46	9	16
138	56	248	495	–	431	76	35	238	75	54	180
4	1	1	11	–	16	3	1	1	1	0	1
1,391	172	823	2,233	–	8,573	1,753	335	227	174	248	262
83	11	149	135	–	100	18	11	20	3	4	13
49	3	13	86	–	88	18	5	16	2	3	4
43	5	27	67	–	33	7	2	12	1	1	2
260	51	509	763	–	416	116	124	131	13	13	141
2	2	6	2	–	4	8	1	2	0	0	0
<b>1,577,955</b>	<b>123,849</b>	<b>959,910</b>	<b>2,710,342</b>	<b>–</b>	<b>626,294</b>	<b>129,565</b>	<b>357,901</b>	<b>329,379</b>	<b>92,044</b>	<b>71,802</b>	<b>120,852</b>
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
359,900	82,502	251,574	802,999	–	971,758	201,033	219,433	365,648	70,876	28,013	76,734
–	–	–	–	–	–	–	–	–	–	–	–
<b>1,937,855</b>	<b>206,351</b>	<b>1,211,484</b>	<b>3,513,341</b>	<b>–</b>	<b>1,598,052</b>	<b>330,598</b>	<b>577,334</b>	<b>695,027</b>	<b>162,920</b>	<b>99,815</b>	<b>197,587</b>

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Table A4.2 Imports Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Imports						
Agriculture, hunting, forestry, and fishing	m1	35	12	5	470	8
Mining and quarrying	m2	10	14	7	120	156
Food, beverages, and tobacco	m3	57	63	31	279	231
Textiles and textile products	m4	15	86	160	214	367
Leather, leather products, and footwear	m5	3	27	4	84	247
Wood and products of wood and cork	m6	4	29	5	53	28
Pulp, paper, paper products, printing, and publishing	m7	32	200	38	1,421	340
Coke, refined petroleum, and nuclear fuel	m8	42	96	33	1,450	538
Chemicals and chemical products	m9	27	79	35	2,713	524
Rubber and plastics	m10	13	20	23	174	35
Other nonmetallic minerals	m11	6	9	15	52	38
Basic metals and fabricated metal	m12	31	110	35	747	130
Machinery, nec	m13	64	115	27	293	75
Electrical and optical equipment	m14	4,137	302	139	20,651	1,291
Transport equipment	m15	214	125	19	1,752	638
Manufacturing, nec; recycling	m16	128	1,697	184	2,706	1,602
Electricity, gas, and water supply	m17	9	24	8	35	14
Construction	m18	42	126	123	99	251
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	11	43	3	54	29
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	130	205	51	752	182
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	56	96	12	368	106
Hotels and restaurants	m22	107	1,957	83	1,988	2,426
Inland transport	m23	30	67	43	340	231
Water transport	m24	16	18	11	148	34
Air transport	m25	367	923	366	4,044	5,977
Other supporting and auxiliary transport activities; activities of travel agencies	m26	6	20	11	49	52
Post and telecommunications	m27	390	257	46	255	425
Financial intermediation	m28	60	780	198	523	154
Real estate activities	m29	2	9	2	9	5
Renting of M&Eq and other business activities	m30	780	3,698	1,017	4,110	1,196
Public administration and defense; compulsory social security	m31	22	122	21	222	245
Education	m32	14	171	10	93	330
Health and social work	m33	4	36	2	39	234
Other community, social, and personal services	m34	119	2,018	105	528	1,240
Private households with employed persons	m35	2	8	1	0	0
Total intermediate consumption	r60	164,418	371,333	130,185	905,999	483,601
Taxes less subsidies on products	r99	–	–	–	–	–
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–
Value added at basic prices	r64	274,560	825,623	701,390	608,493	590,547
International transport margins		–	–	–	–	–
Output at basic prices	r69	438,978	1,196,956	831,575	1,514,492	1,074,148

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Table A4.2 Imports Industry *continued*

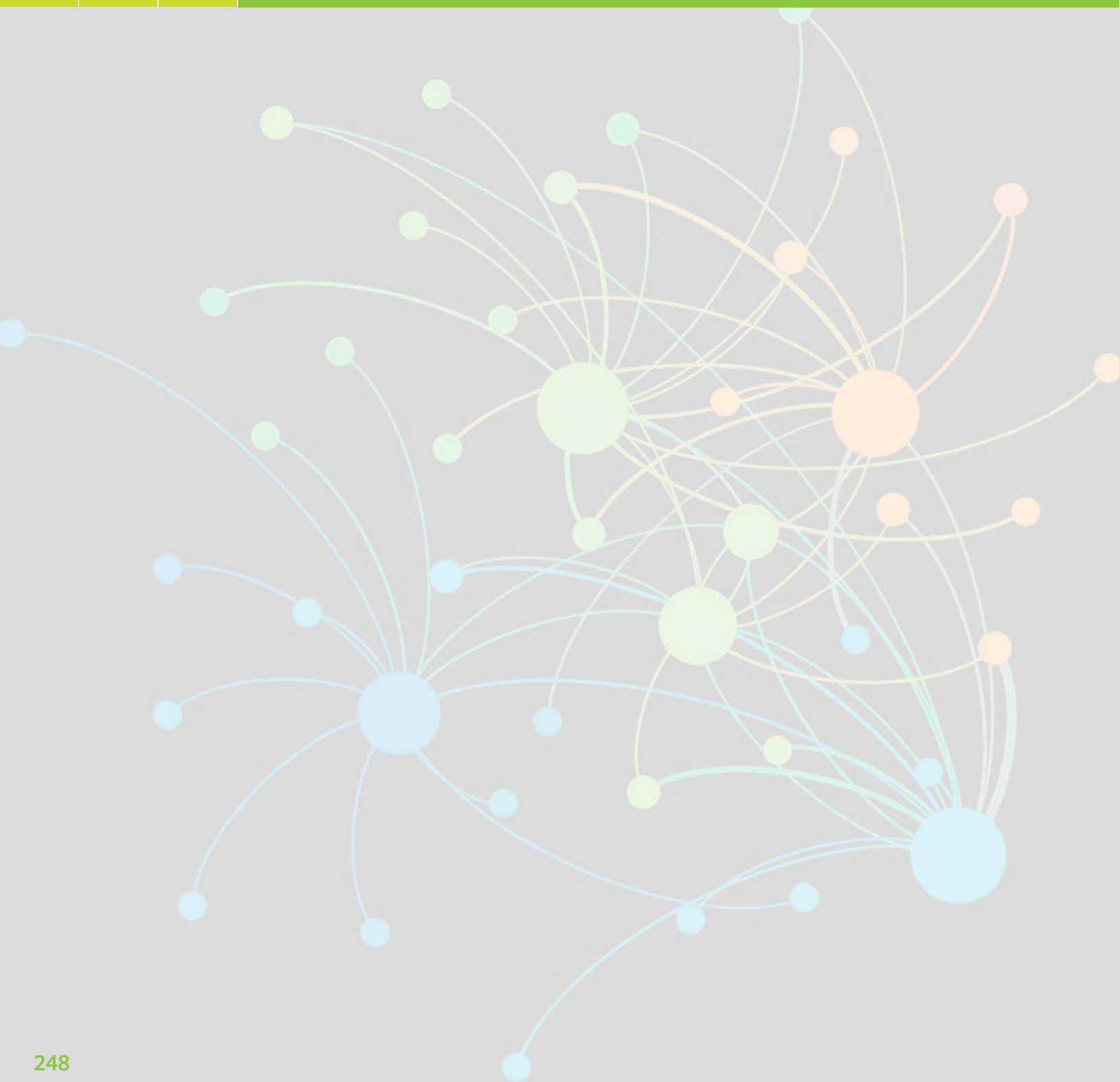
Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Imports</b>										
164	85	98	–	8,144	–	130	802	554	–	68,256
193	181	143	–	445	–	9	153	7,373	–	282,447
354	208	395	–	32,955	–	33	110	77	–	51,272
86	329	224	–	6,521	–	3	52	51	–	20,121
22	40	35	–	4,197	–	0	9	8	–	10,416
22	6	41	–	172	–	2	61	105	–	7,173
400	42	280	–	830	–	61	229	36	–	14,791
230	66	197	–	5,964	–	8	74	18	–	34,270
1,243	2,030	1,841	–	15,109	–	89	813	181	–	136,236
21	67	174	–	2,479	–	12	549	120	–	23,098
31	22	31	–	287	–	7	121	156	–	12,469
116	45	199	–	854	–	28	3,526	466	–	127,947
97	1,133	161	–	930	–	65	58,850	324	–	99,553
2,386	409	4,636	–	20,357	–	156	87,899	27,948	–	421,285
81	103	1,251	–	25,067	–	110	40,301	574	–	104,146
1,210	150	1,202	–	7,420	–	18	4,950	7,635	–	58,877
8	6	17	–	153	–	45	98	45	–	2,148
88	46	82	–	75	–	27	1,111	52	–	6,267
13	14	27	–	394	–	43	531	67	–	2,302
146	222	281	–	4,968	–	294	6,231	913	–	41,844
78	38	114	–	1,559	–	68	1,907	297	–	10,526
966	257	532	–	8,176	–	35	5	10	–	22,822
112	111	134	–	3,531	–	635	343	2,414	–	25,964
20	20	39	–	1,357	–	410	25	16	–	6,380
4,161	437	1,223	–	2,299	–	242	132	10	–	37,519
34	7	17	–	174	–	28	62	9	–	1,502
197	124	59	–	1,465	–	54	124	21	–	4,903
111	41	107	–	2,785	–	138	187	9	–	10,594
2	1	2	–	29	–	14	6	0	–	157
457	128	764	–	9,783	–	7,774	6,214	120	–	67,477
76	35	64	–	425	–	431	83	27	–	3,594
468	71	35	–	419	–	472	71	2	–	2,856
34	255	20	–	518	–	180	107	49	–	2,167
271	195	802	–	11,858	–	4,955	89	38	–	28,260
9	0	0	–	99	–	2	0	0	–	186
<b>305,865</b>	<b>436,969</b>	<b>344,245</b>	–	<b>4,498,621</b>	–	<b>1,632,189</b>	<b>4,962,772</b>	<b>613,692</b>	<b>2,335,901</b>	<b>38,878,398</b>
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
462,474	255,424	367,539	–	–	–	–	–	–	–	12,293,351
–	–	–	–	–	–	–	–	–	–	–
<b>768,339</b>	<b>692,393</b>	<b>711,784</b>	–	<b>4,498,621</b>	–	<b>1,632,189</b>	<b>4,962,772</b>	<b>613,692</b>	<b>2,335,901</b>	<b>51,171,749</b>

\$ = United States dollar; (–) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi–Regional Input–Output Database.

# A5

## APPENDIX 5: INPUT-OUTPUT TABLES FOR 2010 AND 2017— REPUBLIC OF KOREA



**Table A5.1: Republic of Korea Input–Output Table, 2010** (current prices, \$ million)

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	2,869	3	22,427	445	1	768	9
Mining and quarrying	c2	1	0	6	5	2	0	3
Food, beverages, and tobacco	c3	6,704	4	13,040	16	653	7	111
Textiles and textile products	c4	250	6	220	12,092	291	19	316
Leather, leather products, and footwear	c5	2	1	24	403	1,390	2	15
Wood and products of wood and cork	c6	111	4	43	28	2	823	77
Pulp, paper, paper products, printing, and publishing	c7	171	4	1,200	472	99	30	10,471
Coke, refined petroleum, and nuclear fuel	c8	955	100	325	434	42	35	385
Chemicals and chemical products	c9	2,339	80	1,352	4,776	231	284	2,221
Rubber and plastics	c10	125	4	383	241	26	11	141
Other nonmetallic minerals	c11	6	0	129	11	9	2	24
Basic metals and fabricated metal	c12	91	48	773	524	259	66	188
Machinery, nec	c13	145	39	275	528	30	20	256
Electrical and optical equipment	c14	154	22	483	946	75	40	267
Transport equipment	c15	200	83	252	701	89	30	201
Manufacturing, nec; recycling	c16	3	12	374	1,677	151	44	150
Electricity, gas, and water supply	c17	274	68	519	1,029	28	89	707
Construction	c18	81	8	51	32	2	3	43
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	85	3	397	229	7	15	140
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	602	24	2,813	1,389	283	105	994
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	773	31	3,611	1,906	240	135	1,276
Hotels and restaurants	c22	114	22	174	242	30	20	426
Inland transport	c23	146	302	1,660	790	87	136	1,302
Water transport	c24	0	0	0	0	–	0	0
Air transport	c25	8	1	31	37	3	3	105
Other supporting and auxiliary transport activities; activities of travel agencies	c26	390	142	1,060	616	83	57	389
Post and telecommunications	c27	63	6	74	66	5	5	120
Financial intermediation	c28	900	155	907	771	82	115	916
Real estate activities	c29	32	8	290	360	155	19	486
Renting of M&Eq and other business activities	c30	137	53	716	756	76	29	1,447
Public administration and defense; compulsory social security	c31	55	1	21	18	2	2	55
Education	c32	14	3	40	48	7	3	71
Health and social work	c33	113	6	84	61	4	10	71
Other community, social, and personal services	c34	134	20	471	185	89	33	1,494
Private households with employed persons	c35	–	–	–	–	–	–	–

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Table A5.1 Domestic Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Domestic								
Agriculture, hunting, forestry, and fishing	c1	2	718	333	1	11	6	18
Mining and quarrying	c2	2,097	32	1	39	701	6	42
Food, beverages, and tobacco	c3	23	1,333	27	19	182	133	467
Textiles and textile products	c4	41	445	343	58	478	296	1,251
Leather, leather products, and footwear	c5	0	97	2	5	125	72	346
Wood and products of wood and cork	c6	5	51	8	42	243	82	154
Pulp, paper, paper products, printing, and publishing	c7	172	1,257	133	121	496	263	1,756
Coke, refined petroleum, and nuclear fuel	c8	3,478	19,060	301	591	1,510	435	1,125
Chemicals and chemical products	c9	2,094	52,518	5,136	726	3,805	1,207	13,819
Rubber and plastics	c10	18	582	408	54	387	636	2,955
Other nonmetallic minerals	c11	18	318	12	764	505	102	3,769
Basic metals and fabricated metal	c12	682	2,469	439	470	55,687	14,356	17,872
Machinery, nec	c13	509	675	437	164	2,552	13,074	4,290
Electrical and optical equipment	c14	267	1,086	190	154	2,187	7,270	85,182
Transport equipment	c15	131	430	129	142	1,282	3,015	4,032
Manufacturing, nec; recycling	c16	10	410	127	65	918	793	3,083
Electricity, gas, and water supply	c17	1,006	2,955	174	360	5,831	600	2,851
Construction	c18	46	146	17	20	150	92	624
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	87	508	47	43	337	273	832
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	615	3,595	330	302	2,383	1,930	5,891
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	790	4,615	423	388	3,059	2,478	7,563
Hotels and restaurants	c22	109	715	59	70	610	373	1,069
Inland transport	c23	696	2,804	292	963	3,531	1,239	2,816
Water transport	c24	0	0	0	0	0	0	0
Air transport	c25	31	102	13	12	63	93	264
Other supporting and auxiliary transport activities; activities of travel agencies	c26	734	1,886	197	302	2,110	918	2,636
Post and telecommunications	c27	70	189	18	40	185	77	440
Financial intermediation	c28	402	1,871	223	282	2,307	1,522	3,538
Real estate activities	c29	103	504	31	37	255	195	688
Renting of M&Eq and other business activities	c30	859	2,675	178	203	3,467	1,166	7,512
Public administration and defense; compulsory social security	c31	11	46	6	7	63	29	69
Education	c32	64	141	11	12	140	71	260
Health and social work	c33	14	142	26	19	147	117	288
Other community, social, and personal services	c34	168	1,451	198	259	4,207	372	974
Private households with employed persons	c35	-	-	-	-	-	-	-

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Table A5.1 Domestic Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Domestic</b>											
13	16	4	697	3	26	34	2,474	3	1	0	12
14	3	597	74	0	1	1	2	1	0	0	1
355	68	31	108	28	214	278	10,200	31	5	3	152
1,347	1,008	118	531	52	316	460	210	258	15	4	704
85	289	16	66	1	87	65	1	9	2	1	25
280	845	33	1,556	4	29	38	46	9	1	0	267
429	216	151	476	195	1,501	1,954	284	264	13	39	754
797	105	1,647	1,857	99	760	990	640	6,960	1,741	1,907	550
2,952	897	1,729	2,645	26	197	256	293	699	60	94	334
2,342	246	97	1,345	27	205	267	47	298	3	3	104
314	62	40	5,259	1	10	14	27	3	0	2	11
24,919	1,586	1,030	23,921	31	239	311	282	273	32	42	343
10,799	195	1,128	4,225	23	180	235	78	116	21	50	441
12,358	534	1,221	8,793	67	511	666	404	560	33	49	737
35,754	317	446	2,129	35	273	355	96	2,286	267	1,065	587
2,789	620	29	449	8	64	83	114	24	2	14	45
1,186	98	7,909	627	149	1,145	1,490	1,092	1,222	8	8	1,278
230	15	218	139	9	69	90	36	115	17	15	91
550	101	57	399	92	11	15	172	123	16	4	47
3,894	715	404	2,822	10	772	104	1,221	871	114	30	331
5,000	918	518	3,623	13	103	1,034	1,567	1,118	147	39	424
581	50	237	334	172	1,320	1,718	161	168	26	95	896
2,189	270	163	1,576	284	2,182	2,840	94	639	53	14	712
0	0	0	0	0	0	0	0	0	0	0	0
54	10	10	38	51	394	513	6	157	3	5	57
1,001	143	170	371	294	2,264	2,947	81	3,893	1,256	1,241	1,293
174	17	106	173	188	1,446	1,882	86	109	10	3	292
3,613	378	999	5,533	329	2,529	3,292	765	1,304	334	256	1,301
342	131	109	779	407	3,129	4,073	1,779	342	28	39	771
3,747	173	1,519	10,826	482	3,703	4,820	408	1,773	1,081	485	4,208
51	5	68	100	14	105	137	25	92	2	260	54
129	11	49	88	38	291	378	41	34	7	12	142
189	18	122	755	63	487	634	67	113	6	11	105
874	72	860	959	258	1,981	2,578	496	1,504	85	34	929
-	-	-	-	-	-	-	-	-	-	-	-

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Table A5.1 Domestic Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Domestic						
Agriculture, hunting, forestry, and fishing	c1	2	24	3	97	59
Mining and quarrying	c2	1	1	0	3	1
Food, beverages, and tobacco	c3	23	165	26	815	154
Textiles and textile products	c4	50	245	45	482	322
Leather, leather products, and footwear	c5	3	35	0	230	68
Wood and products of wood and cork	c6	1	2	1	69	7
Pulp, paper, paper products, printing, and publishing	c7	324	2,108	79	3,590	2,291
Coke, refined petroleum, and nuclear fuel	c8	131	185	201	986	570
Chemicals and chemical products	c9	37	170	53	3,410	653
Rubber and plastics	c10	15	17	5	95	14
Other nonmetallic minerals	c11	2	6	2	40	7
Basic metals and fabricated metal	c12	39	225	145	648	513
Machinery, nec	c13	30	253	53	715	497
Electrical and optical equipment	c14	825	774	102	4,633	748
Transport equipment	c15	100	181	45	705	711
Manufacturing, nec; recycling	c16	11	83	28	148	91
Electricity, gas, and water supply	c17	205	1,041	1,803	1,924	1,905
Construction	c18	62	117	2,634	255	2,439
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	108	49	7	155	52
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	761	348	48	1,095	369
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	977	447	62	1,406	474
Hotels and restaurants	c22	94	1,504	87	3,827	1,556
Inland transport	c23	238	1,586	75	2,240	1,182
Water transport	c24	0	0	0	0	0
Air transport	c25	180	235	3	283	173
Other supporting and auxiliary transport activities; activities of travel agencies	c26	176	435	42	547	50
Post and telecommunications	c27	1,409	1,486	41	1,357	884
Financial intermediation	c28	316	15,452	12,157	3,669	2,683
Real estate activities	c29	219	2,325	1,015	2,543	662
Renting of M&Eq and other business activities	c30	2,144	10,110	445	8,675	3,902
Public administration and defense; compulsory social security	c31	94	195	39	190	149
Education	c32	33	401	19	554	351
Health and social work	c33	39	430	49	722	457
Other community, social, and personal services	c34	224	2,223	234	2,872	2,516
Private households with employed persons	c35	-	-	-	-	-

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Table A5.1 Domestic Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Domestic</b>										
593	640	110	–	11,368	–	0	473	1,317	638	<b>46,218</b>
2	2	3	–	44	–	–	8	(423)	138	<b>3,407</b>
1,768	979	1,151	–	30,686	–	1	73	2,099	4,802	<b>76,933</b>
204	321	817	–	10,418	–	0	284	1,653	15,473	<b>51,445</b>
1	13	98	–	1,497	–	0	1	287	1,598	<b>6,962</b>
29	19	69	–	70	–	0	10	9	101	<b>5,170</b>
1,917	493	1,461	–	6,726	–	87	65	(705)	3,479	<b>44,839</b>
1,106	388	994	–	3,559	–	0	19	1,676	35,686	<b>92,330</b>
376	14,851	2,558	–	6,355	–	0	219	(1,259)	49,484	<b>177,676</b>
36	39	237	–	188	–	–	25	175	6,862	<b>18,662</b>
25	7	84	–	136	–	0	9	248	1,487	<b>13,466</b>
295	221	1,397	–	2,037	–	1	2,961	2,749	43,511	<b>201,673</b>
184	63	1,147	–	1,530	–	3	16,009	179	30,344	<b>91,491</b>
1,142	1,028	2,281	–	12,824	–	3	12,314	2,159	164,945	<b>328,037</b>
232	146	2,472	–	12,931	–	0	20,780	452	102,407	<b>195,492</b>
366	50	257	–	1,244	–	0	537	210	1,636	<b>16,717</b>
2,490	1,671	2,814	–	14,762	–	706	3	0	1,889	<b>63,916</b>
135	71	118	–	301	–	1	147,979	863	338	<b>157,671</b>
87	157	146	–	2,696	–	1	574	80	603	<b>9,305</b>
613	1,111	1,037	–	19,084	–	10	4,064	569	4,270	<b>65,923</b>
787	1,427	1,331	–	24,502	–	13	5,218	731	5,483	<b>84,650</b>
2,182	390	1,590	–	28,721	–	922	19	0	2,467	<b>53,153</b>
397	234	1,230	–	18,164	–	0	330	56	664	<b>54,176</b>
0	0	0	–	0	–	0	0	0	10,778	<b>10,779</b>
32	20	66	–	388	–	–	4	1	8,142	<b>11,587</b>
95	77	343	–	2,308	–	0	238	4	682	<b>31,472</b>
338	157	477	–	4,892	–	0	13	1	635	<b>17,533</b>
1,052	1,244	2,767	–	36,760	–	0	30	–	2,351	<b>113,105</b>
859	1,112	1,228	–	64,807	–	12	5,574	1	1,693	<b>97,139</b>
1,373	706	4,735	–	6,316	–	17	33,742	2	12,518	<b>137,184</b>
84	98	198	–	8,197	–	88,699	36	0	52	<b>99,325</b>
274	55	256	–	45,635	–	29,763	288	1	366	<b>80,101</b>
382	417	247	–	29,777	–	37,457	27	1	87	<b>73,762</b>
1,372	1,178	17,794	–	48,721	–	1,186	4,721	15	3,297	<b>107,037</b>
–	–	–	–	–	–	–	–	–	–	–

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Table A5.1 Import Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	644	1	4,171	104	5	303	83
Mining and quarrying	m2	8	1	17	13	2	1	28
Food, beverages, and tobacco	m3	755	1	1,844	46	62	1	19
Textiles and textile products	m4	41	1	18	2,151	141	2	46
Leather, leather products, and footwear	m5	4	0	5	75	451	1	8
Wood and products of wood and cork	m6	31	1	12	9	2	263	38
Pulp, paper, paper products, printing, and publishing	m7	40	1	247	77	16	20	2,012
Coke, refined petroleum, and nuclear fuel	m8	399	40	112	99	14	8	151
Chemicals and chemical products	m9	666	23	254	1,170	77	73	655
Rubber and plastics	m10	78	3	231	148	20	9	91
Other nonmetallic minerals	m11	5	0	78	11	3	2	16
Basic metals and fabricated metal	m12	28	10	134	94	33	14	32
Machinery, nec	m13	33	9	51	72	5	3	53
Electrical and optical equipment	m14	29	7	59	100	18	3	48
Transport equipment	m15	52	17	19	42	6	2	24
Manufacturing, nec; recycling	m16	3	6	167	700	90	21	69
Electricity, gas, and water supply	m17	1	0	2	3	0	0	2
Construction	m18	1	0	2	1	0	0	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	0	11	9	1	0	5
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	52	2	154	115	28	6	55
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	27	1	79	26	21	1	28
Hotels and restaurants	m22	18	1	30	3	10	0	22
Inland transport	m23	19	4	63	24	4	2	23
Water transport	m24	5	0	25	9	1	2	12
Air transport	m25	6	0	24	13	2	2	45
Other supporting and auxiliary transport activities; activities of travel agencies	m26	31	10	69	23	8	2	30
Post and telecommunications	m27	3	0	8	6	1	1	13
Financial intermediation	m28	19	4	20	12	2	2	25
Real estate activities	m29	1	0	7	10	2	0	12
Renting of M&Eq and other business activities	m30	26	12	205	147	20	6	355
Public administration and defense; compulsory social security	m31	21	1	15	5	1	2	13
Education	m32	1	0	4	2	0	0	4
Health and social work	m33	1	0	2	2	1	0	1
Other community, social, and personal services	m34	2	0	7	4	1	0	8
Private households with employed persons	m35	0	0	0	0	0	0	0
Total intermediate consumption	r60	21,101	1,422	62,371	37,160	5,575	3,717	28,903
Taxes less subsidies on products	r99	370	70	993	400	56	26	657
Cif/ fob adjustments on exports	r61	-	-	-	-	-	-	-
Direct purchases abroad by residents	r62	-	-	-	-	-	-	-
Purchases on the domestic territory by nonresidents	r63	-	-	-	-	-	-	-
Value added at basic prices	r64	24,494	1,904	12,924	13,431	1,271	1,362	14,993
International transport margins		254	12	645	453	61	65	286
Output at basic prices	r69	46,218	3,407	76,933	51,445	6,962	5,170	44,839

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Table A5.1 Import Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Imports</b>												
5	167	73	1	6	2	7	5	5	3	167	1	5
53,730	763	10	803	17,845	35	137	62	7	15,321	907	1	5
24	254	13	4	35	14	61	24	4	12	19	3	24
13	82	50	9	84	26	115	107	138	19	69	8	34
1	11	3	1	16	8	39	27	57	7	22	1	31
8	21	3	11	82	28	66	89	269	11	436	1	8
21	259	23	26	92	50	350	90	76	16	139	25	187
1,613	8,014	82	234	687	181	415	339	35	732	801	42	285
700	14,903	1,445	211	1,137	284	3,871	612	217	516	681	5	40
45	412	366	34	263	434	1,831	1,426	149	71	830	16	124
152	236	12	539	379	68	2,373	199	39	66	3,305	1	6
535	759	131	152	22,540	4,319	5,062	7,900	437	255	7,197	4	32
132	168	94	37	665	2,945	1,118	2,377	30	259	983	5	38
85	205	35	30	488	1,934	37,701	3,003	67	344	1,679	23	172
17	59	13	18	158	274	389	5,490	19	51	150	6	43
9	209	57	30	451	377	1,504	1,314	287	16	230	4	29
172	14	1	3	93	9	21	17	1	56	19	0	2
39	4	1	2	20	12	15	13	1	13	16	0	1
3	29	3	2	17	15	46	33	3	3	18	2	14
2,407	445	56	55	1,085	200	823	354	39	709	267	6	75
67	123	8	9	98	58	183	128	16	27	81	4	52
6	39	2	4	32	19	56	30	2	12	19	9	57
2,348	112	7	48	860	34	100	71	7	671	81	4	31
41	24	12	30	65	18	27	13	2	3	11	0	124
14	45	9	13	32	41	117	24	4	5	18	22	172
76	152	11	21	169	69	205	82	9	19	30	21	145
8	17	2	3	17	10	92	29	2	8	43	14	111
11	52	5	7	56	42	101	89	9	23	141	10	69
3	12	1	1	6	4	17	8	3	3	19	10	77
162	538	28	40	653	201	1,464	798	29	254	1,303	115	823
13	19	2	2	21	11	54	29	2	13	50	4	26
8	13	1	1	12	8	38	18	1	4	19	2	17
1	4	0	0	5	5	39	11	1	1	8	0	3
11	15	1	2	19	8	37	22	1	7	25	4	31
0	0	0	0	0	0	0	0	0	0	0	0	0
<b>77,831</b>	<b>134,002</b>	<b>12,830</b>	<b>9,117</b>	<b>148,105</b>	<b>65,035</b>	<b>236,949</b>	<b>144,183</b>	<b>12,099</b>	<b>41,363</b>	<b>103,053</b>	<b>3,829</b>	<b>29,436</b>
1,121	919	93	134	439	457	1,085	534	79	2,201	2,353	57	438
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
6,491	40,266	5,537	3,996	48,652	25,077	85,181	48,862	4,378	18,266	50,752	5,405	35,948
6,887	2,488	202	219	4,477	922	4,821	1,912	160	2,086	1,513	13	102
<b>92,330</b>	<b>177,676</b>	<b>18,662</b>	<b>13,466</b>	<b>201,673</b>	<b>91,491</b>	<b>328,037</b>	<b>195,492</b>	<b>16,717</b>	<b>63,916</b>	<b>157,671</b>	<b>9,305</b>	<b>65,923</b>

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Table A5.1 Import Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods					Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Imports							
Agriculture, hunting, forestry, and fishing	m1	6	385	1	0	0	3
Mining and quarrying	m2	7	7	38	7	7	3
Food, beverages, and tobacco	m3	31	1,142	5	1	0	16
Textiles and textile products	m4	52	29	36	2	0	96
Leather, leather products, and footwear	m5	34	1	10	1	0	19
Wood and products of wood and cork	m6	10	13	3	0	0	61
Pulp, paper, paper products, printing, and publishing	m7	247	48	21	2	2	57
Coke, refined petroleum, and nuclear fuel	m8	389	272	2,952	564	642	165
Chemicals and chemical products	m9	53	59	178	14	18	75
Rubber and plastics	m10	162	29	182	3	4	64
Other nonmetallic minerals	m11	8	16	5	1	1	7
Basic metals and fabricated metal	m12	42	35	44	8	10	57
Machinery, nec	m13	50	13	22	5	12	94
Electrical and optical equipment	m14	225	66	116	8	16	192
Transport equipment	m15	57	7	361	79	316	82
Manufacturing, nec; recycling	m16	39	52	11	1	7	22
Electricity, gas, and water supply	m17	3	2	3	1	1	2
Construction	m18	2	1	1	1	1	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	30	5	5	1	1	2
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	123	61	48	10	9	22
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	111	44	26	4	3	9
Hotels and restaurants	m22	79	27	8	1	4	29
Inland transport	m23	42	14	80	6	6	14
Water transport	m24	8	3	16	239	63	80
Air transport	m25	215	3	70	84	173	149
Other supporting and auxiliary transport activities; activities of travel agencies	m26	198	5	288	82	91	210
Post and telecommunications	m27	143	7	17	3	5	29
Financial intermediation	m28	94	21	49	17	16	29
Real estate activities	m29	100	44	8	1	1	18
Renting of M&Eq and other business activities	m30	1,101	70	261	232	142	575
Public administration and defense; compulsory social security	m31	35	9	13	3	78	11
Education	m32	23	2	2	0	0	5
Health and social work	m33	4	1	2	1	1	2
Other community, social, and personal services	m34	42	4	15	2	1	12
Private households with employed persons	m35	0	0	0	0	0	0
Total intermediate consumption	r60	38,320	25,789	30,271	6,769	7,455	20,210
Taxes less subsidies on products	r99	571	1,322	4,870	208	16	356
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–
Value added at basic prices	r64	45,628	25,848	18,597	3,700	3,977	10,803
International transport margins		132	194	438	102	138	104
Output at basic prices	r69	84,650	53,153	54,176	10,779	11,587	31,472

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Table A5.1 Import Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Imports</b>										
0	5	0	18	13	99	117	21	–	1,398	–
1	3	1	20	7	9	10	12	–	84	–
3	22	3	100	19	196	121	134	–	7,384	–
6	25	6	61	44	18	56	103	–	4,669	–
2	21	0	61	22	1	6	51	–	1,822	–
0	1	0	21	3	9	6	20	–	82	–
30	168	8	213	92	116	32	110	–	511	–
46	77	85	407	243	475	201	416	–	4,779	–
7	49	10	958	123	80	2,264	726	–	2,119	–
9	11	3	63	10	21	29	147	–	168	–
1	4	1	28	5	15	7	54	–	77	–
4	33	10	137	79	29	54	428	–	228	–
7	59	11	169	112	33	16	252	–	143	–
264	321	23	2,018	315	387	425	692	–	4,930	–
17	37	5	131	184	21	23	328	–	1,682	–
5	41	13	73	43	170	27	122	–	564	–
1	3	2	5	3	3	2	5	–	56	–
1	3	7	4	8	1	1	3	–	11	–
2	5	1	8	3	4	12	7	–	88	–
19	42	4	86	32	38	157	73	–	930	–
15	26	2	37	16	23	42	34	–	543	–
4	183	4	206	79	115	21	83	–	798	–
4	25	1	36	18	10	18	24	–	377	–
7	9	1	15	10	2	3	3	–	77	–
72	103	1	126	77	14	9	29	–	653	–
12	32	2	41	5	7	6	26	–	1,004	–
143	111	4	108	47	25	7	46	–	360	–
8	336	252	141	62	26	44	74	–	894	–
5	58	25	63	17	21	28	30	–	302	–
379	2,598	52	1,572	817	355	125	958	–	2,467	–
36	79	14	46	14	13	11	33	–	75	–
3	33	1	21	21	7	1	13	–	74	–
2	8	0	8	4	3	2	4	–	46	–
7	57	2	40	31	20	9	207	–	663	–
0	0	0	1	0	0	0	0	–	4	–
<b>9,994</b>	<b>47,443</b>	<b>20,105</b>	<b>56,019</b>	<b>29,092</b>	<b>23,193</b>	<b>33,279</b>	<b>56,782</b>	–	<b>497,706</b>	–
191	3,565	503	2,664	1,836	1,571	2,176	1,949	–	42,627	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	17,470	–
–	–	–	–	–	–	–	–	–	(7,219)	–
7,312	62,035	76,513	78,111	68,282	55,180	38,021	47,997	–	–	–
36	62	18	390	116	157	287	309	–	2,786	–
<b>17,533</b>	<b>113,105</b>	<b>97,139</b>	<b>137,184</b>	<b>99,325</b>	<b>80,101</b>	<b>73,762</b>	<b>107,037</b>	–	<b>553,370</b>	–

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Table A5.1 Import Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	15	8	–	7,848
Mining and quarrying	m2	0	97	6	–	90,015
Food, beverages, and tobacco	m3	0	46	25	–	12,465
Textiles and textile products	m4	0	14	(1)	–	8,371
Leather, leather products, and footwear	m5	0	3	13	–	2,836
Wood and products of wood and cork	m6	0	16	4	–	1,636
Pulp, paper, paper products, printing, and publishing	m7	5	252	3	–	5,683
Coke, refined petroleum, and nuclear fuel	m8	0	12	8	–	26,018
Chemicals and chemical products	m9	0	324	40	–	34,637
Rubber and plastics	m10	0	87	106	–	7,675
Other nonmetallic minerals	m11	0	30	141	–	7,892
Basic metals and fabricated metal	m12	0	986	86	–	51,938
Machinery, nec	m13	0	19,351	172	–	29,599
Electrical and optical equipment	m14	1	10,628	1,356	–	68,013
Transport equipment	m15	0	8,602	162	–	18,942
Manufacturing, nec; recycling	m16	0	374	102	–	7,237
Electricity, gas, and water supply	m17	0	26	2	–	536
Construction	m18	0	100	1	–	287
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	1	49	4	–	447
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	2	888	44	–	9,522
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	1	70	6	–	2,051
Hotels and restaurants	m22	17	1	5	–	2,035
Inland transport	m23	0	134	5	–	5,327
Water transport	m24	0	7	1	–	969
Air transport	m25	0	5	0	–	2,393
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	23	1	–	3,216
Post and telecommunications	m27	0	225	1	–	1,667
Financial intermediation	m28	0	21	1	–	2,783
Real estate activities	m29	0	2	0	–	921
Renting of M&Eq and other business activities	m30	13	4,954	2	–	23,851
Public administration and defense; compulsory social security	m31	150	279	3	–	1,205
Education	m32	27	353	0	–	740
Health and social work	m33	2	78	2	–	256
Other community, social, and personal services	m34	103	83	1	–	1,505
Private households with employed persons	m35	0	0	1	–	8
Total intermediate consumption	r60	159,209	304,781	15,464	518,902	3,078,862
Taxes less subsidies on products	r99	–	26,042	1,080	–	104,028
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	17,470
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	(7,219)
Value added at basic prices	r64	–	–	–	–	991,192
International transport margins		–	3,224	201	–	36,273
Output at basic prices	r69	159,209	334,046	16,745	518,902	4,220,607

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi–Regional Input–Output Database.



**Table A5.2: Republic of Korea Input–Output Table, 2017** (current prices, \$ million)

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	2,934	4	28,180	503	2	1,088	15
Mining and quarrying	c2	1	0	6	2	3	0	3
Food, beverages, and tobacco	c3	7,795	6	18,715	28	800	11	209
Textiles and textile products	c4	284	9	344	16,508	689	30	637
Leather, leather products, and footwear	c5	4	2	47	482	1,920	3	19
Wood and products of wood and cork	c6	110	5	63	33	5	1,203	138
Pulp, paper, paper products, printing, and publishing	c7	189	5	1,624	548	121	41	18,420
Coke, refined petroleum, and nuclear fuel	c8	1,153	151	530	639	54	57	805
Chemicals and chemical products	c9	2,494	99	1,745	5,522	301	373	3,786
Rubber and plastics	c10	127	5	500	262	43	15	233
Other nonmetallic minerals	c11	6	0	147	9	11	2	34
Basic metals and fabricated metal	c12	84	54	971	446	356	80	270
Machinery, nec	c13	149	50	377	636	38	27	458
Electrical and optical equipment	c14	176	30	761	1,283	99	60	540
Transport equipment	c15	199	111	360	854	144	42	370
Manufacturing, nec; recycling	c16	4	17	568	1,879	549	66	280
Electricity, gas, and water supply	c17	334	102	812	1,409	61	141	1,416
Construction	c18	104	12	82	44	4	4	92
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	100	5	590	294	14	22	274
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	657	31	3,885	1,686	334	144	1,800
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	851	40	5,030	2,351	268	186	2,331
Hotels and restaurants	c22	165	39	332	408	47	38	1,122
Inland transport	c23	135	337	1,982	828	91	161	2,010
Water transport	c24	0	0	2	2	0	0	5
Air transport	c25	8	1	44	45	4	4	216
Other supporting and auxiliary transport activities; activities of travel agencies	c26	335	164	1,306	645	109	70	635
Post and telecommunications	c27	67	7	99	75	7	7	220
Financial intermediation	c28	987	201	1,263	915	126	159	1,713
Real estate activities	c29	38	11	441	614	73	29	1,041
Renting of M&Eq and other business activities	c30	145	72	1,045	931	121	41	2,968
Public administration and defense; compulsory social security	c31	66	2	36	26	3	4	135
Education	c32	15	4	57	61	6	5	135
Health and social work	c33	176	12	166	104	8	20	197
Other community, social, and personal services	c34	151	28	744	175	180	51	3,013
Private households with employed persons	c35	-	-	-	-	-	-	

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Table A5.2 Domestic Industry *continued*

Industry		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
		c8	c9	c10	c11	c12	c13	c14
Domestic								
Agriculture, hunting, forestry, and fishing	c1	3	860	425	1	12	8	21
Mining and quarrying	c2	2,395	26	1	30	556	5	35
Food, beverages, and tobacco	c3	41	1,722	40	23	229	182	620
Textiles and textile products	c4	81	722	541	77	733	460	1,646
Leather, leather products, and footwear	c5	1	49	4	6	96	87	650
Wood and products of wood and cork	c6	9	67	12	51	308	112	207
Pulp, paper, paper products, printing, and publishing	c7	296	1,542	176	136	589	333	2,182
Coke, refined petroleum, and nuclear fuel	c8	6,934	27,406	506	791	2,107	655	1,712
Chemicals and chemical products	c9	3,409	61,523	6,751	793	4,337	1,489	16,600
Rubber and plastics	c10	30	682	528	58	437	769	3,509
Other nonmetallic minerals	c11	26	328	14	718	492	107	3,844
Basic metals and fabricated metal	c12	1,037	2,665	537	475	58,589	16,647	20,711
Machinery, nec	c13	850	816	588	184	2,989	16,375	5,367
Electrical and optical equipment	c14	510	1,503	291	192	2,796	9,998	122,370
Transport equipment	c15	229	548	182	164	1,598	3,995	5,402
Manufacturing, nec; recycling	c16	18	560	192	81	1,204	1,117	4,229
Electricity, gas, and water supply	c17	1,976	4,133	272	470	7,949	878	4,093
Construction	c18	90	209	28	26	207	137	907
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	159	680	69	52	431	375	1,125
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	1,048	4,476	452	345	2,835	2,469	7,398
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	1,357	5,795	585	447	3,670	3,196	9,578
Hotels and restaurants	c22	256	1,213	111	111	1,001	659	1,838
Inland transport	c23	1,026	2,977	346	951	3,626	1,371	3,051
Water transport	c24	3	5	0	0	8	1	8
Air transport	c25	54	132	18	14	77	123	341
Other supporting and auxiliary transport activities; activities of travel agencies	c26	1,117	2,088	241	308	2,239	1,048	2,941
Post and telecommunications	c27	115	229	24	45	212	96	523
Financial intermediation	c28	692	2,346	307	325	2,765	1,962	4,481
Real estate activities	c29	193	687	47	47	334	276	961
Renting of M&Eq and other business activities	c30	1,525	3,490	254	243	4,302	1,542	9,711
Public administration and defense; compulsory social security	c31	23	68	10	10	88	46	107
Education	c32	114	177	16	14	170	92	334
Health and social work	c33	35	262	52	31	252	216	522
Other community, social, and personal services	c34	307	2,044	318	342	5,931	525	1,335
Private households with employed persons	c35	-	-	-	-	-	-	-

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Table A5.2 Domestic Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Domestic</b>											
14	18	4	915	5	33	46	4,136	3	0	0	10
12	3	571	69	0	1	1	3	1	0	0	0
461	95	35	160	49	315	431	20,637	30	5	3	147
1,963	1,303	141	836	102	521	835	470	264	17	5	726
57	610	35	125	1	130	60	2	16	2	1	50
361	1,168	49	2,322	7	43	60	95	8	1	0	265
510	271	154	673	346	2,204	3,018	564	247	13	40	729
1,139	162	2,597	3,044	197	1,255	1,719	1,456	7,405	1,895	2,054	597
3,464	1,117	1,967	3,562	41	265	362	538	602	51	78	292
2,690	301	109	1,776	43	274	375	86	257	3	3	91
314	66	36	6,048	2	12	17	43	2	0	1	8
27,251	1,856	914	30,381	44	281	385	456	205	27	35	270
12,847	252	1,201	5,794	39	251	344	151	106	19	45	402
16,072	763	1,668	12,726	127	810	1,109	862	546	33	49	744
43,394	430	484	3,138	61	389	532	196	2,071	269	1,062	546
3,723	884	30	691	16	100	136	244	24	2	14	47
1,623	145	11,601	970	285	1,814	2,484	2,455	1,262	9	8	1,353
324	22	315	216	18	113	154	80	122	18	16	98
718	141	71	596	168	17	24	361	121	16	4	47
4,725	926	469	3,913	17	1,088	149	2,375	794	107	28	306
6,117	1,199	607	5,067	22	142	1,546	3,075	1,028	138	37	397
974	90	343	643	404	2,575	3,526	433	211	34	121	1,150
2,298	302	150	1,906	419	2,667	3,653	158	504	42	11	572
4	0	5	4	2	15	20	2	6	5	2	13
67	13	13	54	90	574	786	12	147	3	5	54
1,084	165	185	461	448	2,853	3,907	136	3,168	1,045	1,022	1,073
204	21	114	233	306	1,951	2,672	161	95	9	2	260
4,412	493	1,278	7,788	565	3,600	4,931	1,499	1,198	310	236	1,217
458	188	134	1,200	765	4,874	6,675	3,816	345	29	40	790
4,707	231	2,053	15,146	870	5,547	7,597	847	1,711	1,051	464	4,170
75	8	79	169	29	184	252	62	102	2	330	62
160	14	55	126	66	419	574	82	31	6	11	133
330	33	169	1,507	156	993	1,359	191	147	8	14	143
1,176	104	1,014	1,397	449	2,864	3,922	1,117	1,375	82	33	903
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Table A5.2 Domestic Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Domestic						
Agriculture, hunting, forestry, and fishing	c1	1	27	3	89	68
Mining and quarrying	c2	0	1	0	2	1
Food, beverages, and tobacco	c3	7	213	32	866	200
Textiles and textile products	c4	16	325	61	646	519
Leather, leather products, and footwear	c5	1	70	1	182	40
Wood and products of wood and cork	c6	0	3	2	80	9
Pulp, paper, paper products, printing, and publishing	c7	89	2,642	96	3,982	2,971
Coke, refined petroleum, and nuclear fuel	c8	42	267	275	1,211	831
Chemicals and chemical products	c9	10	191	55	3,375	740
Rubber and plastics	c10	4	20	5	94	17
Other nonmetallic minerals	c11	0	6	2	35	7
Basic metals and fabricated metal	c12	9	238	108	583	563
Machinery, nec	c13	8	308	61	734	608
Electrical and optical equipment	c14	252	1,090	130	5,317	1,077
Transport equipment	c15	29	227	54	764	945
Manufacturing, nec; recycling	c16	3	114	37	166	126
Electricity, gas, and water supply	c17	64	1,400	2,455	2,240	2,578
Construction	c18	20	167	3,641	302	3,567
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	32	65	9	169	70
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	210	424	56	1,110	459
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	272	550	73	1,438	595
Hotels and restaurants	c22	36	2,566	142	5,431	2,681
Inland transport	c23	57	1,695	76	2,010	1,276
Water transport	c24	2	29	2	18	15
Air transport	c25	51	300	4	301	223
Other supporting and auxiliary transport activities; activities of travel agencies	c26	44	477	42	498	54
Post and telecommunications	c27	379	1,780	46	1,330	1,071
Financial intermediation	c28	88	19,436	14,434	3,850	3,370
Real estate activities	c29	67	3,167	1,319	2,882	910
Renting of M&Eq and other business activities	c30	619	12,959	569	8,956	5,031
Public administration and defense; compulsory social security	c31	35	306	60	241	220
Education	c32	9	509	23	571	449
Health and social work	c33	15	768	84	1,074	823
Other community, social, and personal services	c34	65	2,818	313	3,011	3,207
Private households with employed persons	c35	-	-	-	-	-

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Table A5.2 Domestic Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Domestic</b>										
531	986	140	–	11,682	–	0	544	(211)	618	<b>53,719</b>
1	2	3	–	37	–	–	7	356	314	<b>4,448</b>
1,888	1,682	1,716	–	37,695	–	1	98	(339)	6,502	<b>103,349</b>
241	627	1,434	–	8,381	–	0	407	(281)	20,899	<b>63,217</b>
2	23	167	–	2,639	–	0	2	(28)	2,627	<b>10,182</b>
32	34	110	–	97	–	0	12	(1)	381	<b>7,459</b>
2,018	849	2,253	–	9,039	–	120	82	739	5,117	<b>64,968</b>
1,326	781	1,772	–	3,560	–	0	31	(252)	55,453	<b>132,315</b>
359	23,529	3,675	–	6,954	–	0	271	1,399	64,148	<b>226,268</b>
35	66	352	–	215	–	–	31	(29)	9,986	<b>24,000</b>
21	10	116	–	137	–	0	10	(31)	2,465	<b>15,064</b>
220	298	1,965	–	1,916	–	1	3,472	(417)	49,432	<b>223,417</b>
187	107	1,791	–	1,874	–	4	24,834	(35)	40,999	<b>121,833</b>
1,325	2,081	3,799	–	17,772	–	4	17,481	(407)	233,163	<b>459,200</b>
248	255	3,749	–	13,671	–	0	28,782	(81)	112,959	<b>228,374</b>
413	92	421	–	1,681	–	0	738	(37)	2,607	<b>23,036</b>
2,908	3,148	4,807	–	20,211	–	810	5	(0)	744	<b>89,424</b>
162	144	205	–	401	–	1	215,036	(184)	389	<b>227,294</b>
96	298	237	–	3,549	–	2	767	(16)	2,077	<b>13,831</b>
629	1,960	1,557	–	23,305	–	11	5,049	(112)	14,542	<b>91,660</b>
814	2,537	2,017	–	30,177	–	15	6,536	(144)	18,709	<b>118,650</b>
3,092	912	3,243	–	48,009	–	1,461	32	(0)	4,112	<b>89,560</b>
352	338	1,763	–	19,238	–	0	357	(9)	634	<b>59,360</b>
2	4	18	–	12	–	0	1	(0)	11,593	<b>11,810</b>
34	36	101	–	393	–	–	4	(0)	8,347	<b>12,696</b>
86	118	498	–	2,321	–	0	254	(0)	1,297	<b>34,484</b>
334	262	699	–	5,679	–	0	16	(0)	767	<b>20,117</b>
1,090	2,213	4,176	–	45,421	–	0	36	–	2,339	<b>142,224</b>
972	2,151	2,027	–	87,491	–	16	7,605	(1)	1,097	<b>133,808</b>
1,417	1,315	7,601	–	7,716	–	23	46,979	(0)	29,525	<b>193,496</b>
104	204	372	–	12,508	–	126,672	56	(0)	156	<b>142,911</b>
283	94	387	–	56,766	–	35,170	393	(0)	717	<b>98,247</b>
570	1,057	545	–	51,757	–	62,091	52	(1)	244	<b>126,183</b>
1,478	2,194	27,241	–	60,124	–	1,405	5,949	(7)	3,462	<b>140,841</b>
–	–	–	–	–	–	–	–	–	–	–

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Table A5.2 Imports Industry *continued*

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Industry								
Imports								
Agriculture, hunting, forestry, and fishing	m1	568	2	4,818	100	12	533	222
Mining and quarrying	m2	6	11	15	19	4	4	51
Food, beverages, and tobacco	m3	874	3	2,477	49	97	2	43
Textiles and textile products	m4	38	1	22	2,447	201	3	75
Leather, leather products, and footwear	m5	6	0	8	145	724	2	17
Wood and products of wood and cork	m6	35	2	21	11	2	429	53
Pulp, paper, paper products, printing, and publishing	m7	37	1	297	85	18	25	3,029
Coke, refined petroleum, and nuclear fuel	m8	410	69	197	113	18	18	351
Chemicals and chemical products	m9	725	29	341	1,357	94	109	1,113
Rubber and plastics	m10	86	4	310	168	34	11	144
Other nonmetallic minerals	m11	7	1	124	15	4	3	32
Basic metals and fabricated metal	m12	28	12	186	146	48	19	56
Machinery, nec	m13	37	11	72	93	6	5	93
Electrical and optical equipment	m14	36	7	67	133	17	5	100
Transport equipment	m15	62	25	32	73	9	4	42
Manufacturing, nec; recycling	m16	4	8	246	865	177	35	120
Electricity, gas, and water supply	m17	1	1	4	5	1	1	3
Construction	m18	1	0	3	2	0	0	2
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	1	13	11	1	1	7
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	59	3	192	144	37	12	93
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	27	1	124	30	28	4	66
Hotels and restaurants	m22	17	2	40	1	9	1	39
Inland transport	m23	22	6	90	30	4	6	44
Water transport	m24	5	1	22	9	1	3	14
Air transport	m25	6	1	27	17	3	3	141
Other supporting and auxiliary transport activities; activities of travel agencies	m26	29	17	120	19	10	6	74
Post and telecommunications	m27	4	1	14	9	1	1	30
Financial intermediation	m28	20	6	34	11	3	4	63
Real estate activities	m29	1	0	10	11	1	1	25
Renting of M&Eq and other business activities	m30	31	20	352	210	39	9	798
Public administration and defense; compulsory social security	m31	14	1	22	6	1	5	28
Education	m32	1	0	5	2	0	0	9
Health and social work	m33	1	0	4	3	1	0	4
Other community, social, and personal services	m34	3	2	12	8	1	1	17
Private households with employed persons	m35	0	0	0	0	0	0	0
Total intermediate consumption	r60	23,246	1,864	83,176	46,593	8,198	5,446	52,540
Taxes less subsidies on products	r99	453	94	1,426	580	87	31	931
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	30,020	2,490	18,746	16,044	1,897	1,982	11,498
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	53,719	4,448	103,349	63,217	10,182	7,459	64,968

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Table A5.2 Imports Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Imports</b>												
9	179	84	1	6	3	9	5	10	3	233	1	6
78,441	665	10	660	17,909	47	219	75	11	15,101	1,650	1	8
72	434	28	7	63	25	125	41	10	26	40	6	32
24	93	66	12	82	31	146	126	169	25	87	12	28
1	14	7	2	56	18	67	36	130	11	53	2	49
21	33	5	17	126	52	124	125	655	24	806	2	12
30	274	27	26	117	68	424	105	69	22	194	37	202
3,215	9,576	127	280	927	364	638	342	85	1,043	1,806	91	540
1,740	18,177	1,873	246	1,520	414	5,208	753	314	911	979	10	53
121	531	462	40	350	543	2,468	1,846	192	126	1,071	25	128
305	361	18	720	537	103	3,661	298	57	96	4,974	2	8
1,042	854	153	157	22,594	5,071	6,173	8,203	539	362	8,475	7	35
247	225	132	46	893	3,914	1,632	3,136	43	437	1,310	8	43
165	290	54	38	678	2,834	56,207	4,007	112	641	2,287	41	210
35	83	19	22	221	408	601	6,710	34	79	220	9	47
25	294	84	38	615	554	2,145	1,717	415	27	341	7	35
288	18	1	5	104	15	35	23	3	52	33	1	4
449	7	1	5	109	13	24	16	1	78	35	0	2
16	38	4	2	26	23	71	50	4	9	25	3	11
2,461	575	72	47	962	279	1,187	537	59	565	385	12	112
101	138	11	9	124	112	273	126	43	43	178	8	72
8	29	2	3	28	28	58	16	4	7	30	13	80
2,185	118	10	32	589	51	143	75	13	474	109	3	51
39	25	8	29	50	13	25	13	2	7	12	0	100
33	73	11	12	54	92	220	36	11	11	40	19	383
141	173	18	24	219	143	313	73	25	28	68	43	277
16	27	3	4	27	15	120	44	2	18	77	23	140
24	60	7	8	78	86	151	84	24	33	324	20	140
5	16	1	1	7	7	24	9	5	4	31	18	97
1,192	784	44	62	1,189	312	2,273	1,069	57	640	2,172	240	1,345
184	24	2	3	62	19	75	34	4	41	87	7	40
9	13	1	1	13	13	53	20	1	5	33	4	25
2	6	1	1	8	8	59	14	2	3	18	1	7
177	18	2	4	60	14	55	30	4	37	49	8	42
0	0	0	0	0	0	0	0	0	0	0	0	0
<b>118,782</b>	<b>166,256</b>	<b>17,283</b>	<b>10,130</b>	<b>163,576</b>	<b>83,043</b>	<b>323,365</b>	<b>173,522</b>	<b>16,504</b>	<b>49,640</b>	<b>141,892</b>	<b>6,843</b>	<b>43,535</b>
1,713	1,330	119	173	563	592	1,341	741	105	4,514	2,935	79	498
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
11,821	58,682	6,598	4,761	59,278	38,198	134,494	54,110	6,428	35,270	82,467	6,909	47,626
-	-	-	-	-	-	-	-	-	-	-	-	-
<b>132,315</b>	<b>226,268</b>	<b>24,000</b>	<b>15,064</b>	<b>223,417</b>	<b>121,833</b>	<b>459,200</b>	<b>228,374</b>	<b>23,036</b>	<b>89,424</b>	<b>227,294</b>	<b>13,831</b>	<b>91,660</b>

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Table A5.2 Imports Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Imports							
Agriculture, hunting, forestry, and fishing	m1	8	624	1	0	0	3
Mining and quarrying	m2	10	12	26	6	5	2
Food, beverages, and tobacco	m3	45	2,142	6	1	1	18
Textiles and textile products	m4	61	46	35	2	0	86
Leather, leather products, and footwear	m5	47	11	10	1	0	23
Wood and products of wood and cork	m6	17	30	3	0	0	78
Pulp, paper, paper products, printing, and publishing	m7	284	76	18	2	1	50
Coke, refined petroleum, and nuclear fuel	m8	733	671	2,725	645	605	137
Chemicals and chemical products	m9	75	109	185	17	19	76
Rubber and plastics	m10	184	48	199	3	3	67
Other nonmetallic minerals	m11	11	32	6	1	2	9
Basic metals and fabricated metal	m12	51	66	50	9	12	60
Machinery, nec	m13	61	24	26	6	13	107
Electrical and optical equipment	m14	325	129	133	10	20	216
Transport equipment	m15	68	15	378	109	419	84
Manufacturing, nec; recycling	m16	50	96	13	1	8	25
Electricity, gas, and water supply	m17	5	4	3	1	1	2
Construction	m18	3	1	1	1	0	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	22	7	5	1	1	3
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	204	108	54	14	20	27
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	154	96	23	5	4	8
Hotels and restaurants	m22	107	47	4	1	2	10
Inland transport	m23	66	26	119	19	16	55
Water transport	m24	9	4	17	158	38	26
Air transport	m25	426	7	85	83	169	80
Other supporting and auxiliary transport activities; activities of travel agencies	m26	372	12	263	93	102	214
Post and telecommunications	m27	199	14	14	3	4	34
Financial intermediation	m28	186	50	42	13	8	22
Real estate activities	m29	136	89	8	1	1	17
Renting of M&Eq and other business activities	m30	1,895	151	326	251	175	673
Public administration and defense; compulsory social security	m31	56	17	10	3	49	10
Education	m32	33	4	2	0	0	4
Health and social work	m33	10	3	2	1	1	3
Other community, social, and personal services	m34	58	8	18	2	1	18
Private households with employed persons	m35	0	0	0	0	0	0
Total intermediate consumption	r60	59,633	51,579	28,961	6,712	7,474	19,913
Taxes less subsidies on products	r99	695	1,846	6,081	260	21	444
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–
Value added at basic prices	r64	58,321	36,135	24,318	4,838	5,201	14,127
International transport margins		–	–	–	–	–	–
Output at basic prices	r69	118,650	89,560	59,360	11,810	12,696	34,484

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Table A5.2 Imports Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Imports</b>										
0	6	0	15	14	89	203	25	–	1,784	–
0	4	1	16	7	10	19	14	–	104	–
1	30	4	117	26	224	248	199	–	11,153	–
1	23	6	77	56	16	97	130	–	10,928	–
1	32	2	43	23	5	13	85	–	2,687	–
0	2	1	27	4	11	14	36	–	84	–
8	184	8	172	102	110	51	148	–	650	–
9	99	108	300	347	582	509	782	–	7,386	–
2	64	13	1,040	147	89	3,368	981	–	2,695	–
3	14	3	78	12	23	41	204	–	170	–
0	5	1	40	7	19	12	93	–	109	–
1	45	12	157	100	39	78	555	–	303	–
2	78	14	213	140	38	28	366	–	212	–
100	442	31	2,305	431	472	840	1,077	–	6,969	–
7	47	5	180	274	28	40	381	–	3,565	–
2	56	17	91	57	196	47	176	–	1,000	–
0	5	2	5	4	4	6	9	–	27	–
0	4	10	4	12	1	2	4	–	16	–
1	7	1	8	4	3	19	8	–	120	–
6	61	7	110	47	41	236	110	–	1,420	–
2	33	2	25	22	25	109	63	–	769	–
0	222	4	546	74	90	46	107	–	1,240	–
1	28	2	36	21	11	27	39	–	455	–
2	11	1	14	10	2	4	4	–	52	–
20	162	2	136	129	22	27	63	–	1,060	–
2	39	2	29	7	8	16	53	–	1,335	–
47	168	6	157	66	33	11	73	–	542	–
2	410	305	81	87	32	136	144	–	1,224	–
1	73	32	65	21	24	58	46	–	405	–
128	3,707	71	1,633	1,217	467	278	1,865	–	3,523	–
5	97	14	33	19	14	27	55	–	91	–
1	35	1	14	22	7	3	19	–	56	–
1	13	1	9	7	4	8	9	–	81	–
4	70	2	54	41	23	20	270	–	1,088	–
0	2	0	0	1	0	0	0	–	5	–
<b>2,899</b>	<b>61,436</b>	<b>24,956</b>	<b>61,389</b>	<b>38,881</b>	<b>26,034</b>	<b>57,045</b>	<b>89,152</b>	–	<b>655,739</b>	–
237	4,901	696	3,804	2,447	1,945	3,360	2,892	–	59,902	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
16,982	75,887	108,156	128,302	101,584	70,268	65,777	48,796	–	–	–
–	–	–	–	–	–	–	–	–	–	–
<b>20,117</b>	<b>142,224</b>	<b>133,808</b>	<b>193,496</b>	<b>142,911</b>	<b>98,247</b>	<b>126,183</b>	<b>140,841</b>	–	<b>715,641</b>	–

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Table A5.2 Imports Industry *continued*

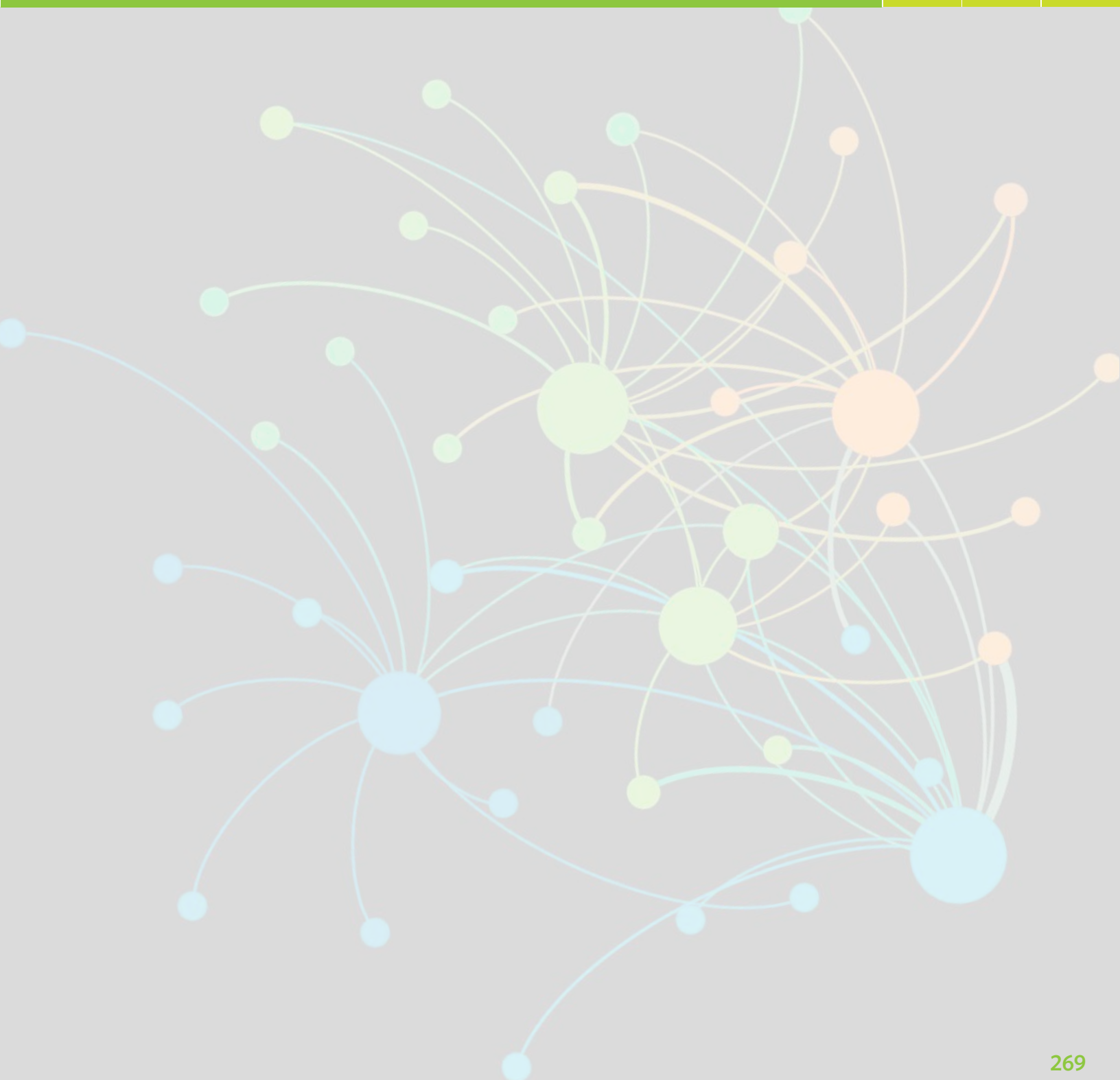
		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	35	13	–	9,625
Mining and quarrying	m2	0	249	4	–	115,397
Food, beverages, and tobacco	m3	0	129	32	–	18,830
Textiles and textile products	m4	0	80	24	–	15,357
Leather, leather products, and footwear	m5	0	7	4	–	4,342
Wood and products of wood and cork	m6	0	27	2	–	2,891
Pulp, paper, paper products, printing, and publishing	m7	1	307	7	–	7,268
Coke, refined petroleum, and nuclear fuel	m8	0	26	7	–	35,880
Chemicals and chemical products	m9	0	572	57	–	45,475
Rubber and plastics	m10	0	193	61	–	9,964
Other nonmetallic minerals	m11	0	68	(235)	–	11,505
Basic metals and fabricated metal	m12	0	1,338	109	–	57,144
Machinery, nec	m13	0	20,607	117	–	34,436
Electrical and optical equipment	m14	1	15,260	2,230	–	98,919
Transport equipment	m15	0	11,763	165	–	26,265
Manufacturing, nec; recycling	m16	0	537	23	–	10,145
Electricity, gas, and water supply	m17	0	43	4	–	722
Construction	m18	0	129	6	–	944
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	2	102	13	–	648
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	2	1,402	126	–	11,788
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	1	155	16	–	3,034
Hotels and restaurants	m22	16	1	32	–	2,965
Inland transport	m23	0	143	(2,298)	–	2,821
Water transport	m24	0	7	205	–	943
Air transport	m25	0	5	0	–	3,667
Other supporting and auxiliary transport activities; activities of travel agencies	m26	0	30	1	–	4,399
Post and telecommunications	m27	0	335	4	–	2,287
Financial intermediation	m28	0	36	1	–	3,959
Real estate activities	m29	0	2	0	–	1,256
Renting of M&Eq and other business activities	m30	16	7,493	7	–	36,713
Public administration and defense; compulsory social security	m31	170	365	6	–	1,701
Education	m32	26	567	0	–	1,003
Health and social work	m33	9	146	2	–	452
Other community, social, and personal services	m34	117	134	29	–	2,498
Private households with employed persons	m35	0	0	1	–	10
Total intermediate consumption	r60	228,173	428,224	643	708,423	4,092,700
Taxes less subsidies on products	r99	–	34,848	55	–	142,740
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–
Value added at basic prices	r64	–	–	–	–	1,388,011
International transport margins		–	–	–	–	–
Output at basic prices	r69	228,173	463,072	698	708,423	5,623,451

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi–Regional Input–Output Database.

# APPENDIX 6: INPUT-OUTPUT TABLES FOR 2010 AND 2017— TAIPEI, CHINA

## A6



**Table A6.1: Taipei, China Input–Output Table, 2010** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	1,707	–	5,461	325	0	6	1
Mining and quarrying	c2	0	2	0	1	0	0	0
Food, beverages, and tobacco	c3	2,237	–	3,727	14	219	1	6
Textiles and textile products	c4	74	1	7	4,580	40	1	68
Leather, leather products, and footwear	c5	2	0	0	127	1	0	2
Wood and products of wood and cork	c6	12	2	1	2	2	180	67
Pulp, paper, paper products, printing, and publishing	c7	23	0	291	58	10	9	3,710
Coke, refined petroleum, and nuclear fuel	c8	561	69	164	172	9	12	168
Chemicals and chemical products	c9	406	8	147	2,239	119	31	602
Rubber and plastics	c10	57	5	282	92	38	14	160
Other nonmetallic minerals	c11	2	4	89	68	0	0	–
Basic metals and fabricated metal	c12	46	9	385	31	8	12	111
Machinery, nec	c13	123	25	43	61	2	4	64
Electrical and optical equipment	c14	1	0	0	1	0	0	47
Transport equipment	c15	22	0	1	2	0	0	0
Manufacturing, nec; recycling	c16	–	0	–	0	0	–	–
Electricity, gas, and water supply	c17	124	24	332	443	13	26	394
Construction	c18	33	9	23	35	4	4	40
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	0	1	23	18	2	2	24
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	734	9	861	624	65	68	868
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	298	14	627	165	17	57	528
Hotels and restaurants	c22	2	0	12	17	1	1	20
Inland transport	c23	87	19	140	85	9	15	113
Water transport	c24	1	1	2	0	0	0	1
Air transport	c25	0	0	6	4	0	0	9
Other supporting and auxiliary transport activities; activities of travel agencies	c26	12	0	32	27	3	3	18
Post and telecommunications	c27	14	3	27	35	4	7	87
Financial intermediation	c28	125	5	203	192	25	20	198
Real estate activities	c29	11	1	30	45	3	1	44
Renting of M&Eq and other business activities	c30	29	4	387	99	15	6	206
Public administration and defense; compulsory social security	c31	58	2	92	31	2	8	57
Education	c32	4	0	2	2	0	0	4
Health and social work	c33	3	–	1	3	0	0	2
Other community, social, and personal services	c34	17	1	78	44	5	2	410
Private households with employed persons	c35	0	–	–	–	–	–	–

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Table A6.1 Domestic Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Domestic</b>												
–	12	20	–	–	1	0	–	0	0	23	–	0
558	11	0	35	74	0	1	0	0	194	20	–	–
–	65	0	0	0	64	–	–	–	1	–	–	–
2	40	244	38	34	265	179	90	54	1	28	3	33
0	1	7	1	1	7	5	3	2	0	1	0	1
0	3	3	9	20	34	7	22	75	–	418	0	27
4	279	65	124	115	118	296	38	18	11	57	3	926
2,593	8,303	117	467	1,723	174	164	70	12	1,454	382	42	888
272	34,584	4,473	582	1,362	413	5,709	309	55	41	534	45	8
22	208	1,121	34	165	612	1,828	529	68	8	466	96	435
8	211	4	2,327	427	84	3,838	136	17	12	5,142	4	–
132	692	278	238	35,919	7,169	4,484	2,381	399	22	6,723	17	7
115	208	72	150	435	4,016	1,141	375	17	331	818	13	61
23	12	2	1	23	1,122	46,506	182	0	10	537	10	27
9	2	0	–	0	174	15	5,202	0	0	0	418	39
1	0	–	–	0	5	0	17	112	–	62	4	–
965	2,205	347	762	1,648	311	2,069	218	18	2,385	133	17	729
95	211	36	71	258	104	205	23	5	48	40	0	405
26	28	14	8	110	53	42	24	3	15	96	2	273
122	1,327	449	410	3,054	1,877	3,358	1,000	113	113	1,657	75	792
108	429	191	386	631	873	1,173	1,100	75	43	1,068	143	294
2	60	45	8	27	48	70	11	5	1	19	1	515
58	292	60	266	348	238	452	103	17	40	631	10	244
15	22	1	31	12	1	2	0	0	8	28	0	1
0	13	5	4	14	34	44	8	1	2	13	1	55
15	99	38	16	136	111	216	44	8	4	37	1	612
17	48	37	42	110	103	133	26	7	23	140	28	894
147	487	247	146	860	371	1,933	217	24	170	300	33	1,275
4	29	15	25	57	107	114	23	8	4	92	3	1,528
125	462	108	218	417	368	1,547	239	28	164	935	13	2,838
37	95	45	36	187	128	194	53	8	118	192	4	413
0	3	0	1	19	3	14	2	1	3	11	0	5
–	3	3	1	2	6	9	4	0	1	27	1	81
2	70	30	84	1,875	113	201	28	2	11	121	6	245
–	–	–	–	–	–	–	–	–	–	–	–	–

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Table A6.1 Domestic Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Domestic							
Agriculture, hunting, forestry, and fishing	c1	–	422	–	–	–	–
Mining and quarrying	c2	–	–	0	0	–	–
Food, beverages, and tobacco	c3	–	2,977	0	–	2	0
Textiles and textile products	c4	32	107	1	0	–	3
Leather, leather products, and footwear	c5	1	3	0	0	–	0
Wood and products of wood and cork	c6	2	4	0	–	–	1
Pulp, paper, paper products, printing, and publishing	c7	465	231	9	1	19	17
Coke, refined petroleum, and nuclear fuel	c8	476	101	1,838	786	2,230	221
Chemicals and chemical products	c9	7	117	1	1	1	6
Rubber and plastics	c10	395	199	88	0	0	4
Other nonmetallic minerals	c11	–	55	0	–	–	–
Basic metals and fabricated metal	c12	1	86	7	2	4	18
Machinery, nec	c13	23	39	292	76	546	102
Electrical and optical equipment	c14	–	1	2	–	0	3
Transport equipment	c15	71	0	85	21	14	15
Manufacturing, nec; recycling	c16	–	0	0	–	–	–
Electricity, gas, and water supply	c17	1,318	676	151	4	31	70
Construction	c18	376	63	215	4	6	56
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	101	24	264	–	2	21
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	752	490	75	83	303	99
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	136	701	300	59	7	34
Hotels and restaurants	c22	61	8	7	5	70	16
Inland transport	c23	44	72	40	20	17	128
Water transport	c24	0	0	1	812	1	0
Air transport	c25	12	4	8	3	6	13
Other supporting and auxiliary transport activities; activities of travel agencies	c26	61	5	52	1,814	488	209
Post and telecommunications	c27	637	116	45	8	57	79
Financial intermediation	c28	739	219	135	124	128	77
Real estate activities	c29	2,976	399	91	31	28	166
Renting of M&Eq and other business activities	c30	1,146	348	181	93	174	166
Public administration and defense; compulsory social security	c31	374	38	132	19	7	54
Education	c32	0	1	1	–	1	1
Health and social work	c33	37	4	0	0	2	1
Other community, social, and personal services	c34	286	78	25	2	11	27
Private households with employed persons	c35	–	–	–	–	–	–

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Table A6.1 Domestic Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Domestic</b>										
-	-	-	6	29	7	-	16	-	5,899	95
-	-	-	0	0	-	-	0	-	-	-
-	-	-	3	78	24	-	125	-	11,639	41
2	-	-	34	34	11	5	78	-	1,938	26
0	-	-	1	1	0	0	2	-	54	1
0	-	-	13	4	5	-	3	-	45	47
64	581	34	1,106	565	459	124	496	-	1,559	166
38	29	59	238	190	23	69	171	-	342	5
1	10	1	430	84	117	1,286	595	-	1,241	69
0	-	-	64	76	28	6	122	-	884	44
-	-	-	18	33	61	38	15	-	260	56
1	-	3	109	814	69	60	226	-	1,070	116
23	83	9	131	157	171	351	347	-	1,065	78
159	7	8	1,362	91	217	111	429	-	4,322	60
1	-	-	34	61	7	33	186	-	4,022	89
-	-	-	1	7	28	2	37	-	442	34
142	153	201	188	296	525	383	567	-	3,754	114
245	66	2,462	92	256	177	96	217	-	107	47
123	20	23	36	23	7	34	56	-	1,025	45
460	28	62	481	206	150	677	497	-	11,133	37
44	43	16	435	442	210	1,286	445	-	25,845	59
5	88	26	69	150	55	30	178	-	12,903	49
144	187	46	199	141	110	206	141	-	3,768	55
2	-	0	0	7	4	0	0	-	83	103
316	19	3	52	67	43	20	58	-	3,237	43
54	5	0	12	12	2	4	7	-	523	33
1,994	427	94	578	908	129	221	313	-	5,603	122
113	6,130	4,001	430	1,018	178	245	402	-	17,208	170
80	753	294	313	48	51	135	756	-	33,195	56
403	1,112	1,118	1,095	969	390	236	557	-	1,594	265
92	463	314	105	0	73	48	175	-	1,476	65
12	8	3	55	136	11	6	4	-	12,519	65
0	34	-	2	42	9	16	12	-	8,695	125
66	328	88	1,196	1,757	347	230	3,720	-	17,067	390
-	-	-	-	-	-	-	-	-	2,997	58

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Table A6.1 Domestic Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Domestic						
Agriculture, hunting, forestry, and fishing	c1	-	128	326	1,589	16,074
Mining and quarrying	c2	-	37	(14)	63	983
Food, beverages, and tobacco	c3	-	-	424	1,580	23,228
Textiles and textile products	c4	-	25	28	7,719	15,824
Leather, leather products, and footwear	c5	-	1	2	1,312	1,539
Wood and products of wood and cork	c6	-	-	(1)	168	1,173
Pulp, paper, paper products, printing, and publishing	c7	1	861	126	1,988	15,025
Coke, refined petroleum, and nuclear fuel	c8	-	-	152	13,427	37,939
Chemicals and chemical products	c9	632	161	129	34,858	91,686
Rubber and plastics	c10	-	-	(9)	7,967	16,108
Other nonmetallic minerals	c11	-	-	7	1,610	14,524
Basic metals and fabricated metal	c12	3	1,436	47	26,473	89,611
Machinery, nec	c13	113	6,441	160	19,889	38,170
Electrical and optical equipment	c14	1	3,261	1,170	134,799	194,508
Transport equipment	c15	1	3,195	295	9,884	23,897
Manufacturing, nec; recycling	c16	-	64	2	1,298	2,114
Electricity, gas, and water supply	c17	-	-	1	9	21,745
Construction	c18	2	35,448	-	3	41,590
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	-	-	-	24	2,593
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	168	3,473	82	26,495	63,328
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	599	1,891	61	21	40,856
Hotels and restaurants	c22	87	-	-	3,686	18,357
Inland transport	c23	142	234	0	2,076	10,997
Water transport	c24	-	0	1	5,684	6,827
Air transport	c25	-	0	0	4,578	8,694
Other supporting and auxiliary transport activities; activities of travel agencies	c26	1	4	0	1,582	6,300
Post and telecommunications	c27	-	1	0	524	13,639
Financial intermediation	c28	261	-	-	1,227	39,781
Real estate activities	c29	9	5,416	-	22	46,964
Renting of M&Eq and other business activities	c30	134	10,243	-	3,706	32,139
Public administration and defense; compulsory social security	c31	38,196	3	0	168	43,563
Education	c32	12,681	-	-	63	25,638
Health and social work	c33	11,608	-	-	21	20,757
Other community, social, and personal services	c34	397	-	1	1,055	30,416
Private households with employed persons	c35	-	-	-	7	3,062

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Table A6.1 Import Industry *continued*

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
Imports								
Agriculture, hunting, forestry, and fishing	m1	687	0	2,179	127	2	87	12
Mining and quarrying	m2	5	70	20	35	2	0	17
Food, beverages, and tobacco	m3	402	0	673	18	38	0	5
Textiles and textile products	m4	16	0	3	559	72	0	13
Leather, leather products, and footwear	m5	1	0	0	11	265	0	2
Wood and products of wood and cork	m6	12	3	2	2	2	177	67
Pulp, paper, paper products, printing, and publishing	m7	5	1	105	21	3	10	1,212
Coke, refined petroleum, and nuclear fuel	m8	253	29	74	93	6	6	86
Chemicals and chemical products	m9	222	5	91	1,089	77	17	318
Rubber and plastics	m10	34	3	154	62	28	9	94
Other nonmetallic minerals	m11	3	1	22	20	0	1	2
Basic metals and fabricated metal	m12	12	3	80	13	2	4	46
Machinery, nec	m13	54	17	24	26	1	3	31
Electrical and optical equipment	m14	6	3	7	10	1	1	75
Transport equipment	m15	15	1	4	4	0	0	4
Manufacturing, nec; recycling	m16	4	0	5	5	1	4	5
Electricity, gas, and water supply	m17	2	0	3	3	0	0	3
Construction	m18	1	0	1	1	0	0	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	0	3	4	0	1	3
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	53	3	78	58	11	6	57
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	11	0	18	14	2	2	6
Hotels and restaurants	m22	17	1	52	25	24	3	59
Inland transport	m23	17	4	35	13	1	3	15
Water transport	m24	4	0	9	8	1	0	4
Air transport	m25	4	0	9	7	2	0	6
Other supporting and auxiliary transport activities; activities of travel agencies	m26	9	0	23	15	2	2	13
Post and telecommunications	m27	1	0	2	2	0	0	6
Financial intermediation	m28	6	0	7	6	0	1	8
Real estate activities	m29	0	0	1	1	0	0	1
Renting of M&Eq and other business activities	m30	14	3	63	32	2	4	61
Public administration and defense; compulsory social security	m31	3	0	7	2	0	1	4
Education	m32	5	0	4	2	0	0	6
Health and social work	m33	1	0	1	1	0	0	1
Other community, social, and personal services	m34	1	0	3	2	0	0	3
Private households with employed persons	m35	0	0	0	0	0	0	0
Total intermediate consumption	r60	8,707	366	17,238	11,933	1,164	839	10,274
Taxes less subsidies on products	r99	108	1	236	34	6	3	80
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	7,105	601	5,456	3,662	342	302	4,501
International transport margins		153	15	298	196	27	29	170
Output at basic prices	r69	16,074	983	23,228	15,824	1,539	1,173	15,025

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Table A6.1 Import Industry *continued*

		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
Industry		c8	c9	c10	c11	c12	c13	c14
Imports								
Agriculture, hunting, forestry, and fishing	m1	2	13	235	1	2	17	4
Mining and quarrying	m2	21,646	547	18	1,320	2,936	30	122
Food, beverages, and tobacco	m3	8	128	15	4	12	17	29
Textiles and textile products	m4	4	62	44	8	20	28	47
Leather, leather products, and footwear	m5	1	5	8	0	5	25	10
Wood and products of wood and cork	m6	3	11	5	10	26	36	23
Pulp, paper, paper products, printing, and publishing	m7	5	131	27	48	40	41	138
Coke, refined petroleum, and nuclear fuel	m8	1,192	4,308	125	211	820	85	180
Chemicals and chemical products	m9	178	17,859	2,254	309	747	241	3,058
Rubber and plastics	m10	22	180	722	23	105	407	1,119
Other nonmetallic minerals	m11	45	101	11	635	121	34	940
Basic metals and fabricated metal	m12	165	374	88	99	16,180	2,774	2,003
Machinery, nec	m13	84	137	46	89	287	2,805	971
Electrical and optical equipment	m14	52	100	22	13	132	1,789	42,136
Transport equipment	m15	10	28	9	5	64	227	304
Manufacturing, nec; recycling	m16	3	27	5	3	20	26	114
Electricity, gas, and water supply	m17	52	24	3	9	33	8	27
Construction	m18	14	4	1	4	7	9	14
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	2	20	5	3	12	15	40
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	590	363	61	68	343	163	670
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	56	47	12	9	37	21	159
Hotels and restaurants	m22	6	178	121	23	80	139	207
Inland transport	m23	582	63	10	63	142	36	76
Water transport	m24	19	25	5	4	25	11	57
Air transport	m25	3	24	5	3	13	22	104
Other supporting and auxiliary transport activities; activities of travel agencies	m26	28	71	23	13	92	71	143
Post and telecommunications	m27	2	4	2	4	8	8	51
Financial intermediation	m28	5	16	7	15	34	16	64
Real estate activities	m29	0	1	1	2	2	3	6
Renting of M&Eq and other business activities	m30	35	142	38	435	133	78	993
Public administration and defense; compulsory social security	m31	4	8	6	5	10	7	19
Education	m32	2	6	2	2	29	8	25
Health and social work	m33	0	2	1	2	1	2	31
Other community, social, and personal services	m34	2	7	2	5	13	7	20
Private households with employed persons	m35	0	0	0	0	0	0	0
Total intermediate consumption	r60	30,302	75,528	12,015	9,968	72,596	28,313	129,853
Taxes less subsidies on products	r99	46	179	63	38	58	151	218
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	4,851	13,846	3,730	4,241	15,035	9,007	59,841
International transport margins		2,741	2,134	299	276	1,922	700	4,597
Output at basic prices	r69	37,939	91,686	16,108	14,524	89,611	38,170	194,508

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Table A6.1 Import Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Imports</b>											
1	3	1	71	0	3	1	175	0	1	1	0
11	7	7,533	806	0	7	4	2	12	6	14	2
3	12	3	5	0	4	2	537	1	1	2	1
8	12	1	9	1	7	6	19	1	0	0	1
11	2	0	1	0	1	1	1	0	0	0	0
23	54	1	411	0	27	3	5	0	0	0	1
17	12	3	39	1	222	109	86	3	1	4	3
39	6	660	184	20	380	210	47	797	309	913	91
177	34	39	308	25	23	16	67	15	7	16	5
292	47	8	264	52	235	212	108	48	1	1	4
36	8	24	1,235	1	1	1	14	4	0	1	1
984	157	51	2,247	7	8	4	16	7	3	8	8
280	10	109	636	10	22	9	13	81	21	150	31
382	20	35	1,433	31	39	5	6	10	3	10	8
2,564	2	4	61	181	23	34	2	46	17	43	15
21	21	7	32	1	4	2	2	6	2	11	2
4	0	37	9	0	10	11	5	2	1	2	1
2	0	8	7	0	6	3	1	4	2	6	2
6	1	6	6	0	10	9	2	10	4	11	3
81	10	212	147	5	59	54	40	21	17	28	10
10	2	19	15	1	35	29	10	13	9	9	4
33	6	4	57	3	1,487	181	37	20	15	196	46
21	2	205	93	1	45	8	13	8	49	16	19
9	3	5	12	0	72	5	2	3	105	53	13
12	2	5	16	0	78	10	3	6	71	72	17
30	3	9	27	0	382	40	4	33	1,080	297	130
2	0	1	11	2	53	37	8	4	5	4	5
8	1	6	18	2	84	37	11	14	10	11	7
1	0	0	3	0	42	76	10	3	2	2	5
106	9	25	274	7	1,092	494	79	160	297	285	172
3	0	5	10	0	36	16	3	5	17	8	5
4	0	6	18	0	25	4	2	2	2	5	2
1	0	0	7	0	27	11	1	1	2	2	1
2	0	1	10	0	27	8	4	3	5	6	3
0	0	0	0	0	0	0	0	0	0	0	0
<b>17,657</b>	<b>1,601</b>	<b>14,270</b>	<b>29,233</b>	<b>1,348</b>	<b>18,225</b>	<b>12,179</b>	<b>8,925</b>	<b>5,386</b>	<b>6,034</b>	<b>6,344</b>	<b>2,224</b>
182	3	15	76	11	5	6	77	7	6	0	1
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
5,683	479	6,478	11,600	1,210	45,008	28,617	9,262	5,499	743	2,228	4,061
375	33	982	681	24	89	54	92	106	44	121	15
<b>23,897</b>	<b>2,114</b>	<b>21,745</b>	<b>41,590</b>	<b>2,593</b>	<b>63,328</b>	<b>40,856</b>	<b>18,357</b>	<b>10,997</b>	<b>6,827</b>	<b>8,694</b>	<b>6,300</b>

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Table A6.1 Import Industry *continued*

Industry		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
		c27	c28	c29	c30	c31
Imports						
Agriculture, hunting, forestry, and fishing	m1	0	0	0	3	12
Mining and quarrying	m2	1	1	1	6	3
Food, beverages, and tobacco	m3	1	1	0	3	22
Textiles and textile products	m4	0	0	0	6	5
Leather, leather products, and footwear	m5	0	0	0	1	3
Wood and products of wood and cork	m6	0	0	0	14	4
Pulp, paper, paper products, printing, and publishing	m7	6	56	9	187	59
Coke, refined petroleum, and nuclear fuel	m8	12	13	25	112	85
Chemicals and chemical products	m9	2	7	2	230	51
Rubber and plastics	m10	1	2	0	39	42
Other nonmetallic minerals	m11	0	0	0	7	9
Basic metals and fabricated metal	m12	2	2	1	36	139
Machinery, nec	m13	9	33	3	68	58
Electrical and optical equipment	m14	164	12	21	1,321	127
Transport equipment	m15	3	3	1	40	33
Manufacturing, nec; recycling	m16	1	2	0	6	5
Electricity, gas, and water supply	m17	2	2	2	3	3
Construction	m18	1	2	2	3	3
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	4	1	5	4
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	20	16	6	47	18
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	3	9	2	17	10
Hotels and restaurants	m22	12	258	77	203	441
Inland transport	m23	15	20	5	22	16
Water transport	m24	72	5	1	8	9
Air transport	m25	183	13	2	27	33
Other supporting and auxiliary transport activities; activities of travel agencies	m26	32	4	1	9	8
Post and telecommunications	m27	140	25	7	44	60
Financial intermediation	m28	7	511	87	27	45
Real estate activities	m29	3	20	8	9	2
Renting of M&Eq and other business activities	m30	200	368	238	427	191
Public administration and defense; compulsory social security	m31	4	22	10	12	16
Education	m32	13	15	6	80	194
Health and social work	m33	1	9	1	3	6
Other community, social, and personal services	m34	3	6	6	56	16
Private households with employed persons	m35	0	0	0	0	0
Total intermediate consumption	r60	5,505	12,015	9,389	11,971	10,433
Taxes less subsidies on products	r99	17	212	0	36	393
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–
Value added at basic prices	r64	8,098	27,549	37,570	19,956	32,687
International transport margins		19	6	5	175	50
Output at basic prices	r69	13,639	39,781	46,964	32,139	43,563

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Table A6.1 Import Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Imports</b>										
3	0	7	0	743	17	0	39	4	-	4,456
1	3	4	0	59	0	1	25	3	-	35,283
5	5	26	0	4,175	94	3	17	10	-	6,282
2	3	15	0	1,607	51	1	7	1	-	2,640
1	0	1	-	483	0	0	1	3	-	844
5	1	3	0	16	9	0	7	2	-	965
80	22	80	-	611	25	1	21	1	-	3,446
12	49	88	0	3,137	14	4	9	7	-	14,693
65	936	311	-	774	40	425	156	90	-	30,284
16	6	68	-	302	15	1	53	4	-	4,781
15	10	5	-	69	11	0	16	5	-	3,411
19	18	77	0	171	11	2	943	45	-	26,810
64	127	156	0	367	43	31	17,009	377	-	24,289
333	304	470	-	4,831	53	6	5,786	1,535	-	61,292
10	27	119	-	1,104	25	1	2,462	283	-	7,780
10	9	15	0	235	11	3	174	9	-	811
4	4	6	0	33	2	0	17	2	-	331
2	4	3	0	18	0	2	30	1	-	167
3	9	7	0	59	1	5	33	3	-	315
14	83	39	0	808	8	77	687	47	-	5,075
4	10	13	0	161	2	13	34	5	-	831
164	88	531	0	2,596	49	18	0	0	-	7,457
12	29	17	0	305	20	33	59	8	-	2,101
3	4	5	-	64	6	0	7	0	-	639
19	12	27	-	1,456	16	0	3	0	-	2,285
2	4	5	-	352	16	3	14	1	-	2,994
9	16	24	0	260	3	1	18	1	-	833
7	8	20	0	529	3	7	13	0	-	1,657
2	4	20	0	112	0	0	1	0	-	343
94	86	129	-	356	44	20	504	2	-	7,692
5	4	11	-	64	1	50	8	0	-	393
17	10	12	0	145	2	118	6	0	-	776
3	5	5	-	29	1	21	4	1	-	186
4	5	126	-	1,177	25	91	8	0	-	1,657
0	0	0	-	29	1	0	0	0	-	31
<b>4,707</b>	<b>7,863</b>	<b>13,399</b>	<b>0</b>	<b>224,751</b>	<b>3,446</b>	<b>65,978</b>	<b>100,494</b>	<b>5,439</b>	<b>315,574</b>	<b>1,323,482</b>
204	360	194	-	6,019	-	1	2,789	290	-	12,126
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
20,682	12,415	16,708	3,062	-	-	-	-	-	-	432,114
46	120	115	-	1,632	34	40	2,143	210	-	20,768
<b>25,638</b>	<b>20,757</b>	<b>30,416</b>	<b>3,062</b>	<b>232,402</b>	<b>3,480</b>	<b>66,019</b>	<b>105,426</b>	<b>5,939</b>	<b>315,574</b>	<b>1,788,490</b>

\$ = United States dollar; ( ) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi-Regional Input–Output Database.

**Table A6.2: Taipei, China Input–Output Table, 2017** (current prices, \$ million)

		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
Industry		c1	c2	c3	c4	c5	c6	c7
Domestic								
Agriculture, hunting, forestry, and fishing	c1	2,416	–	7,156	412	0	9	1
Mining and quarrying	c2	0	0	1	1	1	–	0
Food, beverages, and tobacco	c3	2,832	–	4,365	15	214	2	8
Textiles and textile products	c4	81	1	6	3,537	140	0	64
Leather, leather products, and footwear	c5	–	–	–	12	381	0	4
Wood and products of wood and cork	c6	14	2	1	1	2	211	80
Pulp, paper, paper products, printing, and publishing	c7	22	0	265	49	6	9	3,484
Coke, refined petroleum, and nuclear fuel	c8	416	42	110	105	7	8	119
Chemicals and chemical products	c9	382	6	117	1,807	72	27	547
Rubber and plastics	c10	58	5	264	93	16	12	157
Other nonmetallic minerals	c11	2	3	71	41	3	0	–
Basic metals and fabricated metal	c12	40	8	298	23	6	10	87
Machinery, nec	c13	143	13	35	57	2	3	66
Electrical and optical equipment	c14	1	1	0	1	0	0	70
Transport equipment	c15	34	0	1	1	0	–	0
Manufacturing, nec; recycling	c16	–	0	–	0	0	–	–
Electricity, gas, and water supply	c17	154	27	381	468	18	29	462
Construction	c18	33	9	21	30	2	4	38
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	0	1	24	17	2	2	26
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	709	8	721	500	56	54	790
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	377	16	727	182	20	75	668
Hotels and restaurants	c22	5	0	23	29	2	2	39
Inland transport	c23	100	25	145	79	9	16	112
Water transport	c24	0	0	0	0	0	–	0
Air transport	c25	–	0	5	3	0	–	7
Other supporting and auxiliary transport activities; activities of travel agencies	c26	11	0	26	21	3	2	16
Post and telecommunications	c27	16	3	25	32	4	7	90
Financial intermediation	c28	157	5	231	216	12	23	235
Real estate activities	c29	12	1	34	49	6	2	52
Renting of M&Eq and other business activities	c30	21	3	372	77	7	5	194
Public administration and defense; compulsory social security	c31	93	2	130	41	2	12	89
Education	c32	4	–	1	1	0	0	4
Health and social work	c33	1	–	1	1	0	0	0
Other community, social, and personal services	c34	20	2	85	43	4	2	461
Private households with employed persons	c35	–	–	–	–	–	–	–

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Table A6.2 Domestic Industry *continued*

Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment	Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles
c8	c9	c10	c11	c12	c13	c14	c15	c16	c17	c18	c19	c20
<b>Domestic</b>												
-	15	31	-	-	2	0	-	1	0	34	-	0
273	15	0	36	101	1	1	0	0	238	32	-	-
-	67	0	0	0	100	-	-	-	0	-	-	-
0	29	206	28	25	178	98	42	47	1	29	2	35
0	2	20	0	7	169	11	48	14	-	-	0	0
0	3	3	8	23	47	5	26	102	-	520	0	35
1	223	58	87	100	135	191	35	20	7	55	3	920
647	5,193	79	237	1,083	153	85	49	10	741	292	33	703
86	26,782	3,763	393	1,089	462	3,658	289	57	19	505	43	8
7	171	1,048	26	157	743	1,336	539	77	6	480	106	466
2	147	3	1,360	309	83	2,594	113	16	8	4,229	3	-
38	489	218	136	25,446	7,042	2,681	1,960	369	15	5,809	15	7
21	164	56	79	355	2,531	661	222	13	346	355	9	105
12	16	3	1	32	1,884	45,098	254	1	12	826	17	47
3	2	0	-	0	359	16	6,872	0	0	0	513	48
0	0	-	-	0	8	0	20	155	-	80	5	-
362	2,254	388	665	1,715	458	1,835	268	25	2,121	167	22	935
28	160	32	48	212	125	142	22	6	33	41	0	424
8	26	14	6	102	68	32	25	3	13	109	2	323
37	1,052	367	259	2,526	2,067	2,227	965	116	81	1,543	76	790
41	438	207	309	659	1,245	1,067	1,226	100	32	1,299	179	358
1	97	82	11	47	115	105	22	11	2	37	2	1,052
14	253	61	208	336	316	351	119	22	28	704	11	314
1	2	0	2	1	0	0	0	0	0	3	0	0
0	8	4	2	11	34	26	6	1	1	11	0	49
4	76	30	10	107	118	140	40	8	2	31	1	551
6	40	36	31	100	127	97	27	8	19	144	32	980
60	486	276	120	917	489	1,672	264	34	162	367	43	1,689
1	29	16	20	65	158	103	29	11	3	117	3	1,862
36	337	83	150	362	402	699	182	29	113	760	13	2,934
16	108	63	38	253	257	213	79	14	138	331	6	731
0	2	0	0	14	4	11	2	1	3	11	-	5
-	1	0	0	1	1	2	1	-	0	0	0	0
1	65	32	71	1,765	167	157	32	3	10	151	6	331
-	-	-	-	-	-	-	-	-	-	-	-	-

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Table A6.2 Domestic Industry *continued*

		Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
Industry		c21	c22	c23	c24	c25	c26
Domestic							
Agriculture, hunting, forestry, and fishing	c1	-	736	-	-	-	-
Mining and quarrying	c2	-	-	0	0	-	-
Food, beverages, and tobacco	c3	-	4,663	0	-	3	0
Textiles and textile products	c4	35	129	1	0	-	2
Leather, leather products, and footwear	c5	1	-	-	-	-	-
Wood and products of wood and cork	c6	2	6	0	-	-	1
Pulp, paper, paper products, printing, and publishing	c7	456	285	10	1	16	11
Coke, refined petroleum, and nuclear fuel	c8	367	93	1,457	657	1,743	114
Chemicals and chemical products	c9	7	138	1	1	1	3
Rubber and plastics	c10	422	251	99	0	1	3
Other nonmetallic minerals	c11	-	58	0	-	-	-
Basic metals and fabricated metal	c12	1	91	5	2	5	12
Machinery, nec	c13	38	70	520	145	894	103
Electrical and optical equipment	c14	-	2	3	-	0	3
Transport equipment	c15	84	0	102	39	20	15
Manufacturing, nec; recycling	c16	-	0	0	-	-	-
Electricity, gas, and water supply	c17	1,660	1,021	220	5	39	62
Construction	c18	383	77	226	5	6	39
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	113	32	292	-	0	18
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	796	536	61	68	230	64
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	158	1,067	359	73	8	28
Hotels and restaurants	c22	134	21	14	11	141	22
Inland transport	c23	47	102	53	30	18	109
Water transport	c24	0	0	0	105	0	0
Air transport	c25	8	4	7	2	4	7
Other supporting and auxiliary transport activities; activities of travel agencies	c26	57	5	51	1,851	433	147
Post and telecommunications	c27	699	151	51	10	63	60
Financial intermediation	c28	932	345	184	174	166	69
Real estate activities	c29	3,238	564	129	39	36	154
Renting of M&Eq and other business activities	c30	1,200	435	209	92	178	123
Public administration and defense; compulsory social security	c31	618	70	243	36	12	58
Education	c32	0	1	1	-	1	0
Health and social work	c33	0	1	0	0	0	0
Other community, social, and personal services	c34	381	116	32	2	13	24
Private households with employed persons	c35	-	-	-	-	-	-

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Table A6.2 Domestic Industry *continued*

Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security	Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs
c27	c28	c29	c30	c31	c32	c33	c34	c35	c36	c37
<b>Domestic</b>										
-	-	-	12	48	9	-	34	-	7,790	130
-	-	-	0	0	-	-	0	-	-	-
-	-	-	4	117	28	-	221	-	12,661	44
3	-	-	36	27	9	6	102	-	1,100	20
-	-	-	0	5	-	-	-	-	461	-
0	-	-	19	6	5	-	3	-	47	54
65	576	32	1,203	675	383	121	629	-	1,475	151
33	24	44	201	173	10	56	156	-	99	1
0	10	1	469	78	100	1,188	759	-	1,136	66
1	-	-	76	103	24	7	145	-	882	41
-	-	-	17	32	43	35	17	-	174	38
1	-	3	92	900	55	54	204	-	864	93
38	123	15	171	280	211	484	510	-	661	43
259	10	13	1,926	159	249	179	739	-	3,237	54
1	-	-	45	70	8	51	377	-	3,811	96
-	-	-	1	8	31	-	64	-	378	29
189	198	260	254	475	579	516	903	-	4,466	126
260	67	2,388	105	336	144	109	266	-	108	45
145	24	26	45	33	5	41	81	-	1,375	47
469	28	61	515	278	121	745	609	-	12,614	34
58	54	17	593	715	211	1,814	624	-	30,674	68
11	194	53	147	387	99	63	487	-	18,862	63
191	237	56	253	205	111	256	215	-	4,863	62
0	-	0	0	1	0	-	0	-	6	7
324	16	3	49	73	34	21	67	-	1,984	26
56	4	0	12	14	2	4	8	-	845	53
2,303	482	101	654	1,229	124	267	430	-	6,078	135
158	8,170	4,945	565	1,549	188	313	641	-	25,865	199
99	904	351	401	70	63	174	1,119	-	39,666	63
433	1,143	1,019	1,145	1,242	366	256	721	-	1,661	256
179	764	489	184	1	114	83	351	-	2,226	98
14	9	3	57	157	10	7	6	-	15,744	83
0	1	-	0	67	1	1	1	-	10,192	197
85	418	110	1,550	2,688	351	263	5,015	-	19,977	432
-	-	-	-	-	-	-	-	-	3,681	67

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Table A6.2 Domestic Industry *continued*

		Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
Industry		c38	c39	c40	c41	
Domestic						
Agriculture, hunting, forestry, and fishing	c1	–	188	(148)	1,855	20,730
Mining and quarrying	c2	–	59	(45)	40	754
Food, beverages, and tobacco	c3	–	–	(14)	2,547	27,878
Textiles and textile products	c4	–	32	107	9,066	15,226
Leather, leather products, and footwear	c5	–	–	16	576	1,729
Wood and products of wood and cork	c6	–	–	(21)	183	1,387
Pulp, paper, paper products, printing, and publishing	c7	–	1,041	51	2,527	15,377
Coke, refined petroleum, and nuclear fuel	c8	–	–	693	11,494	27,527
Chemicals and chemical products	c9	519	223	74	33,010	77,899
Rubber and plastics	c10	–	–	117	8,886	16,824
Other nonmetallic minerals	c11	–	–	(50)	2,008	11,361
Basic metals and fabricated metal	c12	2	1,467	550	26,925	76,022
Machinery, nec	c13	60	11,191	152	24,701	45,649
Electrical and optical equipment	c14	1	1,694	62	157,158	214,024
Transport equipment	c15	1	3,278	47	12,595	28,493
Manufacturing, nec; recycling	c16	–	73	1	1,661	2,513
Electricity, gas, and water supply	c17	–	–	0	22	23,748
Construction	c18	1	36,530	–	21	42,523
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	c19	–	–	–	50	3,132
Wholesale trade and commission trade, except of motor vehicles and motorcycles	c20	134	3,676	37	41,832	77,851
Retail trade, except of motor vehicles and motorcycles; repair of household goods	c21	589	2,357	0	1,154	49,846
Hotels and restaurants	c22	90	–	–	5,828	28,313
Inland transport	c23	126	297	(15)	3,058	13,498
Water transport	c24	–	0	(0)	6,347	6,477
Air transport	c25	–	0	–	6,426	9,224
Other supporting and auxiliary transport activities; activities of travel agencies	c26	2	7	(1)	2,273	7,021
Post and telecommunications	c27	–	2	0	698	15,359
Financial intermediation	c28	251	–	–	2,127	54,299
Real estate activities	c29	8	7,760	–	41	57,454
Renting of M&Eq and other business activities	c30	21	17,097	–	6,678	41,057
Public administration and defense; compulsory social security	c31	44,198	6	(0)	97	52,441
Education	c32	11,725	–	–	62	27,946
Health and social work	c33	17,945	–	–	29	28,446
Other community, social, and personal services	c34	307	–	(0)	1,581	36,751
Private households with employed persons	c35	–	–	–	14	3,762

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Table A6.2 Imports Industry *continued*

Industry		Agriculture, Hunting, Forestry, and Fishing	Mining and Quarrying	Food, Beverages, and Tobacco	Textiles and Textile Products	Leather, Leather Products, and Footwear	Wood and Products of Wood and Cork	Pulp, Paper, Paper Products, Printing, and Publishing
		c1	c2	c3	c4	c5	c6	c7
		Imports						
Agriculture, hunting, forestry, and fishing	m1	841	0	2,359	129	3	125	19
Mining and quarrying	m2	4	11	27	47	2	1	18
Food, beverages, and tobacco	m3	682	0	814	29	36	1	8
Textiles and textile products	m4	31	0	3	809	16	1	18
Leather, leather products, and footwear	m5	2	0	0	37	75	0	2
Wood and products of wood and cork	m6	17	2	2	3	2	221	77
Pulp, paper, paper products, printing, and publishing	m7	7	1	129	24	2	16	1,271
Coke, refined petroleum, and nuclear fuel	m8	367	29	97	121	7	9	91
Chemicals and chemical products	m9	288	5	103	1,094	48	19	343
Rubber and plastics	m10	38	3	158	66	21	8	92
Other nonmetallic minerals	m11	4	1	23	17	1	1	3
Basic metals and fabricated metal	m12	14	3	88	13	2	5	44
Machinery, nec	m13	44	14	21	12	0	2	22
Electrical and optical equipment	m14	7	2	6	11	1	1	98
Transport equipment	m15	25	1	5	4	0	0	4
Manufacturing, nec; recycling	m16	10	0	10	11	1	5	4
Electricity, gas, and water supply	m17	5	0	7	6	0	1	5
Construction	m18	1	0	1	1	0	0	1
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	0	3	5	0	1	2
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	86	1	87	65	13	8	65
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	17	0	19	22	2	2	8
Hotels and restaurants	m22	29	1	87	28	23	4	87
Inland transport	m23	22	2	36	13	1	3	16
Water transport	m24	3	0	9	7	1	1	3
Air transport	m25	4	0	9	7	1	0	7
Other supporting and auxiliary transport activities; activities of travel agencies	m26	19	0	40	17	4	3	18
Post and telecommunications	m27	2	0	4	3	0	1	9
Financial intermediation	m28	12	0	10	7	1	1	9
Real estate activities	m29	1	0	2	1	0	0	2
Renting of M&Eq and other business activities	m30	22	2	110	38	3	5	86
Public administration and defense; compulsory social security	m31	7	0	11	3	0	2	6
Education	m32	15	0	5	3	0	0	10
Health and social work	m33	0	0	1	0	0	0	1
Other community, social, and personal services	m34	2	0	5	3	0	0	4
Private households with employed persons	m35	0	0	0	0	0	0	0
Total intermediate consumption	r60	10,784	263	19,932	10,602	1,267	973	10,424
Taxes less subsidies on products	r99	145	1	331	39	8	5	103
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	9,801	489	7,615	4,585	454	410	4,850
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	20,730	754	27,878	15,226	1,729	1,387	15,377

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Table A6.2 Imports Industry *continued*

Industry		Coke, Refined Petroleum, and Nuclear Fuel	Chemicals and Chemical Products	Rubber and Plastics	Other Nonmetallic Minerals	Basic Metals and Fabricated Metal	Machinery, nec	Electrical and Optical Equipment
		c8	c9	c10	c11	c12	c13	c14
Imports								
Agriculture, hunting, forestry, and fishing	m1	2	9	272	1	2	37	3
Mining and quarrying	m2	14,479	303	17	1,041	3,324	44	131
Food, beverages, and tobacco	m3	10	187	26	6	21	28	43
Textiles and textile products	m4	4	51	55	8	29	62	49
Leather, leather products, and footwear	m5	1	7	5	1	17	25	11
Wood and products of wood and cork	m6	2	13	6	9	34	49	38
Pulp, paper, paper products, printing, and publishing	m7	3	100	27	41	51	57	108
Coke, refined petroleum, and nuclear fuel	m8	1,528	3,988	142	219	962	116	172
Chemicals and chemical products	m9	238	16,446	2,300	290	829	343	2,636
Rubber and plastics	m10	23	167	788	21	130	523	1,016
Other nonmetallic minerals	m11	37	117	13	597	127	45	837
Basic metals and fabricated metal	m12	135	291	92	83	14,700	3,299	1,554
Machinery, nec	m13	78	94	37	60	263	3,169	799
Electrical and optical equipment	m14	61	116	25	11	172	2,631	47,952
Transport equipment	m15	11	27	8	5	75	350	306
Manufacturing, nec; recycling	m16	3	30	7	4	87	34	114
Electricity, gas, and water supply	m17	27	11	3	10	44	16	29
Construction	m18	36	2	1	7	18	8	11
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	5	27	4	3	10	14	62
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	321	391	65	57	384	241	882
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	68	102	17	11	46	37	390
Hotels and restaurants	m22	5	37	108	20	94	257	209
Inland transport	m23	330	49	10	49	140	52	71
Water transport	m24	23	23	4	4	23	9	45
Air transport	m25	4	21	5	4	15	31	94
Other supporting and auxiliary transport activities; activities of travel agencies	m26	35	42	24	12	114	129	146
Post and telecommunications	m27	3	4	3	4	11	15	35
Financial intermediation	m28	4	11	6	14	36	22	53
Real estate activities	m29	0	1	1	1	2	5	5
Renting of M&Eq and other business activities	m30	86	78	44	428	189	128	913
Public administration and defense; compulsory social security	m31	13	3	5	6	16	12	16
Education	m32	0	2	2	1	26	14	24
Health and social work	m33	0	1	1	1	1	3	30
Other community, social, and personal services	m34	12	4	2	7	18	10	20
Private households with employed persons	m35	0	0	0	0	0	0	0
Total intermediate consumption	r60	19,294	61,509	11,308	7,377	59,930	31,867	124,121
Taxes less subsidies on products	r99	66	220	79	41	68	211	269
Cif/ fob adjustments on exports	r61	–	–	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–	–	–
Value added at basic prices	r64	8,168	16,171	5,437	3,943	16,024	13,571	89,635
International transport margins		–	–	–	–	–	–	–
Output at basic prices	r69	27,527	77,899	16,824	11,361	76,022	45,649	214,024

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Table A6.2 Imports Industry *continued*

Transport Equipment	Manufacturing, nec; Recycling	Electricity, Gas, and Water Supply	Construction	Sale, Maintenance, and Repair of Motor Vehicles and Motorcycles; Retail Sale of Fuel	Wholesale Trade and Commission Trade, Except of Motor Vehicles and Motorcycles	Retail Trade, Except of Motor Vehicles and Motorcycles; Repair of Household Goods	Hotels and Restaurants	Inland Transport	Water Transport	Air Transport	Other Supporting and Auxiliary Transport Activities; Activities of Travel Agencies
c15	c16	c17	c18	c19	c20	c21	c22	c23	c24	c25	c26
<b>Imports</b>											
1	5	1	85	0	4	1	211	0	1	1	0
10	5	8,400	915	0	5	2	2	5	5	6	1
5	12	5	9	0	6	3	844	1	2	2	1
19	16	2	12	1	9	8	27	1	0	0	1
6	3	0	4	0	1	2	5	0	0	0	0
29	87	1	508	0	31	4	6	0	0	0	1
19	12	2	56	1	244	122	121	3	1	4	2
44	12	757	247	27	516	279	70	987	463	1,168	97
201	39	81	371	30	29	20	93	21	11	24	5
327	52	14	301	60	240	231	133	49	0	1	4
39	9	36	1,329	1	2	1	17	5	0	1	1
987	162	79	2,409	8	8	5	21	5	3	5	6
281	11	43	652	10	10	5	7	17	6	28	7
436	17	34	1,601	34	58	5	7	7	2	4	7
3,468	3	3	75	268	30	45	2	46	19	15	10
24	36	4	46	2	4	2	2	3	2	5	1
6	1	45	12	0	14	15	12	3	2	2	1
2	0	35	10	0	9	4	1	2	3	4	1
7	1	3	7	1	10	7	2	7	4	5	2
91	13	205	174	7	79	86	56	41	25	33	13
15	3	24	23	2	53	42	12	25	16	17	4
42	5	5	62	5	1,971	256	66	23	20	183	35
27	2	198	102	1	57	9	17	10	57	15	18
6	2	7	12	0	57	5	2	3	85	33	5
9	3	5	16	0	91	9	4	6	68	55	11
40	4	13	31	0	517	56	8	42	1,561	319	138
3	1	2	16	2	79	56	16	5	8	5	5
9	1	6	20	1	116	40	21	16	14	11	6
1	0	0	3	0	48	80	16	3	2	1	4
133	11	96	384	8	1,710	708	157	206	441	298	140
4	0	17	13	0	52	20	5	6	25	8	4
4	0	5	20	0	33	5	4	2	2	4	1
1	0	0	1	0	12	3	1	1	3	2	1
3	1	13	11	0	41	11	6	3	6	6	3
0	0	0	0	0	0	0	0	0	0	0	0
<b>20,078</b>	<b>1,802</b>	<b>14,297</b>	<b>28,611</b>	<b>1,622</b>	<b>21,847</b>	<b>13,984</b>	<b>13,043</b>	<b>5,883</b>	<b>6,206</b>	<b>6,294</b>	<b>1,786</b>
262	3	18	103	14	7	9	129	9	6	0	1
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
8,153	708	9,433	13,809	1,496	55,997	35,854	15,141	7,606	266	2,929	5,235
–	–	–	–	–	–	–	–	–	–	–	–
<b>28,493</b>	<b>2,513</b>	<b>23,748</b>	<b>42,523</b>	<b>3,132</b>	<b>77,851</b>	<b>49,846</b>	<b>28,313</b>	<b>13,498</b>	<b>6,477</b>	<b>9,224</b>	<b>7,021</b>

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Table A6.2 Imports Industry *continued*

		Post and Telecommunications	Financial Intermediation	Real Estate Activities	Renting of M&Eq and Other Business Activities	Public Administration and Defense; Compulsory Social Security
Industry		c27	c28	c29	c30	c31
Imports						
Agriculture, hunting, forestry, and fishing	m1	1	0	0	4	12
Mining and quarrying	m2	1	0	0	6	2
Food, beverages, and tobacco	m3	1	1	1	6	29
Textiles and textile products	m4	1	0	0	9	9
Leather, leather products, and footwear	m5	0	0	0	2	1
Wood and products of wood and cork	m6	0	0	0	19	5
Pulp, paper, paper products, printing, and publishing	m7	8	67	10	248	76
Coke, refined petroleum, and nuclear fuel	m8	23	32	33	125	120
Chemicals and chemical products	m9	4	8	2	285	55
Rubber and plastics	m10	1	1	0	42	49
Other nonmetallic minerals	m11	0	1	1	8	9
Basic metals and fabricated metal	m12	2	1	2	36	171
Machinery, nec	m13	5	21	1	58	30
Electrical and optical equipment	m14	271	18	24	2,031	176
Transport equipment	m15	3	2	1	37	41
Manufacturing, nec; recycling	m16	1	2	0	7	5
Electricity, gas, and water supply	m17	3	4	3	6	6
Construction	m18	2	2	2	4	3
Sale, maintenance, and repair of motor vehicles and motorcycles; retail sale of fuel	m19	3	3	1	5	4
Wholesale trade and commission trade, except of motor vehicles and motorcycles	m20	33	24	8	71	28
Retail trade, except of motor vehicles and motorcycles; repair of household goods	m21	6	9	4	35	20
Hotels and restaurants	m22	22	365	89	344	804
Inland transport	m23	22	26	6	31	21
Water transport	m24	59	5	1	7	8
Air transport	m25	259	15	3	40	53
Other supporting and auxiliary transport activities; activities of travel agencies	m26	55	6	1	15	15
Post and telecommunications	m27	220	39	10	69	103
Financial intermediation	m28	13	778	97	43	42
Real estate activities	m29	3	23	9	12	3
Renting of M&Eq and other business activities	m30	384	539	320	728	341
Public administration and defense; compulsory social security	m31	8	30	11	21	29
Education	m32	26	22	8	131	319
Health and social work	m33	1	2	1	4	5
Other community, social, and personal services	m34	6	10	9	85	25
Private households with employed persons	m35	0	0	0	0	0
Total intermediate consumption	r60	6,822	15,515	10,649	15,376	14,816
Taxes less subsidies on products	r99	26	326	1	52	585
Cif/ fob adjustments on exports	r61	–	–	–	–	–
Direct purchases abroad by residents	r62	–	–	–	–	–
Purchases on the domestic territory by nonresidents	r63	–	–	–	–	–
Value added at basic prices	r64	8,511	38,457	46,805	25,629	37,040
International transport margins		–	–	–	–	–
Output at basic prices	r69	15,359	54,299	57,454	41,057	52,441

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Table A6.2 Imports Industry *continued*

Education	Health and Social Work	Other Community, Social, and Personal Services	Private Households with Employed Persons	Final Consumption Expenditure by Households	Final Consumption Expenditure by NPISHs	Final Consumption Expenditure by Government	Gross Fixed Capital Formation	Changes in Inventories and Valuables	Exports	Total Output
c32	c33	c34	c35	c36	c37	c38	c39	c40	c41	
<b>Imports</b>										
3	1	10	–	1,067	31	1	106	1	–	5,350
1	3	4	–	54	1	1	31	2	–	28,912
6	13	43	–	5,947	117	8	15	(2)	–	8,967
2	4	21	–	2,170	74	1	8	1	–	3,531
1	1	2	–	909	1	0	3	1	–	1,125
5	1	4	–	24	13	1	16	0	–	1,230
83	30	125	–	787	28	2	37	1	–	3,924
15	55	127	–	4,008	56	8	10	2	–	17,130
66	1,256	406	–	929	47	789	226	51	–	30,031
14	7	69	–	399	23	2	58	(0)	–	5,129
13	12	6	–	108	20	1	24	2	–	3,469
18	20	71	–	248	14	6	818	25	–	25,454
29	71	114	–	889	39	104	7,805	116	–	14,974
322	302	762	–	6,003	88	11	8,074	695	–	72,084
9	39	184	–	2,025	34	5	3,947	257	–	11,392
9	8	19	–	481	25	19	339	7	–	1,375
6	9	12	–	51	1	1	25	1	–	405
1	3	3	–	75	2	9	57	1	–	321
2	9	5	–	177	3	21	115	2	–	545
15	124	55	–	1,339	12	85	337	21	–	5,641
6	15	30	–	273	3	12	54	4	–	1,449
204	204	1,170	–	4,525	88	35	1	0	–	11,512
13	40	26	–	436	25	26	30	5	–	2,016
3	4	5	–	64	1	1	4	21	–	554
27	20	52	–	2,111	18	0	15	1	–	3,095
2	7	10	–	479	15	3	12	0	–	3,953
11	34	43	–	516	6	1	17	0	–	1,361
9	13	36	–	913	4	10	28	0	–	2,431
2	6	31	–	170	0	0	1	0	–	442
117	182	246	–	523	66	27	1,276	1	–	11,174
7	8	24	–	113	1	97	17	0	–	620
22	23	26	–	250	3	216	9	0	–	1,240
1	2	5	–	71	2	118	9	0	–	285
5	7	180	–	1,703	32	134	16	0	–	2,405
0	0	0	–	44	1	0	0	0	–	45
<b>4,736</b>	<b>9,647</b>	<b>19,430</b>	<b>–</b>	<b>275,545</b>	<b>3,817</b>	<b>77,734</b>	<b>110,516</b>	<b>2,831</b>	<b>373,573</b>	<b>1,446,110</b>
244	485	284	–	8,876	–	2	3,651	62	–	16,741
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–
22,966	18,313	17,037	3,762	–	–	–	–	–	–	556,298
–	–	–	–	–	–	–	–	–	–	–
<b>27,946</b>	<b>28,446</b>	<b>36,751</b>	<b>3,762</b>	<b>284,422</b>	<b>3,817</b>	<b>77,736</b>	<b>114,167</b>	<b>2,893</b>	<b>373,573</b>	<b>2,019,149</b>

\$ = United States dollar; (–) = negative; cif = cost, insurance, and freight; fob = free on board; M&Eq = machinery and equipment; nec = not elsewhere classified; NPISHs = nonprofit institutions serving households.

Source: Asian Development Bank Multi-Regional Input–Output Database.

## **Economic Indicators for Eastern Asia**

### *Input–Output Tables*

This publication presents data visualization of economic statistics from Eastern Asia relevant for the analysis of cross-border production arrangements at the local, regional, and global levels. It covers Hong Kong, China; Japan; Mongolia; the People's Republic of China; the Republic of Korea; and Taipei, China. Two companion publications focus on South and Central Asia, and Southeastern Asia and the Pacific. The statistics were computed from the Asian Development Bank's multi-regional input-output database, which serves the increasing demand for structured, relevant, timely, and accurate data, especially with the onset of various economic research projects on global value chains. Supply and use tables and input-output tables in these publications address the emerging need for more systematic and comprehensive approaches in data management, economic analysis, and policy research for national economies around the world.

### **About the Asian Development Bank**

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 67 members—48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.



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