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Reference: (2017). Structural reform and services. Singapore : Asia-Pacific Economic Cooperation Policy Support Unit.

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**Asia-Pacific
Economic Cooperation**

Advancing Free Trade
for Asia-Pacific **Prosperity**

Structural Reform and Services

APEC Policy Support Unit
May 2017

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Produced for:

Economic Committee
Asia-Pacific Economic Cooperation

APEC#217-SE-01.6



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This paper was first published in the APEC Economic Policy Report 2016, under publication number APEC#216-EC-01.1.

The views expressed in this paper are those of the authors and do not necessarily represent those of the APEC Member Economies.

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1. INTRODUCTION

Policy stances by governments across the world have changed substantially since the late 1980s. Reforms included liberalization of foreign trade and investment regimes and support for private sector participation in the economy – through actions to improve the investment climate, increase transparency and accountability of government, bolster the rule of law, implement national competition legislation, and so forth. Trade expansion became a pillar of the growth strategies of many developing economies. Average global import tariffs today are below 10 percent, many imports of intermediate inputs have become duty-free, quantitative restrictions with related licensing (and rents) are much less prevalent, as is the incidence of overvaluation of exchange rates and the associated excess burden on exporters.

Structural reform policies that increased competition on – and the contestability of – markets were pursued by governments because they regarded them to be in their interest. Most were implemented on a unilateral, autonomous basis. In some cases the GATT/WTO provided a supporting framework for trade policy reforms, in others regional integration agreements did. This was most evident and direct for economies that acceded to the WTO, with governments using the process of accession to support reforms. Regional cooperation initiatives – the Australia-New Zealand Closer Economic Relations (CER) agreement, ASEAN and APEC initiatives and bilateral preferential trade agreements (PTAs) also backed reforms that sought to integrate markets.

Reforms underpinned higher rates of economic growth, most notably in Asia (Estevadeordal and Taylor, 2013). The global trade share of developing economies as a group expanded substantially following the adoption of outward-oriented development policies, with the composition of trade shifting over time to comprise more intra-industry exchange and global value chain production, driven in part by major increases in cross-border direct investment flows. Since 1990, per capita incomes in East Asia increased six-fold. Rising average per capita incomes implied a substantial reduction in poverty rates, and a fall in global poverty given that East Asia is a region with several large, populous economies (e.g., China; Indonesia; the Philippines; and Viet Nam).

Reduced poverty in developing economies led to a decline in average income inequality across economies. In the 2000s, global inequality fell for the first time since the Industrial Revolution, reflecting a decline in the dispersion of average incomes across economies. Moreover, for the average developing economy there was a slowdown in the rise in inequality in the second half of the 2000s (Lakner, 2016). At the same time, intra-national inequality has risen in many economies, both developed and developing. In short, globalization has been associated with rising incomes in developing economies and relatively stagnant real wages (incomes) of many households in high-income economies, with the poorer deciles of the income distribution in rich economies lagging behind. Reasons for the rise in inequality include increasing demand for higher skilled workers (skill-biased technical change) and a shift towards lower marginal income tax rates as part of the fiscal reforms pursued by many economies in the 1990s.

However, a large part of the story is the greater integration of developing economies into the world trade order.

Although from a global welfare perspective the change in the shares of world income across regions has been a positive development, public concerns regarding the distribution of the net benefits of globalization have been rising, especially in a number of high-income, developed economies in Europe, as well as in the US. This is reflected in greater opposition to trade agreements in particular, the TPP and TTIP being prominent examples. Much of this concern reflects a fear of erosion of national culture, identity and autonomy (Mansfield and Mutz, 2009; 2013), opposition to (further) immigration, and a general desire to maintain “sovereignty” in key areas of national policy, including taxation of the corporate sector. Matters are compounded by technical change that reduces the supply of traditional manufacturing jobs as tasks are automated. Industrial robotization and 3D-printing/additive manufacturing are already impacting on the structure of labor demand and looking forward these factors will intensify.

A challenge confronting all societies is to generate more inclusive growth. The premise of this report is that efforts to address this challenge in large part constitute a services policy reform agenda. Services “are the future” and that future is already here – services already account for the majority of economic activity and employment, and their share of total output and the workforce will only rise further. A corollary of the sustained high growth rates in average per capita incomes is an increasing share of services in GDP. For the world as a whole, services have grown from roughly 55 percent of global GDP in the early 1980s to some 70 percent today. During this period, merchandise trade grew faster than output, resulting in a steady rise in trade to GDP ratios in most economies, but this reflection of trade acting as a driver of growth did not apply to services. Services trade has expanded as a result of advances in transport and information and communication technology (ICT) industries, but as a share of total output trade in services grew less rapidly than services production. Services trade has grown at about the same rate as trade in goods – the share of services in global trade has not changed appreciably in the last 30 years, representing some 20-25 percent of total trade for most economies. The relatively low share of services output that is traded implies opportunities for a step-increase in international specialization and realization of associated productivity and welfare gains for households.

The structural reforms that can support such productivity gains and inclusive growth are the subject of this report. It aims to contribute to greater understanding of service sector reforms, the benefits they bring and the implementation and execution challenges they give rise to. It does so by drawing on the extant research literature and on five studies on services reforms experiences prepared for the APEC Economic Committee (in response to instructions from Ministers to continue the agenda on structural reform and services, particularly its link to inclusive growth), as well as four studies prepared for two sub-groups of the APEC Committee on Trade and Investment, the Market Access Group (MAG) and the Group on Services (GOS) (Box 1). The case studies provide in-depth analysis of the economic impact of specific services reforms in APEC economies. They illustrate the importance of a focus on services to enhance inclusion while at the same time generating growth in real incomes and improving welfare of

citizens. Most of the studies cite positive impacts, but more importantly, provide useful lessons from the various reform experiences. Not the least of these lessons is that structural reforms are a ‘continuous process’ that require regular adjustment of efforts to meet policy goals. Structural reform is not a once-and-for-all process but rather continued learning-by-doing.

The structure of the report is as follows. Section 1 starts with a brief discussion of what is meant by the term “services” and why services matter for inclusive growth – drawing on examples from the case studies and the existing research literature. Section 2 discusses the importance of pro-competitive domestic economic policy frameworks for services sectors and why ensuring the contestability of services markets is a key element of structural reform of services sectors. Section 3 discusses the role of international exchange of services as a source of competition and the available evidence on how services trade restrictions impact on productivity performance of economies. Section 4 turns to structural reforms and services, with an emphasis on issues of design and implementation. Section 5 concludes the report with a set of recommendations, drawing on the lessons from reforms undertaken by APEC economies emerging from the case studies. Box 1 provides a listing of the case studies.

Box 1. The Case Studies

Australia: Telecommunications Services Trade in Global Value Chains

Chile: Transport Services

China: Structural Reform in the Retail Services Sector

Indonesia: Deregulation of Air Transport Service and Its Impact

Japan: Financial Services Sector Reform

Malaysia: Health and Medical Services and GVCs

New Zealand: Electricity Retail Services Market Reform

Papua New Guinea: Telecommunications Reform

Chinese Taipei: Testing and Certification Services

2. SERVICES AND THE ECONOMY

The focus of economic policy discussions is often centered on sectors of the economy that produce tangible products: agriculture, mining and manufacturing. There is rarely a focus on “services”. Indeed, in the economic literature and policy-centered debates on “structural transformation” and “industrial policy”, services tend to be neglected and may be regarded as undesirable because of perceptions that they are low value-added activities with little prospect for productivity growth. This is illustrated in Baumol’s (1967) influential argument that services production suffers from a “cost disease” due to their inherently technologically stagnant nature. Instead of a focus on “services” as a broad aggregate, policy design and analysis usually centers on specific services sectors – health, finance, transport, distribution, telecommunications, and so forth. This is appropriate, as specific services sectors are quite distinct. The enormous heterogeneity within the broad category of “services” makes it difficult to understand and articulate why governments should focus on this broad category of economic activity as well as on the detail of policy and performance of individual sectors. The reason is that many services have common features that are important to understand from an inclusive growth perspective and therefore should inform the design of structural reform.

2.1 SERVICES, OUTPUT AND INCLUSIVE GROWTH

The share of services in total output and employment for the world as a whole has been increasing over time as per capita incomes rise. This is nothing new (see e.g., Kravis, Heston and Summers, 1983) – as economies become richer they become more services-intensive¹ as a result of a process of “structural transformation” through which factors of production move across sectors. Berlingieri (2014) shows that structural transformation is not simply an inter-sectoral dynamic, with labor and other resources shifting out of agriculture, and, over time, out of manufacturing, but that within-services resource shifts are important as well, driven by innovation and increasing demand for specialized intermediate services. The upshot is that across economies and over time average productivity growth in services is in fact similar to that in other sectors, as opposed to the presumption that most services are unproductive (Young, 2014). Contrary to what is often assumed or claimed, the rise of the share of services in GDP as economies grow richer is not solely a function of shifts in patterns of final demand and the “cost disease” that is presumed to affect production of many services.

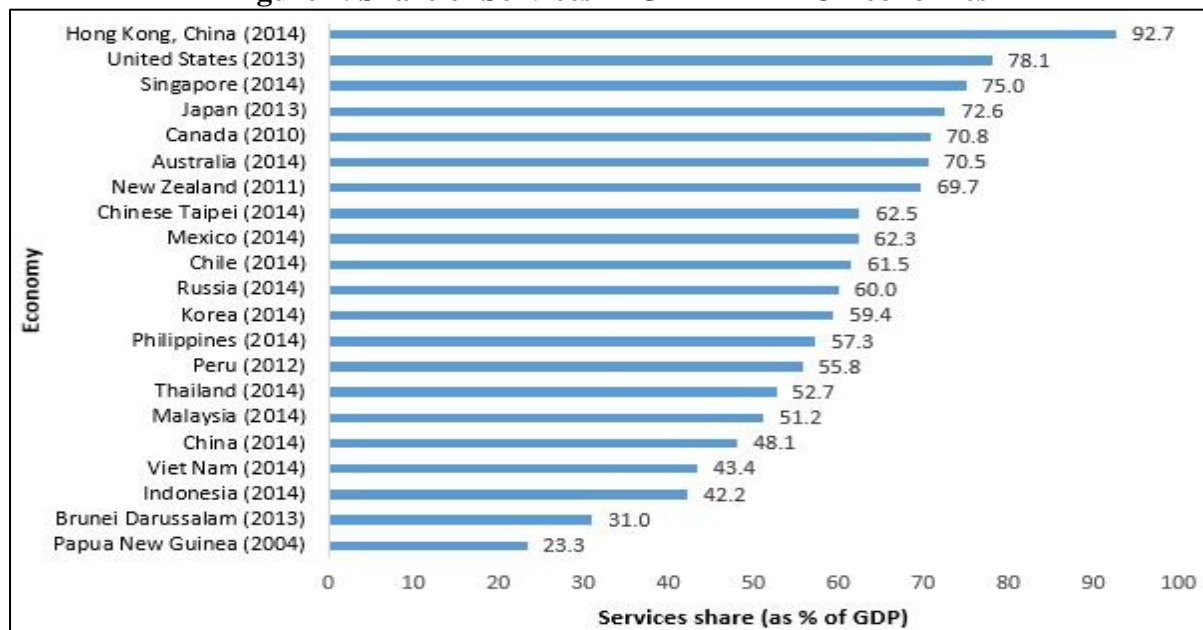
The role of services in the economy is today more important than in the past, whether an economy is poor or rich, as a result of technological changes and policy reforms implemented

¹ The stylized facts have long been well-established: (i) the share of value added originating in services is positively linked to the level of per capita income; (ii) income levels are positively associated with employment shares for intermediate services and with the share of services activities *within* total manufacturing employment; (iii) income levels are strongly linked to demand by firms for intermediate or producer services, particularly in manufacturing; and (iv) changes in the allocation of service activities between manufacturing and service firms (“structural transformation”) explains only a small share of service sector growth – fundamental changes in the structure/organization of production dominate (Francois and Reinert, 1996).

across the globe in recent decades. The trend towards ‘servicification’ of production – a rising share of the value-added embedded in product reflecting services – implies that efficient services are more critical for economic development than in the past. That said, services have always been more important than often is recognized. This is because many services are inputs into the production of other services and goods. As a result, their cost and quality impact on the growth performance of the economy. Many services play an “intermediation” role and support the process of ever-finer specialization associated with economic growth and development. So-called producer services perform an important function in coordinating production processes, both within, and increasingly, across economies. Services are vital to the operation of global value chains—providing the needed coordination and management of activities that are dispersed over many locations.

Services account for 50+ percent of GDP in developing APEC members and 70+ percent in developed APEC members (Figure 1). Focusing on individual economies, there is very significant heterogeneity across APEC. The services share of GDP ranges from a low of around 30 percent to a high of over 90 percent. The differences in contributions to GDP are mirrored in employment shares. The share of employment in services across 14 APEC economies is 64 percent. For developed APEC economies, the share is 80%, while for developing economies, it is 55 percent (Figure 2). Agriculture and mining accounts for 20 percent of total employment, a relatively high share that reflects the size of pattern of economic activity in developing APEC economies, where agriculture and mining accounts for 30 percent of total employment. Viet Nam and Thailand have the lowest share of services employment at 38 percent and 43 percent respectively, while Hong Kong, China has 96 percent of its employed labor in services.

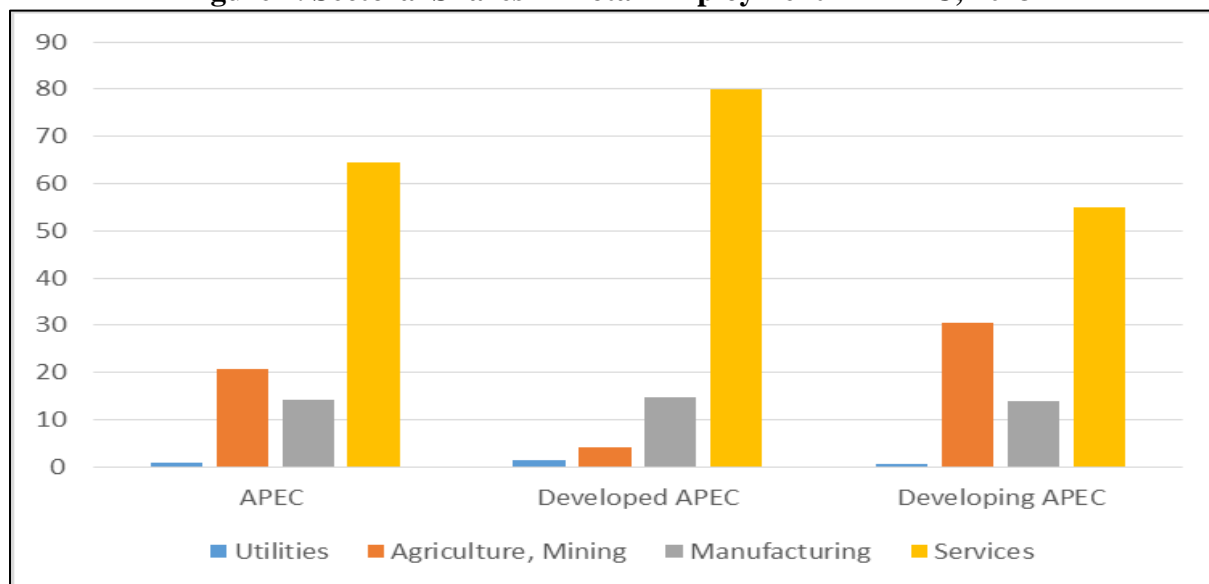
Figure 1. Share of Services in GDP in APEC Economies



Source: World Bank World Development Indicators. Chinese Taipei data is from Directorate-General of Budget, Accounting and Statistics. Both accessed 17 July 2016.

Services not only account for over 60 percent of total employment in the APEC economies for which data are available, they are also more important as a source of employment for women than for men. Available statistics suggest that women account for 43 percent of the workforce in APEC, two-thirds of which is in services activities, compared to slightly less than half for men (Figure 3). An implication is that services matter for inclusion in the sense of providing greater opportunities for participation by women in the economy, and increasing real wages and the quality of work in services sectors will benefit women. If the magnitude and quality of employment is regarded as a feature of inclusion, enhancing the performance of services is key for inclusive growth.

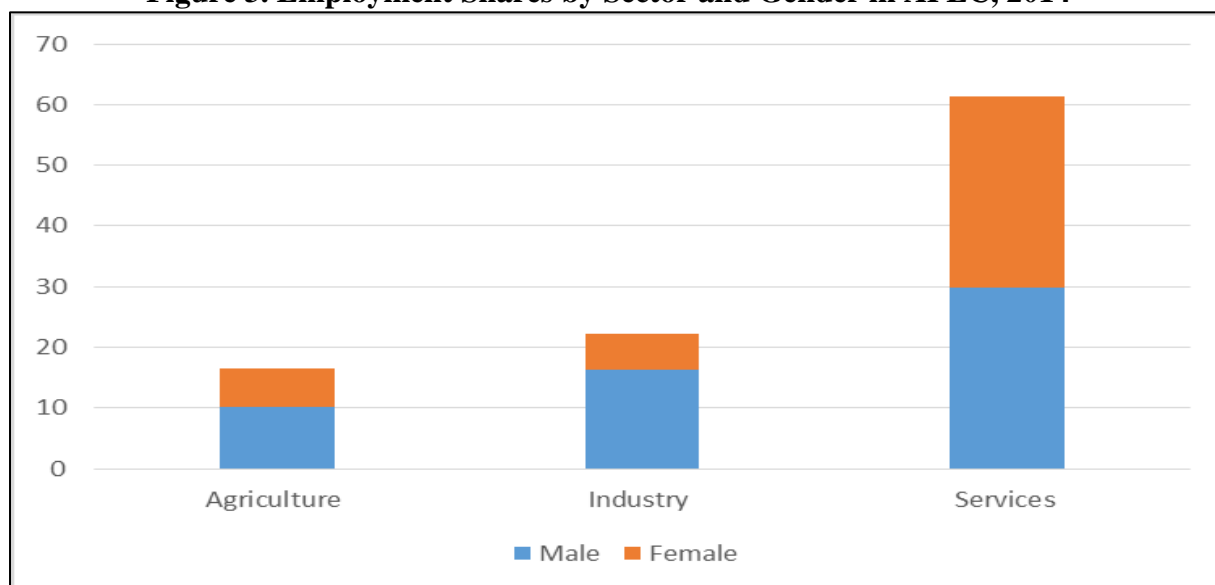
Figure 2. Sectoral Shares in Total Employment in APEC, 2013



Source: APEC PSU computation based on ILOSTAT database.

Note: The ILO reports data for only 14 APEC economies, of which 7 are developed and 7 are developing. The year 2013 is used because it is the most recent year with available data for a good number of APEC economies.

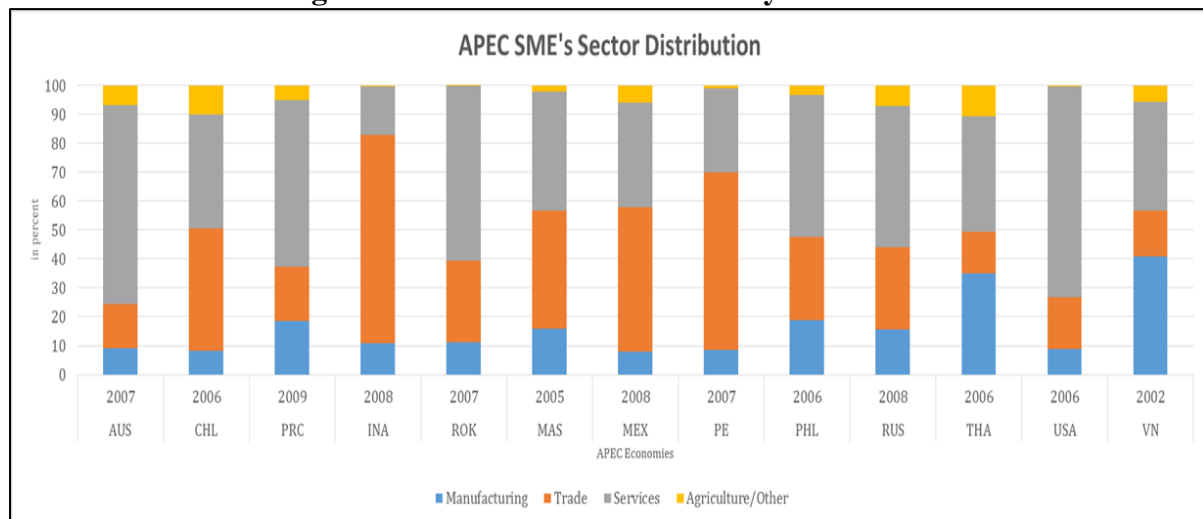
Figure 3. Employment Shares by Sector and Gender in APEC, 2014



Source: PSU computation based on ILOSTAT Database. APEC data exclude Australia, China, PNG, and Peru.

Although differences in definitions and coverage of small and medium-sized enterprises (SMEs) make comparisons and aggregation difficult, SMEs account for over 97 per cent of all enterprises in APEC members and employ between 50 and 80 percent of the workforce (Zhang, 2013). Most SMEs are engaged in services activities (Figure 4), and the share of services rises further if account is taken of small firms operating informally. Services subsectors in which SMEs are important include wholesale and retail trade, hotels and restaurants, business services, maintenance, logistics, construction, and ICT-related activities such as software design, cyber security, applications development, etc. SMEs are prominent in knowledge-based services – a long-standing feature of SME activity (see, e.g., OECD, 2000).

Figure 4. SMEs in APEC are Mostly in Services



Source: MSMEs Country Indicators, IFC

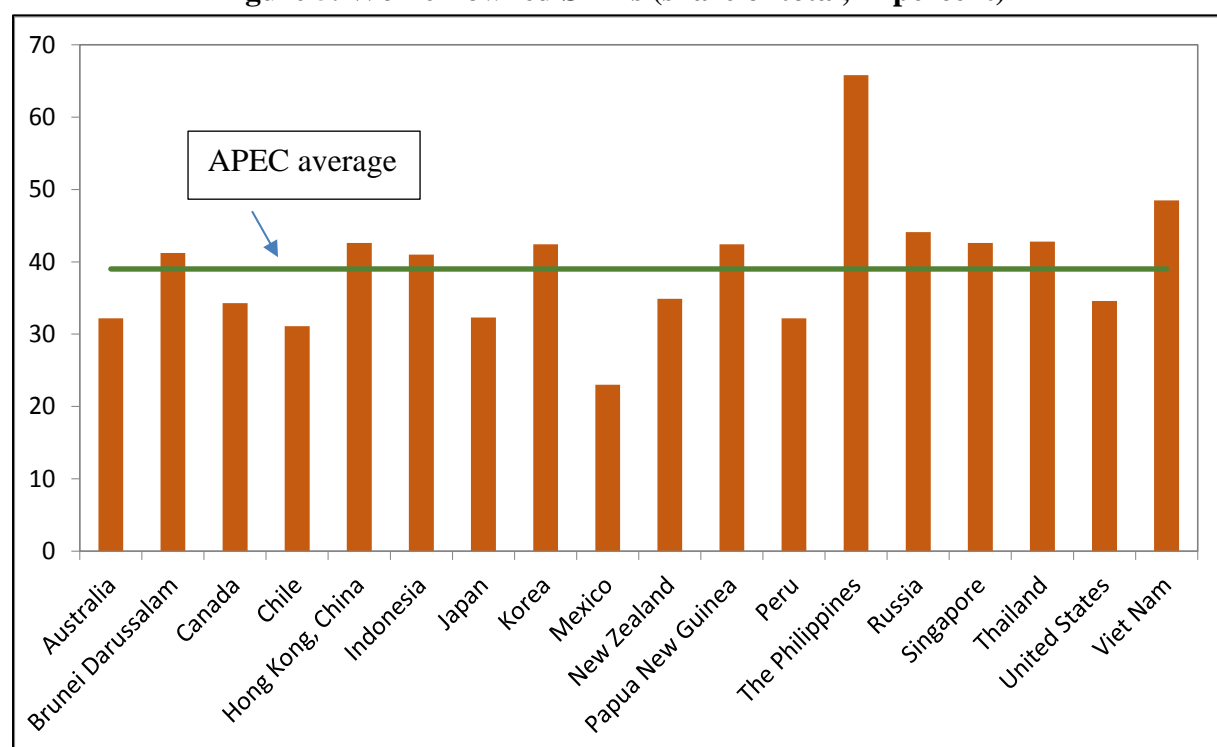
The predominance of SMEs and services activities as a source of employment for women suggests policies targeting SMEs will by necessity overlap with efforts to promote greater inclusion of women in economic activity. This is not just a matter of employment. The share of SMEs that are owned or co-owned by a women across APEC averages only 37 percent (Figure 5). Almost three-quarters of all SMEs owned by women in APEC are very small (less than 10 employees); in contrast, such small SMEs account for only two-thirds of all SMEs owned by men (Table 1). Insofar as women have more limited access to finance (e.g., because of less access to collateral or social barriers) a focus on access to finance can reduce this source of bias and enhance both inclusion and economy-wide productivity. The World Bank Gender Statistics database indicates that in 2014 across all of APEC, 5.6 percent of women borrowed funds from financial intermediaries to start, operate or expand a business as compared to 7.4 percent of men. Only 14 percent of women saved to start a business, compared to 20.9 percent of men.

Table 1. Ownership Shares of SMEs in APEC by Gender, 2011

Size	Owned by male	Owned by female
Very small (5-9 employees)	65.1%	72.9%
Small (10-49 employees)	28.9%	24.2%
Medium (50-250 employees)	6.1%	2.9%

Source: IFC Enterprise Finance Gap Database and APEC PSU calculations.

These are just some of the features of services that make them important from an inclusive growth perspective. Other features are discussed below. Space constraints preclude an extensive discussion of the different dimensions that are relevant in this connection. For example, because services production tends not to involve “smokestacks,” a focus on services and SMEs may also help governments achieve environmental objectives such as emissions reductions goals.²

Figure 5. Women-owned SMEs (share of total, in percent)

Note: Comparable gender-specific data for China and Chinese Taipei are not available. The sample of SME respondent in Malaysia was very small and hence removed. SMEs span very small (5-9 employees), small (10-49 employees) and medium sized (50-250 employees) enterprises in the formal sector. An enterprise is women-owned if it has at least one female owner.

Source: IFC Enterprise Finance Gap Database and APEC PSU calculations.

² Of course, some services do contribute to global warming (transport) and some are energy intensive (data server farms) but many have a small carbon footprint – education, health, engineering, design, software development, management consulting, other professional services, etc.

2.2 SERVICES, ECONOMIC GROWTH AND WELFARE

Standard economic theories of growth postulate that increases in aggregate income or output are a function of increases in the quantity and productivity of capital and labor inputs and technological progress. No special role is accorded to services activities, with the exception of finance. Financial services affect growth by facilitating capital accumulation and fostering innovation. Financial systems are mechanisms for intermediating between those with savings (funds not needed for immediate use) and those seeking to finance investment projects. Financial service providers help to mobilize savings, allocate capital to productive uses, and monitor borrowers. Financial services are also critical in facilitating exchange of goods and services.

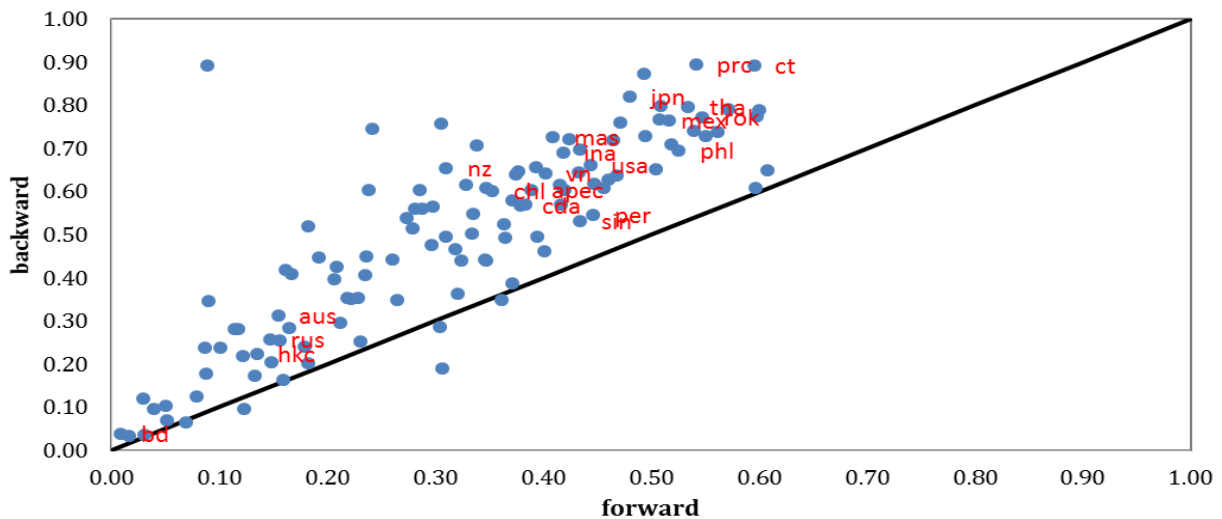
Many other services play equally important facilitating roles. The cost and quality of telecommunications have economy-wide impacts. ICT networks are a transport mechanism for transmission of information and products that can be digitized. Telecommunications are crucial to the dissemination and diffusion of knowledge—including through the internet. Similarly, transport services affect the cost of shipping goods and movement of workers within and between economies. Business services such as accounting, engineering, consulting and legal services reduce transaction costs associated with the operation of markets and enforcement of contracts, and are complementary channels through which knowledge and know-how (e.g., business process innovations) are transmitted across firms and industries. Retail and wholesale distribution services connect producers and consumers. Health and education services are key inputs into – and determinants of – the stock and growth of human capital.³

A key way in which services support the process of economic growth and development is by allowing specialization to occur. A variety of “producer services” play important and distinct roles in supporting specialization and permitting firms to realize scale economies. Organizational innovations in transport and logistics, for example, have yielded productivity gains that in turn impacts on economy-wide growth performance. Particularly important for growth (productivity) performance is that many services are direct inputs into the production of goods and other services. The less efficient and the lower the average quality and variety of services available on markets the more the competitiveness of domestic firms will be negatively impacted.

Case study evidence has shown that at the level of the enterprise the services-content of output (whether measured as the share of services in total costs or the share of total value added) is high in both developing and developed economies (Low, 2013).⁴ However, the services intensity of production is higher on average in high-income economies, reflecting a steady

³ For greater discussion of these different functions and linkages see Riddle (1986), Schettkat and Yocarini (2006), and Eichengreen and Gupta (2009).

⁴ The high share of services value added in manufacturing, coupled with the inelasticity of demand for services partly explain the resilience of services trade to economic crisis. Ariu (2016) argues that since services are intangible and cannot be stored, firms demand services continuously to maintain the production cycle. For example, accounting services, cleaning services, or marketing services need to continue to maintain the firms’ operations.

Figure 7. Backward and Forward Linkages for Manufacturing Sectors, 2011

Source: PSU computations based on WTO-OECD TiVA data.

A number of the case studies illustrate the importance of the linkages among different services sectors and between services and other parts of the economy. Thus, the performance of airports (quality, capacity, congestion) and related services (cargo handling) determine performance of airlines, and the extent to which action to liberalize entry for new airlines or to give existing airlines access to new routes benefits consumers (travelers) (Indonesia case study). The impacts of retail distribution-related policy reforms in China depended in part on the ability of retailers to process and manage payments (financial services) and the efficiency of the logistics sector. In the case of health services in Malaysia, the benefits of policy reforms targeting the sector were conditional on complementary measures to address skills shortages (through a mix of relaxing restrictions on employing foreign workers and investment in training facilities – part of the education sector.⁵ The Chinese Taipei case study illustrates the complex linkages between specific types of services (testing and certification services) and manufacturing/exports (Box 2).

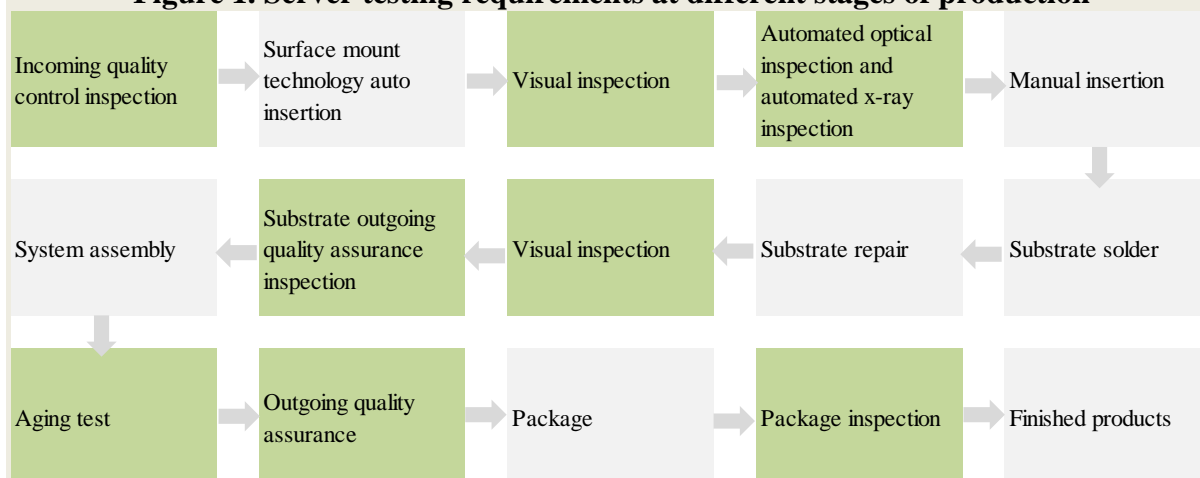
⁵ Malaysia has undertaken specific reforms aiming to improve skills as well, e.g., by removing foreign equity limitations for technical and avocational schools and private universities and implementing measures to attract more foreign students to Malaysia (Malaysia Individual Economy Report).

Box 2. Services and Manufacturing Linkages: The Computer Server Value Chain

Global value chains for the manufacture of computer servers involve many firms and links. Two key players are usually the brand owner (vendor) and the contract manufacturer. The latter manages the bulk of the value chain and has an important role in determining its structure. Reflecting its specialization in information technology hardware, Chinese Taipei hosts many server contract manufacturers.

Testing and certification services are one of many services that are part of the server manufacturing value chain. They are needed throughout the different stages of the production process. After materials are procured, an incoming quality control inspection is done. During production, various testing procedures are required for quality assurance, to meet general industry standards and the specific standards of brand owners, which are often very stringent. At the end of production, overall functionality and product quality tests are performed. From sourcing of parts and components to finished products, there are eight testing and inspection steps to ensure quality and functionality. The graph below sketches out the production process and various testing procedures involved.

Figure 1. Server testing requirements at different stages of production



Note: Darker color highlights various types of testing in the production process.

Firms will do some of this testing in-house and outsource other testing services. On export, tests are generally carried out on the final product in the destination market that are essentially duplicative of those done as part of the production process. Bilateral mutual recognition agreements (MRAs) signed by Chinese Taipei under the APEC TEL MRA greatly reduce and may eliminate such duplicative processes. The case study on Chinese Taipei testing and certification services highlights the substantial savings on compliance costs by firms and the growth and development of the testing and certification services industry that resulted from the regulatory cooperation ushered in by the APEC TEL MRA. There are now some 40 conformity assessment bodies (CABs), a mix of SMEs as well as subsidiaries either of large local manufacturing companies or of companies headquartered in Europe or the United States. Interviews with stakeholders revealed that testing times are halved when a Chinese Taipei-based CAB can complete the required testing domestically and its results accepted in the export market. Domestic testing has also supported retention of research and development in the economy.

Source: Zhang (2016) and Thorburn (2016), this volume.

The case study on financial sector reforms in Japan demonstrates how such linkages can have economy-wide effects. Financial services are critical for productivity performance and national welfare. Fink (2016) shows a collapse in productivity growth in services was a major factor underlying lagging growth performance of Japan. Reforms in the financial sector pursued in the 2000s aimed at both addressing a banking crisis and improving the allocation of credit (savings). While they were successful in stabilizing the banking system, they were not sufficient to mobilize the new entry/investment needed to improve services performance through introduction of new techniques, management and products. Fink argues that a key reason for the limited payoff to reform efforts was insufficient attention to forcing through corporate governance changes and implementing capital market reforms that could provide alternative channels for funding and competitive pressure on lagging firms in the services sectors to improve their performance.

3. COMPETITION POLICY AND PRO-COMPETITIVE REGULATION AS DRIVERS OF SERVICE-SECTOR PERFORMANCE

Greater competition is vital to realize the potential productivity gains from services reform. As discussed further in Section 3 reducing trade and investment barriers to services is one channel for introducing such competition, particularly when the number of efficient domestic competitors is likely to be limited. Such international competition is likely to be particularly important for smaller economies with relatively concentrated services industries. Whether small or large, in practice many elements of most services sectors are non-tradable so that liberalization of cross-border trade cannot play the same role as it can and has played in many economies as a source of market discipline in goods-producing sectors. Other means are needed to introduce competition – in particular measures to permit and promote entry into services markets.

Historically, specific services industries have tended to be state-owned or controlled – e.g., air transportation; transport and communications infrastructure (ports, airports, the telecom network); segments of the banking or insurance sectors; health and education – and in most economies many services are subject to policies that regulate both entry and the conduct of providers. There is a strong rationale for regulation of many services as a means to address market failures, including information asymmetries and the fact that some services are experience or credence goods – their quality can only be assessed after the fact, if at all. Some elements of services industries have the characteristics of a natural monopoly and therefore must be regulated accordingly, whether publicly or privately owned or operated. But starting in the 1980s many economies initiated a process of liberalizing entry into services reflecting a recognition that prevailing regulatory regimes resulted in market structures in which incumbent services providers were able to price services well above the cost of production, because high barriers to entry reduced competition and innovation. This process stimulated subsequent economic growth performance. In the United States, for example, deregulation of a variety of logistics-related services industries ranging from trucking to air transport led to a series of innovations that benefited all industries and consumers, including the rise of the express industry, hub-and-spoke transport networks and distribution centers.

Economic research has shown that this in turn explains a significant share of the productivity growth realized by the US economy in the following decades (Triplett and Bosworth, 2004) and that differences in the degree to which services sectors are contestable across economies does much to explain differential productivity performance. Much of the differential in total factor productivity performance between the EU and the US in the 1990s and early 2000s is explained by market service industries such as retail and wholesale distribution, financial and business services (such as management consulting) (Inklaar et al., 2008; van Ark et al., 2008). Underpinning the differential in services performance are differences in product market regulation that determine the contestability of services markets (Nicoletti and Scarpetta, 2003).

Despite technological changes that are making services easier to supply via telecommunications networks, provision of services often continues to confront the so-called proximity burden (Francois and Hoekman, 2010). That is, for exchange to take place (a services to be provided) the supplier and demander must be in the same place at the same time. The proximity burden makes many services difficult to trade at arms-length, even within economies. One result is that production capacity is distributed more uniformly across the territory of an economy than is the case for manufacturing plants. This has implications for inclusive growth-related policies. For one, it means that services may offer greater prospects for local employment and economic activity because they are more difficult to supply long-distance. But it also implies that there may be no supply at all in a given location. In contrast to goods that can be ordered and shipped to remote locations or regions with low population density in the case of services such as hospital care or higher education the “consumer” will have to move to the location of the provider or accept lower quality or no service.

Recent technological innovations in services such as mobile communications, e-commerce, transport infrastructure and logistics providers entail better connectivity within an economy, with potentially major welfare benefits for households and productivity payoffs for firms through better and more timely access to information and improved ability to move goods and services from point of production to consumption/demand. Connectivity is a determinant of inclusion; the availability and performance of services define conditions of access for individuals as well as firms. Better or more equitable access to services (greater inclusion) requires connectivity which in turn is likely to improve as a result of pro-competitive reforms that center on permitting new entry and innovation by service suppliers. Specific measures aimed at improving inclusion – such as the México Conectado framework to expand access to broadband through Internet access in schools, health centers, libraries, community centers, and other public spaces at local, state and federal levels – can leverage the social benefits of pro-competitive reforms (Mexico Individual Economy Report).

Examples of this are offered by several of the case studies. In Papua New Guinea, before implementation of reforms in 2007 an incumbent telecom public monopolist effectively provided either no or very limited/low quality service in large parts of the economy. Post-reform and entry of private operators, the number of people with mobile phones expanded rapidly, and network coverage has risen to some 90 percent of the population. There have been major positive spillover effects along numerous dimensions as a result of entry by new operators, new access to mobile data services, and better connectivity between firms/farmers and customers/markets and between individuals and providers of services to households – e.g., health care, use of e-payment systems and improvements in worker safety and combatting corruption. In the case of Indonesia, air transport policy reforms led to some 70 new domestic routes being served by a mix of new entrants and incumbents (Box 3). Prior to the reforms the associated city-pairs were not connected by air or services was less frequent.

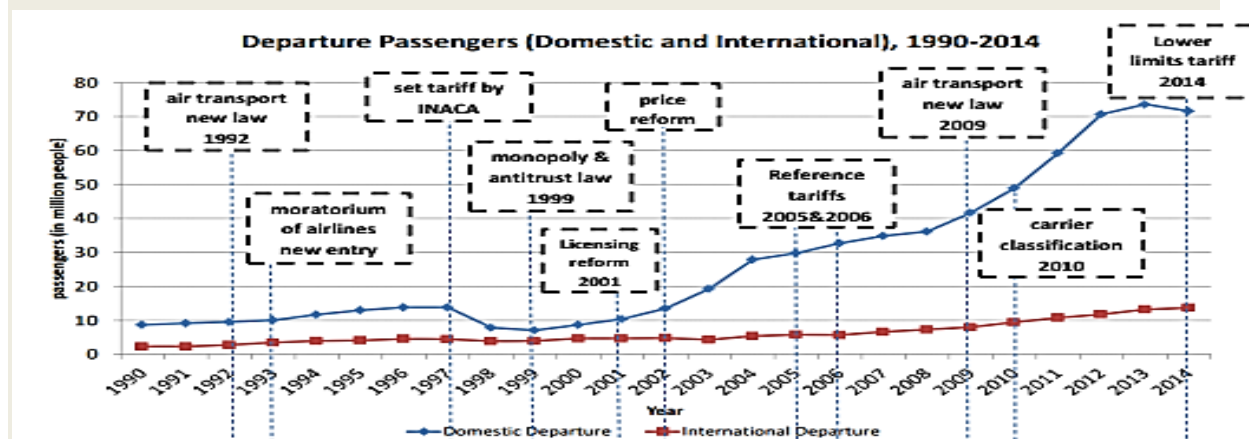
The importance of entry liberalization (measures to foster greater competition) is a common element of many of the case studies and Individual Economy Reports, including telecoms

(Papua New Guinea, Chile, Mexico, New Zealand), health services in Malaysia (allowing investors to establish private hospitals and facilities), retail electricity in Australia (Victoria) and New Zealand, where reforms led to numerous new suppliers of electricity to households, air transport in Indonesia, with 14 scheduled airlines now providing domestic services, and retail distribution in China, where the number of domestic and foreign-owned establishments has expanded rapidly and the resulting competition has ensured both lower prices and greater choice for consumers. The benefits of greater competition may be in part a function of specific regulatory reforms that go beyond entry liberalization – such as requirements on number portability in mobile telecoms (see Individual Economy Report on Chilean reforms of mobile telecoms) and regulatory measures to assure minimum levels of access to services for poor households or remote/disadvantaged locations.

Box 3. Effect of Indonesia's Reform of Air Transport Services

Prior to the enactment of competition law in Indonesia, the Indonesian National Air Carrier Association (INACA) set passenger airline ticket prices by establishing a floor price. The new competition authority declared the practice anti-competitive and imposed ceiling prices for economy class travel in 2002. Indonesia also eased entry and licensing requirements for airlines companies in 2001. Foreign equity limit in commercial airline business remains, with air transport services, airport services, and multimode transportation capped at 49%, other air transport and auxiliary services at 67%, and cargo condition and other survey services totally closed to foreign investments.

A significant growth of the air transport sector followed the series of deregulation. The number of airlines increased significantly following the easing of entry conditions, reducing the market share of the dominant incumbents, Garuda Indonesia and Merpati Nusantara. Air traffic grew - domestic passengers numbered 42.2 million and international passengers 27 million in 2014, respectively, a 4- and 3-fold increase from 2003 (see Figure below). Domestic and international cargo also increased. Offered routes increased particularly at secondary airports from 139 in 2001 to 333 in 2014.



With the increase in air travel, airport congestion has led to delays becoming a feature in recent years. Greater traffic also led to air safety concerns (an increase in air crashes), in part reflecting the quality of air traffic control and insufficient qualified air transport inspectors, issues calling for a systematic improvement of human resources recruitment and training. A floor price for air tickets was re-introduced as a percentage of the ceiling price in 2005, with the purported aim of reducing the extent of price competition and improving airline safety.

Source: Anas and Findlay (2016), this volume.

4. SERVICES TRADE POLICY AND ECONOMIC PERFORMANCE

Technological changes are making services easier to trade internationally. This provides new specialization opportunities for economies and the realization of economies of scale by firms. International competitiveness in services can translate into new exports and foreign exchange earnings, but more generally, export competitiveness depends on service sector performance because many services are inputs used by firms across all sectors of activity. Services that are higher cost/lower quality than those available to competitors abroad will make all firms in an economy less competitive and increase costs (prices) for domestic consumers.

Trade costs for services have been declining in recent decades but remain much higher than for goods. Miroudot et al. (2010) estimate that international trade costs for services are some 70 percent higher than for goods. Anderson et al. (2015) estimate that trade costs for services declined somewhat during the 2000-06 period for a set of OECD economies for which data are available, but relative to the much more rapid decline in trade costs for goods, services lag far behind. Anderson et al. find that sectors with higher initial levels of trade costs experienced a smaller decline than sectors with lower initial costs. The largest decline occurred for travel services, compared to sectors such as audio-visual services where trade costs essentially remained flat. This is not the place for an in-depth discussion of different estimates of services trade costs and how these have been changing. Suffice it to say that the consensus view in the academic literature is that services trade costs are high, have been declining more slowly than trade costs for goods, and that this is due not just to natural barriers to trade associated with the more limited tradability of services but to policies that increase the costs of trade.

4.1 TRADE OPENNESS AND INVESTMENT: CHANNELS FOR SERVICES PERFORMANCE AND PRODUCTIVITY

Before turning to a discussion of such policies and the design of reform efforts to reduce trade costs, we briefly summarize some of the salient research on the linkages between services trade, service-related trade policies and economic performance. This has shown that trade openness is an important channel for improving services performance, which in turn has positive effects on productivity. Building on national accounts statistics briefly described above, recent initiatives such as the OECD-WTO Trade in Value Added (TiVA) database measure the role of services as inputs into goods that are exported. This reveals that services account for a much larger share of global trade than is suggested by trade statistics. Some 25-30 percent of the total value-added of goods that are traded reflects embodied services. If this is added to the value of services that are traded directly (as measured by the balance of payments) some 50 percent of global trade comprises services – much closer to the share of services in GDP. When a service is used as an input into the production of a good that is then exported, that service is exported indirectly, embodied in the good. Many firms in high-income economies that engage in manufacturing have been pursuing so-called servicification: a shift into or increasing the production and sale of services. This is often an element of a strategy to increase productivity and move “up the value chain” in response to competition from imports and decisions to

offshore tasks that can be done more cheaply elsewhere.⁶ Upgrading along a value chain often requires servicification because activities that generate higher value added tend to be services, ranging from R&D and design to brand management.

A difference between trade in goods and services in terms of their inclusive growth impact is that trade in services often entails FDI. This is because the services either must be locally produced for technological reasons or because there are incentives to be close to the customer. Foreign suppliers are sources of new technologies as well as competition. FDI is a particularly important channel for international provision of services and associated transfer of knowledge and know-how, as well as a mechanism through which firms can obtain access to higher quality, lower cost services and improve total factor productivity. FDI was a key feature of the telecom reform experience in PNG, with initially one foreign-owned operator entering the market to compete with the incumbent public telecom company, subsequently followed by a second foreign provider. In China, FDI in the retail distribution sector increased from some 3 percent of total inward FDI in 2006-07 to about 8 percent in 2012-14. The increase in the footprint of foreign companies was paralleled by rapid expansion in the number of Chinese firms providing distribution and related services.

As long as greater foreign participation is associated with increased competition, there will be a larger scale of activity, and hence greater scope for generating growth-enhancing effects. If foreign participation merely substitutes for domestic factors and the sector does not expand, i.e. the degree of competition remains unchanged, then there cannot be a positive growth impact on account of the scale effect. However, because services tend to be produced locally, greater competition will generally have less of an effect in forcing a reallocation of employment across sectors than in the case of liberalization of trade in goods (Konan and Maskus, 2006). The case studies illustrate this. In the case of Malaysia the overall number of nurses and doctors increased as a result of the reform permitting private investment in the health sector; in Indonesia the overall level of employment in air transport increased following the reforms. Conversely, a larger scale achieved merely by eliminating domestic barriers to entry and attracting domestic resources from other sectors would suffice to generate larger endogenous growth as resources are allocated to more productive resources. Even without scale effects and even if services sectors do not possess endogenous growth attributes, inward FDI following services sector liberalization can support growth by bringing in new technology. There is substantial empirical evidence that FDI has beneficial effects on the productivity of economies by inducing greater competition and providing access to higher quality, greater variety and cheaper services (Francois and Hoekman, 2010).

A positive association between services policy reforms and greater competition (entry), and between total factor productivity (TFP) growth performance of downstream firms and inward FDI is perhaps the most robust finding to emerge from the limited empirical research on the

⁶ This has been the focus of much recent analysis. See, e.g., Baines et al. (2009), Breinlich and Criscuolo (2011), Swedish National Board of Trade (2013), Breinlich, Soderbery, and Wright (2014), Crozet and Milet (2014), and Lodefalk (2013, 2014).

impacts of services reforms. Empirical studies for APEC economies include Duggan et al (2013) for Indonesia and Fernandez and Paunov (2011) for Chile.⁷ Hoekman and Shepherd (2015) revisit this type of analysis using World Bank enterprise survey data for 58,000 firms in over 100 developing economies. They find that service sector productivity matters for the productivity of downstream firms producing goods, with services productivity mattering more for those firms that use services relatively intensively in their overall input mix. They also find that lower barriers to services trade and investment increases the productivity performance of domestic manufacturing industries. As in the economy-specific analyses briefly mentioned above, more open FDI regimes are the key channel for this link.

Empirical research in this area has been greatly impeded by data limitations. Information on both outcomes (e.g., economic performance of services, firm-level productivity, and employment) and prevailing policies is patchy at best – time series data on key policy variables are often limited or lacking altogether. As a result research tends to be based on relatively aggregate data and is often cross-section in nature. For example, Mattoo et al. (2006) use a cross-section regression framework to show that economies with open financial and telecommunication sectors display a GDP growth rate about 1.5 percentage point higher than other economies. Eschenbach and Hoekman (2006) find that liberalization and adoption of good regulatory practices in financial, telecommunications, energy and transport services are statistically significant explanatory variables for the economic performance of a sample of 20 transition economies during the 1990-2004 period. Focusing on trade outcomes, Gabriele (2006) demonstrates the existence of a positive and robust correlation between cross-border services exports and long run GDP growth for a sample of developing economies. Services trade policy has also been shown to matter for product differentiation and diversification. Building a gravity framework for more than 100 economies Nordås (2011) finds that price-reducing liberalization in business services is associated with more product differentiation, particularly in the motor-vehicle industry.

4.2 DATA LIMITATIONS, RESTRICTIVENESS INDICES, AND TRADE COSTS

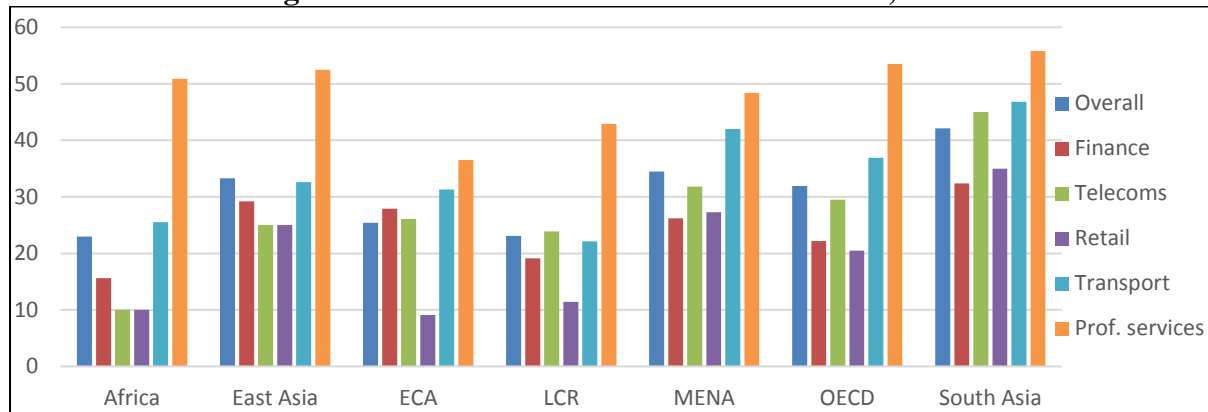
In recent years data have been collected on policies that may act to restrict trade and investment in services. Two complementary efforts have been pursued, one by the World Bank, the other by the OECD. The former has wider economy coverage (some 100 economies) but currently is only available for one point in time – 2008. The latter has narrower economy coverage – OECD member states plus large emerging economies – but goes beyond the World Bank exercise by including not just discriminatory policy measures that are designed to restrict trade but also regulatory policies that apply to both domestic and foreign firms. It also has broader sectoral coverage than the World Bank dataset – a total of 18 sectors, and has at least two years of data points per economy and sector⁸.

⁷ Barone and Cingano (2011) and Bournès et al (2013) use data for OECD economies and find that pro-competitive policies in services sectors enhance the productivity of downstream manufacturing. Görg et al. (2008) using firm-level data for Ireland, find that services outsourcing increased productivity, especially for exporters.

⁸ OECD-STRI is available for 2014 and 2015. The 2016 STRI is slated for release in the fourth quarter of this year.

Figure 8 reports summary data on the services trade restrictiveness indicators (STRIs) in the World Bank database. This shows that there is a lot of heterogeneity in average STRI levels across economies in different regions; the same is true at the sectoral level. Professional services and transport tend to confront the most restrictive policies.

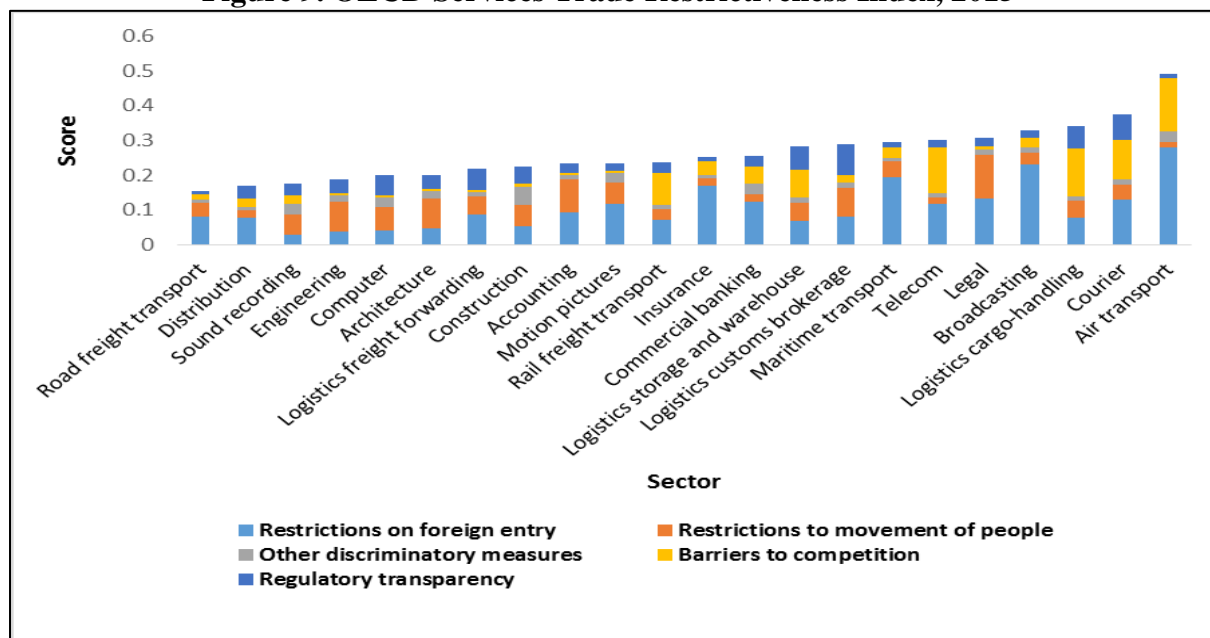
Figure 8. Services Trade Restrictiveness Index, 2009



Source: World Bank Services Trade Restrictions Database.

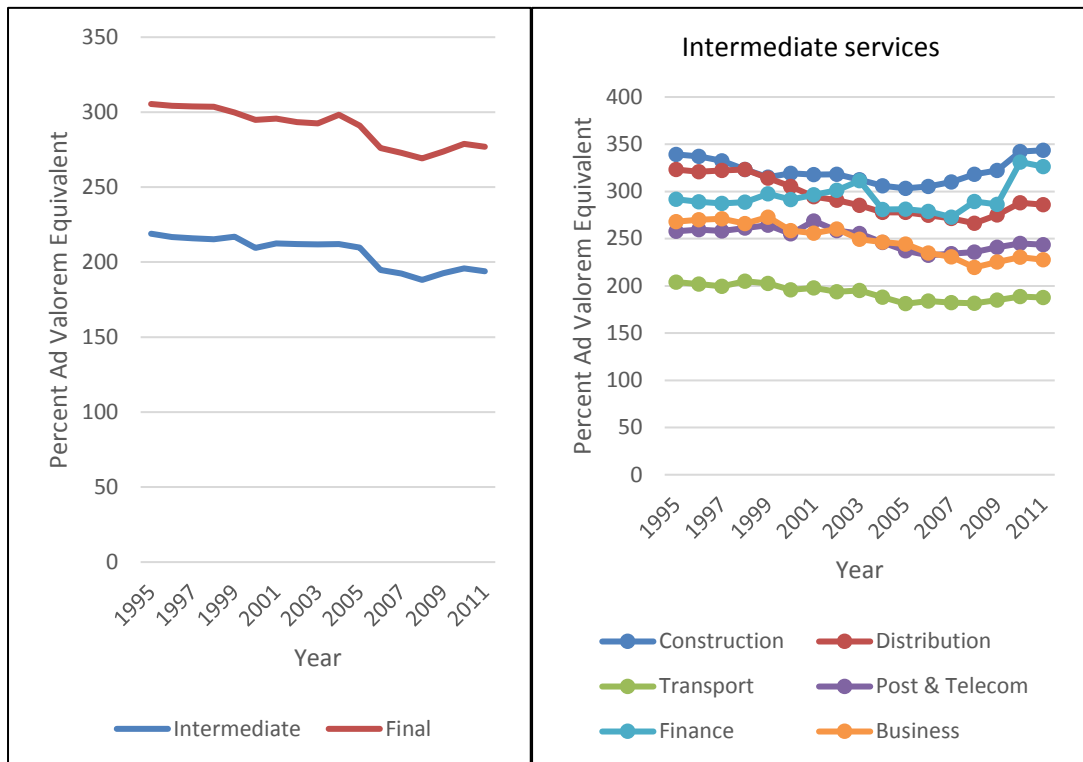
Turning to APEC, Figure 9 reports the OECD STRIs for APEC member economies. Air transport services and courier services are the two most restrictive sectors based on this index, followed by logistics cargo handling, broadcasting and legal services, while road transport and distribution services are the least restricted. Within APEC, there is significant variation among each economy's STRI. Across sectors, restrictions on foreign entry and competition barriers contribute largely to the restrictiveness index, while for professional services, restrictions on movement of people loom large.

What matters from an economic perspective are the economy-wide performance effects of high (low) STRIs. Miroudot and Shepherd (2015) use the OECD STRIs to estimate the level of implied trade costs expressed in *ad valorem* equivalent terms for 2011. They find that trade costs for final services were 277 percent *ad valorem*, compared with 194 percent for intermediate services (Figure 10, left panel). Focusing on intermediate services, trade costs are lowest in transport, followed by business services and post and telecommunication services. Construction consistently has the highest levels of trade costs. Intermediate trade costs in distribution and business services fell in the 1995-2011 period, while those in finance rose, which may reflect tightening of prudential and other regulations as well as a reduction in demand and risk appetite following the financial crisis. Miroudot and Shepherd estimate that a 10 percent increase in the level of services trade restrictiveness indicators (STRIs) is associated with an increase in trade costs of 2.7 percent. For intermediate trade, a similar change in the STRI is associated with a 3.1 percent increase. Results are strongest for postal services and telecommunications. Interestingly, the coefficient for intermediate trade is larger than that for final trade, which provides some evidence that services trade restrictions matter more for intermediate trade than for final trade (Figure 10). An implication is that trade costs are in part determined by trade and investment restrictions in services that increase the cost of transport, distribution, storage, logistics and other services that are inputs into production and exchange. Achieving lower trade-related operating costs is therefore in part a services agenda.

Figure 9. OECD Services Trade Restrictiveness Index, 2015

Source: PSU computations based on OECD STRI. Data cover only 11 APEC member economies.

Hoekman and Shepherd (2015) analyze the relationship between levels of services trade restrictiveness and merchandise export performance, using the World Bank STRIs (Borchert et al., 2014). STRIs are a statistically significant determinant of manufactured exports performance, a finding that is robust to the inclusion of various controls, including the overall level of trade barriers affecting manufactured exports. A 10 percent increase in the average level of STRIs is associated with a 5 percent decrease in bilateral trade in manufactured goods. At the sectoral level, restrictions on transport and retail distribution services have the largest negative impact on exports of manufactures. The strongest impact is found in the retail sector. The retail STRI is de facto correlated with restrictions on trade in distribution services. Distribution and logistics are key to the production and movement of goods, both within and across economies. Given that international production networks and supply chain trade depend on efficient distribution and logistics services (World Bank, 2014), it is unsurprising that the impact of trade restrictions affecting retail services should have a large impact. Trade restrictions that reduce transport sector productivity have the next most negative impact on exports of manufactured goods.

Figure 10. Estimated Trade Costs for Services

Source: Miroudot and Shepherd (2015).

5. STRUCTURAL REFORM AND SERVICES

The forgoing has discussed how and why services performance matters for inclusive growth and that productivity is impacted by policies that determine the contestability of services markets, including trade policies. In practice entry into many services activities is often regulated, and services providers may additionally be subject to regulatory regimes that pertain to their operations and conduct. Regulation is therefore a prominent feature of structural reforms that target services sectors.

Structural reform in the APEC context has been defined to span measures that aim to address impediments on economic growth. The APEC Economic Committee defines structural reform as “improvements made to institutional frameworks, regulations and government policies so that the efficient functioning of markets is supported and behind-the-border barriers are reduced”⁹ thus boosting cross-border trade and investment.

APEC Leaders have identified five broad areas for structural reform initiatives:

- adoption of good regulatory practices;
- active pursuit of competition policy;
- improving public sector governance (civil service performance, enhancing fiscal transparency);
- enhancing corporate governance; and
- strengthening economic and legal infrastructure.

The 2010 APEC New Strategy for Structural Reform (ANSSR) adds a focus on social dimension of reforms, including enhancing opportunities for women, expanding education and supporting SME development. In 2015, APEC Ministers endorsed a Renewed APEC Agenda for Structural Reform (RAASR), which guides APEC’s work on structural reform through 2020. The goal of the RAASR is to “reduce inequality and stimulate growth in APEC economies, and contribute to APEC’s overarching goal to promote balanced, inclusive, sustainable, innovative and secure growth.” This involves measures aimed at more open, well-functioning, transparent and competitive markets, broader participation in economic activities by all segments of society (inclusion), and sustainable, well-targeted, effective and non-discriminatory social policies that support open markets and inclusion by bolstering economic resiliency.¹⁰

This agenda is directly relevant to service sector performance, given the prevalence of regulation of services activities and the market dominance that some firms may have in their sector. Governance and economic and legal infrastructure is particularly important for the impact of services trade liberalization according to research that is discussed below. Other dimensions of structural reform as commonly understood in the literature are also important – e.g. revisiting regulatory policies that impede entry or sector-specific policies that are excluded

⁹ See <http://www.apec.org/About-Us/About-APEC/Fact-Sheets/Structural-Reform.aspx>. Accessed on July 30, 2016.

¹⁰ See <http://www.apec.org/Groups/Economic-Committee.aspx>. Accessed on July 30, 2016.

from the reach of competition law. Given that services account for 60+ percent of GDP in over half of APEC economies, any structural reform agenda must span services sector policies if it is to have any significant impact.

5.1 UNDERSTANDING THE BENEFITS AND COSTS OF SERVICES REFORMS

A first order question is to clearly define what the objective of reform is. This is particularly important for services because of the prevalence of regulation. This generally is motivated by a mix of equity and efficiency goals, but may also reflect successful interest group lobbying to create and defend rents by restricting entry that come at the cost of users of services. Combatting national welfare-reducing, rent-seeking behavior is a central feature of the political economy of trade policy, one that is well understood by policymakers and advisors, and relatively straightforward to explain by reform-minded politicians. Trade liberalization may be difficult to implement in practice if reform gives rise to real adjustment costs associated with downsizing of domestic industries. But conceptually, the costs and benefits of reforms can be readily understood. Matters are different when it comes to services.

One reason is that services tend to be subject to regulatory requirements that often (but not always) have a good rationale in terms of addressing potential market failures. As a result it may be more difficult to disentangle whether policies that raise costs or prices and/or restrict entry and thus appear to create rents are welfare reducing because they may be necessary to address a market failure. An implication is that more work (economic research, consultations with stakeholders) will be needed to determine to what extent a given regulation or set of regulations can be reformed so as to permit greater competition (entry) without reducing the likelihood that regulatory objectives are achieved. Another implication is that reform design should consider policy changes and implementation modalities that increase the prospects of attaining regulatory goals. Making this a focal point for structural reforms in services sectors will help ensure support by national regulators. It will also assist governments in addressing concerns of issue-specific interest groups that reform may worsen outcomes from a regulatory viewpoint. Services reforms often differ from reforms targeting goods-producing sectors is that concerns of citizens may revolve less around prices and costs of products and center more on quality and stability – continued or better access to a service. This is less salient for reform of trade policy for goods as trade liberalization brings with it both lower prices and more choice/greater variety. This may not be true for services reforms, although the case studies suggest that both effects are observed. Thus, in Papua New Guinea; New Zealand; Indonesia; and China, prices fell and access (choice) improved in the sectors studied (see for example Box 4 on China retail), while in Japan and Malaysia access (choice) improved in some dimensions – e.g., use of investment trusts by Japanese savers; access to a greater number of health providers for Malaysian patients.

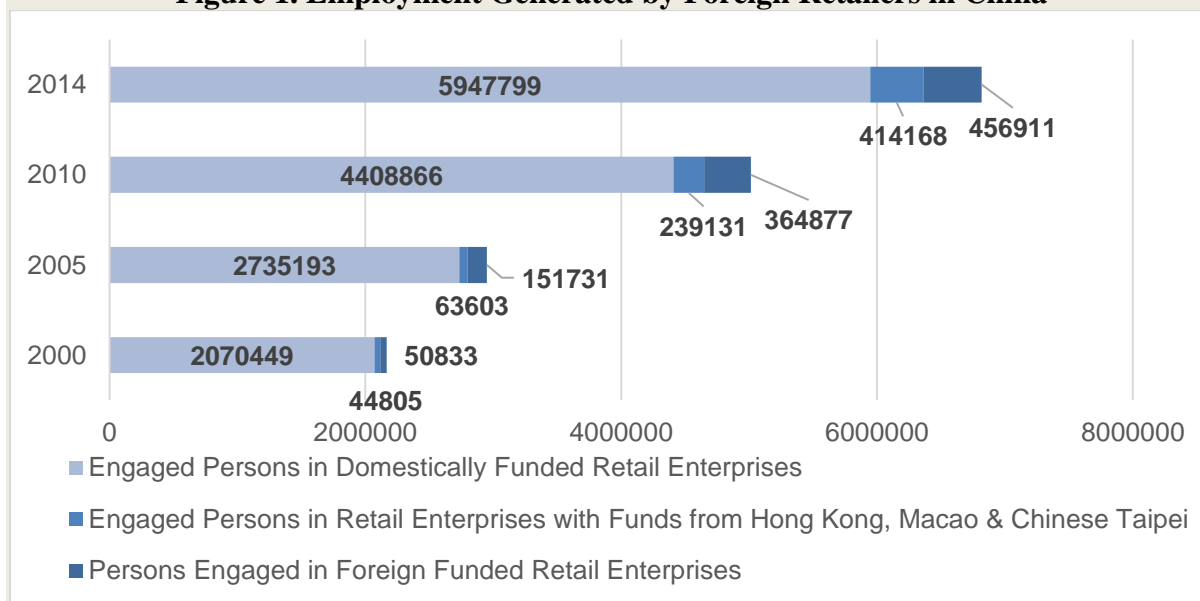
Box 4. China Retail Services: Inclusion following WTO Accession

China liberalized access to distribution services as part of its accession to the World Trade Organization (WTO). It committed to phase out quantitative, geographical, equity, and incorporation restrictions on joint venture establishment by foreign companies, and liberalized retailing of all but a few commodities within 5 years of accession. After accession, the distribution services sector attracted an influx of foreign companies investing in hypermarkets, convenience stores and specialty stores. By 2013, foreign investment in the distribution sector reached US\$11.5 billion, close to 10 per cent of total FDI inflows to China. In 2008, 42% of the top 250 global retailers had a presence in China. However, foreign retailers have not gained a dominant market share, although they have performed well in the hypermarket format. The entry of foreign players and the technology they brought with them benefited China in several ways.

- The use of multiple retail formats by foreign firms (hypermarkets, supermarkets and discount stores) provided more choices for consumers;
- Foreign retailers became role models of business efficiency through innovation which Chinese enterprises are trying to imitate: setting up more efficient modern satellite systems and commercial networks, adopting Bar Code technology and implementing Point of Sale Management, Electronic Data Interchange, Management Information and Global Positioning Systems.
- The experience of watching the process of inward foreign investment through cross border mergers and acquisitions has been an important source of reference for domestic Chinese retail businesses as they implemented a “going out” strategy of their own.
- Foreign retail investment into the poorer western regions of China promoted local growth in underdeveloped areas

Liberalisation of distribution services has also created jobs. Retail draws employees primarily from the lower economic strata and provides training, job security, good wages and often the first opportunity for management experience. The graph below shows that employment in the sector grew from 2.2 million in 2000 to 6.8 million in 2014, 13 percent of whom are with non-Chinese retailers.

Figure 1. Employment Generated by Foreign Retailers in China



Source: National Bureau of Statistics of China

Source: Ying and Brockman (2016).

Another consideration concerns the complex ways in which services feed into the production functions of a large number of industries. There are many interdependencies across sectors and activities. A reform of one service sector may have unintended consequences if these interlinkages are not well-understood and if there is not an effective process to generate feedback, and flexibility to adjust and complement reforms over time. Thus, reforms aimed at encouraging new entry into transport services may have limited effects if there are barriers on the importation or use of certain types of vehicles, or if opening up entry to new providers of air cargo services has little effect because of a lack of warehousing facilities, or if express services delivery of small packages is opened up to new entry but operators cannot invest in the local facilities they need to provide their services. Such types of complementarities and interdependencies are less salient for goods trade liberalization. The Indonesia air transport case study illustrates the types of interdependencies that often arise: airport capacity and human resource constraints in the area of safety assessment and monitoring were two key factors reducing the (large) net benefits for consumers and enterprises created by the reforms. Similarly, in the case of Japan, the operation of capital markets needed to be improved in order for financial sector (banking) reforms to have a greater impact.

As discussed at greater length in a subsequent section, services reforms differ from merchandise trade liberalization because production and consumption of services is mostly local. In contrast to the goods case where both sector-specific capital and labor may lose in the short run, and industries may shrink and even disappear because an economy does not have a comparative advantage in a given manufacturing industry or in agriculture, in the services context reforms will put pressure on incumbent firms but not lead to the type of employment reduction at sector level that may arise for goods. Those who will be negatively affected are the owners of inefficient services providers. Their firms will need to improve their performance, lower prices and confront a fall in profitability as a result of new entry following pro-competitive structural reforms, but overall employment in the sector will not be affected in the way it can be for goods. Because services are mostly produced locally by domestic companies and/or foreign firms that have established a presence via FDI, reforms are more likely to increase overall employment in a sector. Box 4, for example, highlights the case of China's distribution services where reforms led to growth of the industry and increase in sector employment. In the case of PNG telecommunications reforms, the industry as a whole grew with the increase in the subscriber base, while the former domestic monopoly has received a new boost from foreign investment partnership with Vodafone to compete better with Irish-owned Digicel. In general, because services sector reforms usually entail unleashing the sector from constraints to domestic private sector as well as foreign participation, the fresh investments that ensue after the reform help generate increases in employment.

5.2 DISCRIMINATORY AND NONDISCRIMINATORY REGULATIONS

Structural reform of regulatory policies towards services can usefully be split into two categories, depending on whether the policies in question apply to all firms (that is, are applied on a nondiscriminatory basis to all firms, independent of their origin or nationality) or explicitly target foreign firms (that is, are discriminatory in intent and design). Of course, the former set

of policies may have the effect of generating additional costs for foreign firms if they seek to enter the market, but this is not the intent of policy. Discriminatory policies often will be a combination of sector-specific and ‘horizontal’ measures that apply to or impact on many if not all sectors in which foreign firms are active. Examples of the latter are visa regimes, labor market tests, nationality requirements, and other local content policies – e.g., mandatory data localization. Effective structural reforms often will require a focus on both sector-specific and horizontally applicable policies. As mentioned, the Malaysia health services reforms for example included measures to ease the ability of private hospitals to employ foreign nationals in recognition of scarcity of health sector professionals in Malaysia.

Nondiscriminatory regulation and good regulatory practice

Regulatory policies for services are diverse, reflecting the different objectives (market failures) that motivate intervention. One common type of market failure may arise as a result of asymmetric information, where a supplier has much better knowledge of the quality of services provided or their qualifications/ability than a buyer/consumer. Especially in the case of so-called experience or credence goods, a buyer may only find out if the service was any good – or in fact did harm (e.g., advice to invest in a product that was much riskier than advertised) after the fact. Another common type of market failure is associated with negative externalities due to over-exploitation of a resource because the market does not price a service appropriately – classic examples are road congestion and over-exploitation of natural resources by tourists. Another market failure that calls for regulation are situations where it is efficient for only one supplier to operate in a market because of economies of scale or where a provider of infrastructure services has control over bottleneck facilities and an incentive to exploit the resulting market power – e.g., a telecom company that controls access to an international gateway. Although in principle competition law can address the latter situation this can only be done *ex post*. Up front, *ex ante* regulation of conditions of access may be more efficient in such cases.

Prudential regulation of banks (capital requirements; consumer protection; caps on credit card interest rates); licensing of medical practitioners (nurses, doctors, dentists, etc.); rules relating to roaming charges and portability of telephone numbers; or universal service requirements will all have the effect of raising operating costs for providers. Thus regulation may have the effect of reducing supply and/or raising costs of production, leading to higher prices. This is by itself not undesirable if the measures address the market failure at issue and by doing so have the intended effect of enhancing quality, safety, etc. or reducing the chance of catastrophe (e.g., systemic failures in the case of the financial system).

In the pursuit of structural reforms for services governments must be clear on the purpose of the regulations that are implicated. Applied measures should be both effective (work in achieving the regulatory goal) and efficient (do so at least cost). Tools such as regulatory impact assessments (RIAs) are designed with this purpose in mind, as are more generally the types of good regulatory practices (GRP) in the design and implementation of measures that have been developed by the OECD and APEC (see APEC-OECD Integrated Checklist of Regulatory

Reform)¹¹. The various elements of GRP apply as much to services as they do to regulation of goods, including the need for consultations, transparency, use of RIAs, monitoring and evaluation, etc. Even if governments apply GRP principles and use RIAs, this can and most likely will result in specific regulatory requirements for the same sector/product that differ across economies. Even if regulatory requirements are very similar and effectively equivalent in terms of the goals they pursue, different jurisdictions usually will adopt different approaches toward implementation and enforcement. The end result may be (i) that regulations are not optimal for the economy concerned – because notwithstanding the application of GRP principles decisions are taken that are inadequate in some dimension (e.g., restrict trade without needing to); and (ii) in cases where there is equivalence, transactions costs for firms operating internationally are higher than they need to be because of redundant duplication of regulatory enforcement (e.g., certification, licensing, conformity assessment, etc.).

A challenge for the design of structural reforms in services is to put in place mechanisms that help to identify efficient and effective regulatory policies and to recognize that this is not a one-time affair. What is appropriate will change over time as experience is obtained and circumstances change. The New Zealand electricity reform case exemplifies the need for – and value of – a dynamic, flexible approach. When an earlier regulatory reform that allowed vertical integration between energy generator and retail service provision turned out to be a barrier to entry for retailers without preferred relationships with generators, new measures were introduced to reduce generators' monopolies in geographic areas (Box 5). Such flexibility and learning from doing is critical and can be informed by international cooperation between regulators and industry participants. IRC may also offer a way to square an approach aimed at identifying efficient market-based regulation at the domestic level with reducing transactions costs for foreign firms. This question is discussed later in this report.

¹¹ <http://www.oecd.org/regreform/34989455.pdf>. Accessed September 9, 2016.

Box 5. New Zealand Electricity: Structural Reform as Work-in-Progress

Structural reform is a process that may evolve over time and result in unintended outcomes which market participants need to cooperate together to correct. This is one of the key lessons derived from New Zealand's electricity reforms pursued over the course of 25 years. The first phase of reforms from 1987 to 1993 introduced commercial incentives to promote efficiency. In 1999, structural asset and services separation was introduced to create a mix of generators and retailers (gentailers) and encourage competition in both markets, and frameworks for regulated pricing of the natural monopoly parts of the supply chain (transmission and distribution) were established. These reforms permitted vertical integration between generators and retailers to exploit economies of scale but excluded distributors from the retail market.

In 2010, further structural and regulatory changes in the generation and retail sectors were introduced to address unintended outcomes in the electricity retail market. In particular, the level of competition following the 1999 measures was less than expected, as was security of supply provided by market participants. New Zealand relies primarily on hydro power and supply can be unreliable in years with lower than normal rainfall and snowmelt. A major barrier to competition that the 2010 reforms sought to address was the limited capacity of new retailers without a relationship with a generator to offer services. The vertically integrated structure which the 1999 reforms permitted turned out to be a barrier to entry and to competition. A number of possible options were considered, including ending vertical integration, something that was rejected because the integrated structure has economic benefits that exceed costs. Eventually the decision was made to promote actual and virtual asset swaps (exchange of long term supply contracts) between generators. These actions rebalanced the spread of generation between islands and eroded the geographic franchises on which gentailers had based their retail business. This successfully encouraged the retail arms of generators to compete with each other more aggressively.

Source: Beri and O'Reilly (2016).

Discriminatory services trade policies

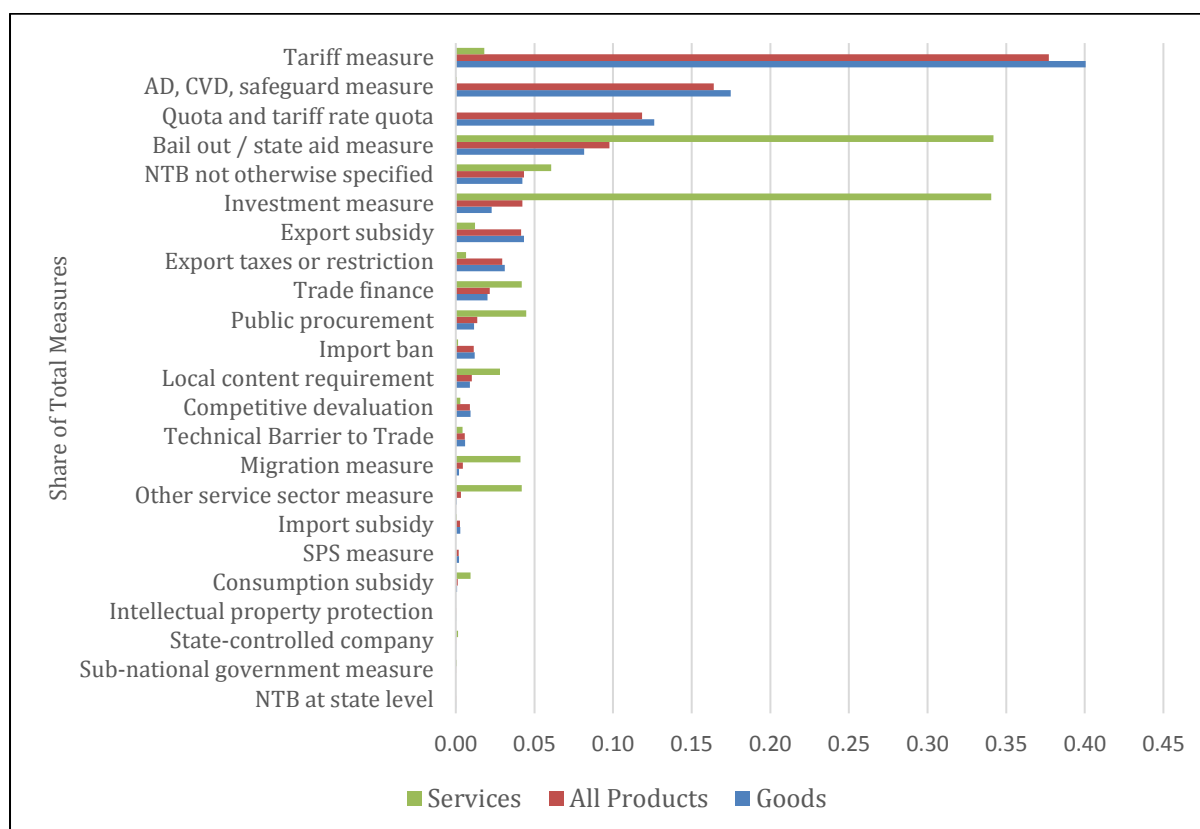
In addition to nondiscriminatory regulation, service sector policies may explicitly be designed to discriminate against foreign providers. This can take many different forms. A key factor in assessing services trade barriers is that services may be traded through different modes of supply. Thus the different STRIs compiled by the OECD and the World Bank cover not just policies impacting on cross-border trade (modes 1 and 2 in GATS parlance) but also policies that affect the ability of providers of services to cross borders so as to sell services in a foreign market. These may pertain to FDI (mode 3 of the GATS) and/or to the temporary cross-border movement of individual service suppliers (natural persons – mode 4 of the GATS).

From a structural reform perspective, removing discriminatory trade barriers is in principle more straightforward than making changes to generally applicable regulatory regimes. It simply requires identifying the existence of such policies and removing them – assuming a government desires to increase competition on the services markets concerned. As discussed below, there are good arguments why unilateral reforms to reduce discrimination should be easier to implement than it is often perceived to be. However, in practice a challenge is that it may not be straightforward to distinguish discriminatory policies that are simply “protectionist”

from policies that have the effect of increasing costs for foreign providers to enter the market but that are not per se discriminatory. Examples are licensing requirements or capital adequacy requirements. These may in effect be duplicative but de jure they are not discriminatory. That said, there are policies that explicitly discriminate – examples include those listed in Art. XVI GATS. But as is the case for regulation generally, in practice, analysis and consultations will often be required to identify what policies – or bundle of policies – have the effect of restricting access of foreign suppliers to a given services market.

More generally, the universe of services policy and thus the potential structural reform agenda for services goes beyond a simplistic “regulation” – “market access barriers” dichotomy. Figure 11 breaks down the use of policy measures that have been used since the 2008 global financial crisis and its aftermath, distinguishing between measures (potentially) affecting trade in goods as opposed to trade in services. Given that services cannot be affected by tariffs or similar measures like antidumping, behind-the-border measures are more prevalent for services. Subsidies of some type account for about one-third of all measures affecting services since 2008, with investment-related policy measures accounting for another third. The biggest difference in instrument use between the goods and services sectors is for investment measures (Hoekman, 2016).¹² In both cases the aim is often to encourage entry of foreign firms, illustrating that a focus on “restrictive” or “cost-increasing” measures may not cast the net widely enough because it let go of possibly welfare reducing subsidy competition. These are matters where international cooperation may be needed, as unilateral reforms cannot undo the negative spillover effects of foreign subsidies or investment incentives.

¹² Note that services account for only a small share of total measures covered by the GTA database (6 percent).

Figure 11. Use of Policy Instruments, Goods vs. Services, 2009-2015

Note: Trade finance covers policies impacting on export credit and related financing.

Source: Hoekman (2016) based on Global Trade Alert database.

5.3 POLITICAL ECONOMY OF SERVICES REFORMS

The forgoing discussion illustrates that structural reforms in services may be complex given the mix of regulation and discrimination, and the *de facto* discriminatory effects regulation may have even if it is not designed to be protectionist. There is nonetheless a common element for both types of policies that should be the focus of attention in the design of structural reform for services – they often imply barriers to entry. Barriers to entry – if binding – generate rents. Incumbents then have incentives to oppose reforms that they perceive will erode these rents. Several features of services suggest that reforms will have different political economy features than is the case for policy reforms towards goods markets. First, services regulation in some sectors may require large up-front investments for providers. In the well-known example of licenses that a taxi operator must have in order to legally offer services the investment can be substantial – current market prices for a medallion in New York are upwards of \$500,000. The value of the license is generated by the associated restriction on entry, as the total number of licenses is capped. If reforms result in free entry, the value of up-front investments by incumbent operators will be driven to zero. In such cases compensation mechanisms are needed.

Second, the political economy of services trade policy reform is different from goods because it often entails factor mobility. This can appear to make matters more complicated as

international factor movement can be politically sensitive. As trade in services is associated with movement of service providers, who may be natural persons, services trade liberalization may be conflated with migration and free movement of persons by the public at large. It is important to recognize, however, that trade in services that occurs through movement of natural persons is by its nature temporary – it does not constitute the long-term movement of providers. In practice, as has been mentioned previously, trade in services will occur through FDI, with foreign firms establishing a presence in an economy so as to provide services. FDI will increase competitive pressures on domestic incumbent companies and may reduce their profitability, but foreign investors will require domestic employees and thus generate employment, both directly in their business, and indirectly through demand for ancillary services that are outsourced to local firms. Overall employment in the services sector following pro-competitive reforms is likely to increase rather than decrease. This is the case in particular for major backbone services such as telecoms and transport. But the case studies show that it likely pertains to most services – overall economic activity and employment in the sectors studied either expanded substantially or remained the same. Thus, from a political economy perspective it is (should be) easier to open services markets as it will lead to a reshuffling of ownership and market shares for different companies, but not have adverse consequences for overall employment of the type that can arise as a result of goods liberalization. This is because most services are less easy to trade than goods. Thus, there is much less prospect of the type of complete specialization that can occur as a result of goods liberalization.

Third, because many services are inputs used by all sectors, “downstream” sectors may have strong incentives to push (support) reforms that will lower their services costs and improve quality and variety of services on the market. This implies that there may be more support for unilateral reform than in the case for goods sectors. Any given good will be of significant interest to only a subset of firms/households—in practice the share of a specific product in the household consumption basket or cost function of an enterprise will be small for most groups. This is not the case for services – telecoms, transport, finance, etc. matter to all firms and these services, together with others that enter into final demand such as health or education services, also matter to all households. A challenge for governments is to articulate this when explaining the case for reforms, as opposed to focusing exclusively or primarily on how reforms will improve the operation of a given service sector. The fact that services have extensive forward linkages makes services reforms of economy-wide relevance.

Fourth, arguments against liberalizing entry for foreign firms and pro-competitive reforms more generally frequently center on market conduct – e.g., that reforms will result in certain groups in society being excluded from service. These arguments may or may not have salience—it depends on initial conditions and the type of reform that is being considered.¹³ In general these types of concerns will be addressed if governments put in place other elements of the structural reform agenda as defined by APEC, i.e., in the areas of competition policy and

¹³ For example, Gal and Hijzen (2016) found that the nature of product market regulation has different effects across firms of different size and across industries. In network markets where reform takes the form of simplifying network access for potential service providers, market power of incumbents gets eroded. However, reforms that concern easing restrictions on zoning and opening up additional plants, in fact, boost large retail businesses.

governance. However, effective performance (conduct) regulation may be needed in sectors where some consumers will be excluded from a pure market-based decision-making process. This needs to be addressed by regulation – e.g., universal service obligations – and the associated costs funded through market-based mechanisms such as auctioning of subsidies to cover the cost of providing services to the affected groups.

Fifth, a corollary of the point that services matter to all sectors and large parts, if not all, of the population, is that services reforms can generate large welfare gains because of network effects and connectivity spillovers that greatly enhance inclusion. Access to a smartphone is a window on the world – with potential benefits both for production and productivity and for consumers by giving access to goods and services. The case studies for PNG and China provide concrete examples of such effects created by new mobile ICT services (see Box 6).

Box 6. PNG Telecoms Reform and Inclusion

Papua New Guinea ended the monopoly of state-owned telecommunications provider Telikom in 2007. New entry resulted in rapid growth of mobile coverage and subscriber numbers, sharp reductions in costs to consumers, creation of new business opportunities, and a variety of positive social and economic spillover effects.

One example is the creation of new sales channels via Facebook for onion farmers in a village on a mountain ridge in the shadow of Mt. Wilhelm, PNG's highest peak. The village is one hour's drive on a rough dirt road to the nearest town, Kundiawa, and larger markets are even further away. In 2015, the village's farm coordinator used his smartphone to post from his Facebook page about the challenges of selling onions from rural locations, where he currently had 6 tonnes of onions ready for market but without a buyer. This post was picked up by a national newspaper journalist who wrote about the situation and reported the mobile number of the farm coordinator. Within a week, a buyer found him and purchased the 6 tonnes at a good price, sending the onions to Alotau, all the way across the economy. Not a big deal for national transporters and businesses, but for a small farming group, it was eye-opening to the potential of mobile phones and the internet to sell their produce.

Source: Berry (2016), this volume.

All in all these considerations suggest that there is likely to be less need for trade agreements and the mechanism of reciprocal commitments to overcome political economy constraints to removing discriminatory services trade policies, but there may be need for regulation and to address adjustment costs in instances where incumbent operators have a legitimate claim that reforms will erode the value of investments that were made in order to comply with extant regulation (e.g., as in the case of purchases of taxi licenses). As the net benefits from unilateral action are clear cut the focus should be on the appropriate design and implementation of structural reforms for services. This does not mean that the types of rationales for engaging in trade agreement-based commitments do not apply – as illustrated by the China; Indonesia; and Chinese Taipei case studies, the WTO and ASEAN frameworks as well as international regulatory cooperation through APEC played a useful role as a focal point and anchor for reforms. While such international frameworks can play an important supporting role, the

reform action agenda is one that can and should be pursued autonomously, on a unilateral basis. It is not conditional on action by trading partners.

5.4 IDENTIFYING AND IMPLEMENTING STRUCTURAL REFORMS FOR SERVICES

Given the plethora of regulatory provisions impacting on services and the fact that many different services matter for domestic industries and local communities (as they source/consume many services) as well as for the operation of GVCs, a fundamental challenge for governments is how to identify what areas are most important and where there are complementarities and interdependencies between/across different services that require a focus beyond any given sector.

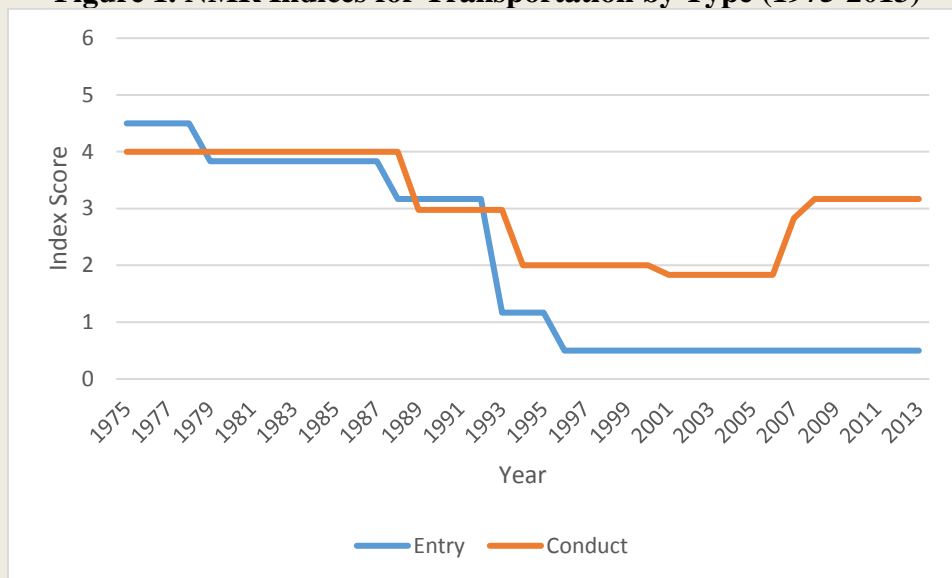
Both economic principles and the case studies indicate that enhancing the productivity of services sectors is critical. As services account for such a large share of GDP, a necessary condition for achieving inclusive growth objectives is to ensure that services are not a drag on macro performance. The Japan case study illustrates this general point: a major factor underlying weak overall growth performance was a lagging service sector, with weak total factor productivity (TFP) performance in part the result of a financial system that reduced competitive pressures by impeding new entry and changes in ownership of incumbent service firms. An implication is that reforms should be informed by baseline analysis and research that identifies the state of play as regards services performance and trends. This applies as well to the effects of status quo policies on international competitiveness and trade, including analysis of the ‘downstream’ effects on sectors that make relatively intensive use of services, and analysis of how services performance impacts on the ability of an economy to participate in (benefit from) GVCs.

Most of the case studies illustrate that putting in place/strengthening framework conditions for new entry and facilitating exit should be a core part of structural reform initiatives in services sectors. Some segments of some services are natural monopolies – e.g., electricity grids – but most services activities can be provided through the market, and market-based competition is usually the best mechanism to deliver productivity gains and ensure the efficient supply of services to firms and households. Greater competition is not only of relevance from a cost efficiency perspective—it also generates inclusion-related benefits. The case studies illustrate that consumers gain not just through lower prices but from greater choice, innovation and better access to services. This generally will require a focus beyond removing entry restrictions and include consideration of conduct regulation as well (Box 7).

Box 7. Reforms in Chile's Transport Services: Impact on Freight and International Travel

Chile's regulatory restrictions in transport services have been falling over time, particularly in relation to entry barriers. The graph below shows that, based on the OECD non-manufacturing restrictions (NMR) index, the period from the mid-1980s to late 1990s ushered what appears as the most aggressive reform efforts in the transport sector.

Figure 1. NMR Indices for Transportation by Type (1975-2013)



Source: Shepherd and van der Marel (2016), based on OECD data

In relation to ports, 1991 saw the end of the state monopoly on harbor services by allowing in private sector actors fundamentally changing the entry conditions for that sector. This measure was supplemented in 1997 with decentralization of state-owned ports and introduction of terminal concessions, which effects entry and conduct regulations. In the air transport sector, Chile began negotiating Open Skies Agreements in the 1980s, which liberalize access for foreign providers. The national airline, LANChile, was privatized in 1989. As with the ports sector, concessioning was introduced in 1991, thereby allowing private sector entry. Together, these changes made fundamental changes in the entry and conduct conditions affecting air transport businesses. By contrast, road transport has been quite liberal for decades, with policies focusing on issues of safety. Finally, in the rail sector the pattern of reform was more complex. Privatization of freight services was implemented through the 1980s and 1990s. Concessions for private lines were allowed from 1981. Additional competition was gradually introduced into freight services through the 1990s.

These series of reforms coincide with increases in various economic indicators. The rate of growth of air freight accelerated rapidly in the mid-1980s, corresponding with the implementation of Open Skies agreements, and was maintained through the 1990s as implementation of the policy was deepened. Export volume growth began to pick up in the mid-1980s, coinciding with the early period of reform, and accelerated during the 1990s. Given the important links between transport services and merchandise exports, transport reforms supported the substantial increase in the rate of export growth. Despite the open air transport policies, however, the number of tourist arrivals did not significantly pick up until the early 2000s.

Source: Shepherd and van der Marel (2016).

Whole of government approaches: sectoral linkages and complementary reforms

From both a competitiveness/economic performance and access/inclusion perspective – complementary, not conflicting goals – structural reforms should target the binding constraints to better performance. One element of this is to take account of the forward and backward linkages across industries. As shown in the case studies, a reform program for a sector may need to be complemented by reforms that target other sectors as well. This was the case for example for Indonesia/air transport (congestion; safety), China/retail (e-payments and financial sector policies; consumer protection), Japan/financial services (corporate governance), and Malaysia/health care (immigration policy). In all these cases complementary reforms in ancillary policy areas were needed to ensure the desired benefits from greater competition were realized, to increase them and/or to offset negative spillovers that reduced the net benefits of reform (although in all cases the absolute value of the reforms were positive). The cases point to a need to plan (allow) for such linkage effects and to ensure that too narrow a focus does not impede achievement of structural reform objectives and implementation.

The prevalence of multiple regulatory agencies and policies promulgated by different ministries and levels of government that all impact on a given sector is increasingly recognized in APEC economies. It has motivated some governments to pursue a “whole of government” approach or to create a coordinating ministry or equivalent body in the executive government structure with a view to addressing possible ‘silo problems’ in national policymaking (e.g. Singapore). Such coordinating ministries reflect a recognition of the complex policymaking environment where multiple ministries have different, sometimes opposing, stakes, but all are involved in setting and implementing policies that impact on a sector. Making this work is not straightforward, but as the case study on Japan/financial services makes clear, such coordinated approaches are often necessary for successful structural reform programs. Adopting a value chain-informed approach in identifying policy reforms can help to increase the probability that reforms have the desired effect (Hoekman, 2013).

Articulating the goals of structural reform

In order for a whole of government approach to be effective it is important to clearly articulate the goal of structural reforms and that all relevant agencies understand why they are part of the equation and how they fit in. Such clarity is also important to ensure that the private sector can plan and prepare in anticipation of the implementation of reforms, and to ensure that citizens and civil society groups understand what is – and what is not – being done. Arguably better performance – as reflected in productivity, prices/costs, access, choice and variety – should be basic motivation for structural reform programs for services. Framing reforms around improving economic performance and more effective and efficient realization of social and regulatory objectives are two elements that ensure efforts are consistent with the broader inclusive growth goal. Reforms usually will entail opening access to markets (i.e., promote new entry), but this is simply a mechanism and not the goal. Entry (more competition) is an instrument, and better market access for foreign providers is an element of that instrument.

Ensuring clarity that the goal of structural reforms is achieving inclusive growth and social objectives is important not just for the substance of the design of structural reforms, but for communications with stakeholders and the public at large. It has become evident that trade officials, for example, increasingly confront a credibility/trust gap with the general public. Care and effort is needed not just to address the substance of the underlying concerns, but to prevent the problems that confront trade negotiations from spilling over to the broader structural reform agenda. It may appear that this is not a salient issue given that structural reforms are primarily unilateral in nature and should be pursued autonomously – as all the reforms in the case studies were. In practice however structural reforms will have an international dimension as the desired increase in competition on services markets will involve entry by foreign firms and there is, as noted previously, a good case for international regulatory cooperation. Clarity in the messaging surrounding services reforms that the goal is not “liberalization” or “free trade,” but inclusive growth and more effective attainment of regulatory and social objectives will help distinguish structural reform initiatives from the trade negotiating settings that are increasingly contentious.

A major practical problem for governments in designing and implementing structural reforms in services is what to focus on. This requires a mix of analysis, including assessments of what trading partners have done and their experiences, and engagement with all domestic stakeholders. Such engagement must go beyond ‘consultations’ and involve regular interaction and ideally be a true public-private partnership in the sense that private actors become part of the process, helping to identify priorities for action, monitor progress in implementation, flag problems by providing feedback that is solicited and used by the government, and providing data on performance that can be used in assessing the effects of the reforms and communicating results to the broader public.

What matters both from a sector-specific performance and the broader inclusive growth perspective is the totality of the policy instruments that affect the efficiency (costs) of a given set of economic activities. If reform efforts are limited to a given sector or target a specific sectoral regulator there is a risk that payoffs will be limited because policy attention is not devoted to other policy areas that matter as much or more for affected value chains/production networks. A complementary, cross-cutting approach that brings together stakeholders (consumers, sectors with which there are significant forward linkages), the relevant regulators and economic policy officials and focuses attention on how various policies jointly affect the performance of a sector can generate information on the effects of the existing combination of applicable policies and regulations. It could also be used as a vehicle to help define performance indicators — metrics that can be used as focal points for the assessment of progress in attaining desired goals and as a mechanism through which to address consumer complaints and disputes.¹⁴ Establishing baseline levels of performance in cooperation with market participants and consumer organizations will allow progress — or the lack thereof — to be assessed over time. Basing some of the performance metrics on data that are collected by the private sector

¹⁴ Some elements of such an approach were put in place by New Zealand as part of its retail energy reforms, with the industry funding consumer complaint and dispute resolution mechanisms (see Beri and O’Reilly, 2016).

as part of their daily operations (management information tools) will facilitate (reduce the cost of) generating the needed information.

The likelihood of such engagement by companies will be enhanced if there is both a strong and sustained commitment by government to pursue implementation of reforms and high-visibility periodic focal points where senior officials report publicly on the state of play and the performance of the government (regulators) is reviewed, again with input from stakeholders. The same is true for regulators when it comes to pursuit of international regulatory cooperation.

5.5 LINKAGES TO OTHER PARTS OF STRUCTURAL REFORM AGENDA

Competition and trade policy

Identifying and dealing with abuse of monopoly power of providers of services inputs, control of bottleneck facilities (international gateways, distributors) and/or monopsony power on the part of service sectors firms (e.g., national airlines, large retailers) is part of the structural reform agenda. Questions that arise here are squarely in the domain of competition policy and center on whether and how much market power firms have, and given any market power, whether it is abused. There is nothing very specific or unique about services that raises specific issues aside from instances where a sector is excluded by law from the reach of competition law. This is something that deserves careful scrutiny as an effective competition policy is needed to ensure services markets are (remain) contestable. In this regard trade policy, both as it pertains to goods and services trade, should not be neglected, given that an open trade and investment regime ensures that foreign firms are not excluded a priori from trying to contest markets where there are rents that can be competed away – see e.g., the case study on Australia/telecoms.

Economic and legal governance

Another linkage where there is strong overlap between services policy and the broader structural reform agenda in economic and legal governance. There is an extensive literature documenting how governance is critical for growth and development. This has tended to neglect services but the extant studies that analyze the role of governance as a determinant of services performance come to the same conclusion. One such result that is particularly relevant for this report is analysis of the potential effects of lowering STRIs and that concludes this is highly conditional on the quality of economic governance. Beverelli, Fiorini and Hoekman (2015) find a similar services trade policy reform implemented by two economies will have very different impacts on the productivity performance of downstream sectors if the quality of institutions, as proxied by indicators such as control of corruption and rule of law, differs a lot. The expected positive effect of services is observed in their analysis – lower STRIs are associated with better productivity in downstream sectors – but the magnitude of such positive effects is conditional on the quality of economic governance. They conclude that this result is not capturing differences in level of economic development, as results are robust to controlling for the level of per capita income.

An explanation for the sensitivity of productivity effects of STRIs to institutional quality is that many services are provided by foreign suppliers who need to establish a local presence in the foreign market to do so. Policies that restrict establishment will then impede trade. But removing such policies may not have a large effect if governance is weak. The need to establish means that foreign firms will also consider the business environment they must operate in, and either not invest or else use technologies that are less advanced or less susceptible to hold-up problems. This result suggests that structural reform efforts in economies with weak governance institutions should focus on improving performance on this dimension in conjunction with reducing STRIs.

The relationship between institutional quality and STRIs is illustrated in Table 2 for the APEC economies for which data are available from Beverelli et al. (2015). This reports the results of a sector-level econometric analysis of the impact on labor productivity of sectors that use services of removing all barriers to FDI in financial, transport, communication and business services, as measured by the World Bank's STRI database for mode 3. Estimates are reported for the largest industry in each APEC member for which sufficient data were available, as well as several other sectors. Two columns are reported for each sector – the one labelled “current” is simply the estimation results for the economy/sector concerned. The one labelled “high” measures the effect on labor productivity under a counterfactual scenario where the governance variable (rule of law) is set at level of the APEC economy with the best performance for this indicator – in this case New Zealand. The last two columns report the ranking of economies in terms of STRI levels and for the rule of law indicator. The more restrictive and the weaker is governance performance, the higher the number. Peru is the most open economy in the sample. Food and beverages (food processing) tends to be the largest manufacturing activity in many of the economies concerned.

Table 2. Productivity Impact of Governance Quality on the Effect of Removing all Mode 3 Barriers

Economy	Largest industry		Food and beverages		Basic metals		Automotive		Machinery		ICT equipment		Performance rank	
	%Δ productivity	Sector	Current	High	Current	High	Current	High	Current	High	Current	High	Openness	Governance
Canada	59.8	Food&Bev.	59.8	67.1	51.7	58.0	27.2	30.5	50.9	57.0	58.0	65.0	7	2
Chile	17.5	Food&Bev.	17.5	25.1	30.1	43.2	12.0	17.3	15.1	21.7	16.3	23.4	3	4
China	7.1	Basic metals	11.6	94.3	7.1	58.0	4.6	37.7	9.7	79.3	11.4	93.0	9	10
Indonesia	18.5	Food&Bev.	18.5	146.7	17.3	137.0	7.3	57.8	13.8	109.7	15.6	123.6	11	9
Japan	14.8	Autos	41.6	63.0	31.1	47.1	14.8	22.4	32.4	49.0	36.7	55.5	5	5
Korea, Rep.	27.8	Machinery	33.7	73.9	21.7	47.5	12.1	26.6	27.8	60.9	31.7	69.4	6	6
Malaysia	38.6	ICT equipment	43.7	113.7	43.4	112.9	19.6	51.0	33.8	88.2	38.6	100.6	10	7
New Zealand	18.2	Food&Bev.	18.2	18.2	16.5	16.5	8.9	8.9	17.9	17.9	19.4	19.4	2	1
Peru	7.3	Food&Bev.	7.3	32.9	5.6	25.1	3.3	14.9	5.9	26.3	7.1	31.7	1	8
United States	45.4	Food&Bev.	45.4	64.9	29.0	41.5	17.1	24.5	35.1	50.2	41.8	59.7	4	3
Viet Nam	5.9	Food&Bev.	5.9	53.3	8.7	78.6	3.6	32.6	5.0	45.7	5.5	49.8	8	11

Notes: Choice of economies that are covered is determined by data availability “Current” reflects prevailing level of governance in each economy using the World Bank indicator of control of corruption. “High” is a counterfactual measure of the effect of removing mode 3 restrictions on labor productivity if control of corruption was at the level observed in New Zealand. Estimates for current level of governance are not statistically different from zero for China; Indonesia; Peru; and Viet Nam.

Source: Beverelli, Fiorini and Hoekman (2015)

To illustrate the relationships between governance (regulatory quality) and trade policy, take the case of Indonesia, the economy in the sample with the most restrictive mode 3 policies and with one of the weakest governance performance indicators. If Indonesia were to remove all mode 3 barriers, this would generate a productivity increase in downstream industries but of a relatively small magnitude and not statistically different from zero. The reason for this is that the binding constraint is the overall investment climate and economic governance. If Indonesia were to have a level of control of corruption analogous to that in New Zealand, the positive productivity effects of lowering STRIs would rise some 7-fold. In the case of Viet Nam, which has similar relative ratings for governance and mode 3 STRIs, the estimated impact of removing all mode 3 barriers increases by an order of magnitude. While the absolute magnitudes of the estimates are only indicative – the estimates for the economies with weaker governance are not statistically significant – they are nonetheless informative: they illustrate the importance of economic governance as a determinant of the gains from services trade liberalization.

5.6 INTERNATIONAL REGULATORY COOPERATION

Although structural reforms in services comprise an agenda for individual governments to pursue – i.e. through unilateral reform – international cooperation can support reform efforts, both in implementing reforms at a point in time, and in adjusting them over time. International regulatory cooperation (IRC) can be a useful mechanism in both instances. There will often be a need for technical assistance in developing economies to pursue some types of reforms. The 2015 AEPR on structural reform and innovation, for example, highlighted the different challenges faced by economies at different levels of development with regard to innovation policies: developing economies need help to develop robust institutions; middle-income economies need to catch up with advanced economies in implementing frameworks to identify

and manage regulatory reform; while advanced economies are engaging with the design and implementation of advanced tools to enhance transparency and robust regulatory policy that promote innovation and adoption of new technologies (APEC Economic Committee, 2015).

IRC is a mechanism through which economies can learn from each other and to mobilize the expertise required to assist developing economies to design and implement regulatory reforms. It also can provide a framework for economies to make progress in reducing regulatory compliance costs for companies. The Chinese Taipei experience with bilateral MRAs under the APEC TEL framework agreement illustrates both the importance and the difficulty of concluding regulatory conformity assessment agreements with partners. Although Chinese Taipei is far from being a small player in the IT market, its experience illustrates the difficulties small/ medium developing economies with limited resources may have in concluding multiple bilateral MRAs with different partner economies and the benefits of an IRC framework (see Box 8).

Box 8. APEC TEL MRA and the Chinese Taipei Experience

To reduce the cost of conformance testing and to promote acceptance between economies of tests conducted by APEC members, the APEC Telecommunications Working Group drafted a basic framework and guiding principles in what became known as the APEC TEL Mutual Recognition Agreement (MRA) endorsed by telecommunications ministers of APEC in 1998. Under this, APEC members can recognize each other's conformity testing of telecommunications equipment. It is implemented through a series of reciprocal bilateral agreements negotiated between APEC member economies.

Chinese Taipei took advantage of the framework agreement to sign bilateral agreements in which foreign markets allow its Conformity Assessment Bodies (CABs) to test and certify telecommunications equipment or components for export, and vice versa for imports of the same from its MRA partners. The result is decreased cost for its manufacturers and reduction of time to certify telecommunication products.

At the start of the MRA, when Chinese Taipei did not have a significant manufacturing industry, prospective partner economies were reluctant to spend the time and effort into negotiating a MRA. Economies are likely to be willing to negotiate with an economy which provide a suitably large market for their own manufacturers or provides a large source of imported goods. The APEC working groups provided the informal contacts (among regulators) through which mutual interests in bilateral agreements can be threshed out that eventually led to formal bilateral negotiations.

Source: Thorburn (2016), this volume.

IRC can act as a focal point for learning and knowledge exchange (Hoekman, Mattoo and Sapir, 2007). A necessary condition for reducing the trade costs created by differences in regulatory regimes for a given product is that the regulators concerned are prepared to take actions to do

so. A first step in moving down this track is for regulators to learn/know/understand what counterparts are doing, what their objectives are, how they go about pursuing them and whether objectives and systems of enforcement are equivalent. For example, as economies steer away from pre-shipment inspection through MRAs, they need to understand better the nature and triggers for post-market surveillance meant to reduce risks of faulty goods. Regulatory cooperation on such matters is foreseen in the APEC TEL MRA. The APEC Telecommunications Working Group issued market surveillance guidelines for telecommunications equipment in 2010 citing factors such as consumer complaints, past history of compliance, emergence of new-to-market technologies, and the level of potential harm due to non-compliance.

IRC may happen naturally, driven by the regulators and/or the industries concerned. It has been occurring to some extent in some sectors, mostly in areas related to trade in goods where production is based on global supply networks (GVCs). IRC may take different forms (see OECD, 2015). For IRC to be feasible, regulators not only need to have the ‘policy space’ (legal mandate) to engage with each other, they may need to be actively encouraged and/or need support to do so. APEC processes offer a framework and potential focal point for providing such encouragement and a mandate for regulatory agencies to interact, although this may need to be accompanied with mobilization of funding within governments needed to cover the costs of time and travel that is involved for regulatory agencies.

IRC and trade agreements

When it comes to nondiscriminatory regulatory policy (i.e., that applies to both domestic and foreign suppliers) there is a strong case *not* to use the reciprocal bargaining mechanisms that are a core feature of trade agreements as a mechanism through which to reduce trade costs that reflect (perceived) redundancy or duplication in the enforcement of regulation. In part this is simply because regulatory cooperation does not lend itself to “first-difference” reciprocity involving the exchange of marginal changes in policy. It is not possible or desirable to change a regulatory provision by x percent in the way that a tariff can be reduced. Certain forms of “diffuse” reciprocity are possible – e.g., agreements that allow foreign regulators or industry to provide comments on a proposed new regulation. But this involves cooperation of a “soft law” nature.

IRC should be done in a fully transparent manner, without the type of secrecy that characterizes trade negotiations. IRC is predicated on complete transparency and openness to the participation of all stakeholders. If governments decide to embed IRC principles into trade agreements, which as discussed below may be helpful from a structural reform perspective, the process through which this is done should not entail the negotiating approaches that have been used for the Trans-Pacific Partnership (TPP) and Transatlantic Trade and Investment Partnership (TTIP). The reason for this is simple: the goal should be to improve regulatory outcomes and efficiency. A process that is centered on negotiating the substance of regulatory norms may not deliver a positive outcome unless it is undertaken by the relevant regulators and there is joint agreement on what the best way forward is.

Trade agreements can help, not as negotiating fora but as focal points. E.g., there may be scope to leverage the high level councils/summits that are part of the institutional machinery of PTAs to get high level political attention to the services regulatory reform/cooperation agenda. This should be regarded – and framed – as a vehicle to help regulators do their job better, not as a way to pursue (or impose) a market access goals on regulatory agencies. As noted previously, structural reforms in services will (should) lead to greater competition on markets and this will (and should) include participation by foreign firms, but the same regulatory regime should apply to companies independent of their origin.

Assessing regulatory equivalence and public engagement

Regulatory equivalence requires identification of areas of regulation and related implementation systems that pursue similar goals and have similar outcomes. In practice, efforts to agree on regulatory equivalence can be stymied by interest groups that would be negatively affected and stakeholders with strong beliefs or even unfounded fears. Well-known examples include the use of hormones in meat production and chlorine-based solutions in the processing of meat products. This suggests a need to go beyond regular interaction between regulators from economies involved in trade integration initiatives and put in place consultative and deliberative mechanisms that engage stakeholders and citizens in assessing the results of different regulatory approaches. Rather than governments simply ‘consulting’ with the private sector and civil society when considering a specific regulation, what may be needed for a more widespread use of regulatory equivalence approaches is sustained engagement among all relevant stakeholders. In practice, this is likely to involve a multilevel process, with business or industry associations representing the interests of concerned firms.

One model of an instrument of this type is a ‘knowledge platform’. These have been used by governments and international organizations such as the World Bank. For example, the Dutch government has established a platform on electromagnetic fields that brings together academics, regulators, government agencies and NGOs with concerns about the health effects of electromagnetic fields.¹⁵ The establishment of such forums can help identify the potential gains from cooperation on regulatory matters, including areas where there is already substantive equivalence. Information on the effect of and experience with regulatory programs could help governments assess their own current policies and institutions and enhance their knowledge of applicable regulatory measures in their trading partners. Knowledge platforms are somewhat akin the public-private sector dialogues that usually take place in the margin of APEC meetings where various stakeholders, regulators, and selected academics/research institutions) come together to discuss current policy/regulatory issues. They differ however in being resourced and in operating on a continuing basis—they are ‘living entities’ (Hoekman and Mattoo, 2013).

¹⁵ See the Knowledge Platform on Electromagnetic Fields and Health, at <http://www.kennisplatform.nl/English/knowledgeplatform.aspx>. An example of a World Bank knowledge platform deals with green growth; see <http://www.greengrowthknowledge.org/>

5.7 BUILDING ON APEC'S TRACK RECORD ON PLURILATERAL COOPERATION

Going beyond greater transparency and analysis of impacts, small-group voluntary cooperation on regulatory matters of the type that is pursued in the APEC context – an example of what is sometimes called critical mass-based cooperation – has been a feature of successful initiatives to reduce trade barriers in specific sectors. One outcome has been critical mass agreements to reduce tariffs – agreements where negotiated disciplines bind only to participating economies but benefits are implemented on a MFN basis. Examples include initiatives such as the Information Technology Agreement (ITA) and the agreements on basic telecommunications and on financial services under the General Agreement on Trade in Services. The ITA was developed in APEC and subsequently adopted in the WTO. The environmental goods initiative likewise came from APEC and later spurred more discussion in WTO. APEC's Mutual Recognition Arrangement for Conformity Assessment of Telecommunications Equipment (TEL MRA) and the CBPR (cross-border privacy rules system) are other examples. Such initiatives can be pursued on services policies as well. APEC has a track record and comparative advantage in discussing 'new' issues of common interest. In the case of policies affecting digital trade and data flows that are increasingly being raised by business and consumer groups and where there is an evident need for these stakeholders to interact with regulators and governments, APEC offers mechanisms to discuss such matters. It is important for the public at large to have a better understanding of the role that APEC has already played in the past in building a consensus on why and how to move forward in a given policy area that is of general interest to all economies. Trade facilitation provides another example where discussions and dialogue in APEC predated and informed the effort that eventually led to the WTO Agreement on Trade Facilitation. Unawareness of the role that the APEC processes can play in fostering international cooperation and concerted action has led to an under appreciation of its contribution.

APEC operates on consensus on various work programs and action agenda. The implementation of any action agenda are always left to the voluntary decisions of the members but the groups of economies that decide to go ahead with implementation provide a demonstration effect for the other APEC economies. This is illustrated by the example of the APEC TEL Mutual Recognition Agreement (MRA) under which APEC members can recognize each other's conformity testing of telecommunications equipment. An MRA taskforce under the APEC Telecommunications Working Group drafted the basic framework, guiding principles, and content which telecommunications ministers subsequently endorsed in 1998. It is implemented through a series of reciprocal bilateral agreements negotiated between APEC member economies. The case study on Chinese Taipei testing and certification services documents how the APEC MRA helped eliminate the duplication of testing of telecommunications equipment in its major export markets – certification is done once for multiple markets, lowered compliance cost for manufacturing firms, reduced regulatory resources and increased the participants in testing and certification services industry.

6. POLICY RECOMMENDATIONS

What follows presents a number of policy recommendations that are based on the case studies, the AEPR Individual Economy Reports and the economic literature on service sector reform.

1. ***Pay more attention to services.*** The performance of services sectors matters for the simple reason that services already account for over half of all economic activity in APEC economies and in most instances significantly more than that. The share of services in GDP and employment will only increase looking forward especially as developing economies expand into digital and internet businesses and demand for services grows with rising incomes. Services impact the competitiveness of all firms in an economy because many services are inputs into production. Services performance is also critical for inclusion, as access to services and the quality of services available to citizens directly impact on their welfare. Most SMEs are in the services sector and so is the majority of employment. Thus, services must be a central focus of economic policy and structural reform efforts aimed at bolstering inclusive growth. This may imply a need to ‘rebalance’ the degree of attention given to different sectors of the economy – away from agriculture and manufacturing (assembly-based industries) in favour of a greater focus on the development and performance of services sectors.
2. ***Pursue reforms on a unilateral basis.*** Structural reforms in services sectors should be pursued autonomously. There is a much weaker case for using instruments such as trade agreements and the associated mechanisms of reciprocity and issue linkage to support reforms in services. This does not imply that international agreements such as the WTO or regional trade agreements cannot be helpful in providing a supportive framework for reforms. But the burden of structural reform initiatives rest on individual governments. They can be and should be informed by international experience and efforts to determine what constitute good practices – an area in which APEC has a long-standing track record.
3. ***Focus on productivity.*** There are many possible rationales and reasons for undertaking structural reform in services sectors. The economic literature and international experience with such reforms suggests that the aim should be to improve the economic performance of services sectors. Performance is a multi-dimensional concept and goes beyond seeking to lower prices for consumers or costs for the industries that source services. The evidence discussed in this report suggests there is a good case for focusing on total factor productivity. This may be reflected in lower prices/costs but may also be associated with better access and improved quality, variety and choice. The different dimensions of performance are all relevant from the perspective of greater inclusion, but from a growth perspective what matters is improving service sector productivity.
4. ***Rely on market mechanisms and competition.*** A focal point (premise) for structural reforms is to enhance competition on domestic markets through removal of policy-driven barriers to entry by new firms and restrictions on the ability for firms to pursue mergers or acquisitions. Identifying and removing entry restrictions should be a basic element of

reforms – measures that inhibit new entry, including by start-ups and foreign-owned companies – as entry is a major driver for better performance. This should be broadly conceived to include a focus on capital markets as a vehicle for such entry. Often achieving the greater competition through new entry will require ancillary regulatory measures that preclude incumbent operators from increasing the costs of switching to new suppliers for customers – requiring portability of telephone numbers is an example. Identifying such ancillary pro-competitive regulation is an important dimension of the design of structural reform programs and is one that can benefit from consultations with consumer organizations and the industries concerned – including buyers of services.

5. ***Recognize and measure the positive spillover effects of structural reform.*** Services reforms can have many positive effects, and experience reveals that many of these take the form of ancillary, unanticipated benefits. Reforms generally will expand choice and improve quality, and may broaden access to services. Reforms may lead to firms starting to export by connecting to GVCs or e-commerce platforms. They are often drivers of innovation, bringing about new services and new products. The implication is that reforms should be defined as going beyond the realization of narrowly defined targets but being motivated by such positive spillovers. A corollary is that systems be put in place to identify and measure spillover effects so as to be able to monitor and document the effects of a reform process. The extent of contestation in recent years of the impacts of trade agreements illustrates the importance of compiling evidence on the results of reforms across a broad array of dimensions, including effects on inclusion through connectivity and innovation. The case studies show that a variety of positive spillovers may be generated by services policy reforms and that this may result in ‘underselling’ of the benefits of undertaking structural reforms. In New Zealand for example, reforms were presented as aiming at lower electricity prices, neglecting the greater choice and quality for households that the reforms generated.
6. ***Apply value chain perspectives to leverage services reforms.*** At the economy level the effects of structural reforms in services will be determined in part by the linkages that connect sectors. The design of reforms should be sensitive to and consider such linkages, and allow for adjustments over time to ensure that related policy areas are not (do not become) a binding constraint. Explicit consideration of forward and backward linkages can be achieved by adopting value-chain informed approaches to identifying the set of policy areas that impact on service sector performance. In many cases a sector-specific focus may need to include measures pertaining to other complementary sectors, either concurrently or in the future. This goes beyond traditional “GVC” – it is about linkages and complementarities across activities and technologies – e.g., internet platforms and portals; e-commerce; logistics and express carriers.
7. ***Adopt a whole of government outlook to anticipate potential silo problems.*** A corollary of the ‘value chain’ dimensions that should be considered in the design and implementation of structural reforms for services is to engage the different regulatory agencies and government entities that impact on the various sectors that are implicated.

Likewise, reforms have to bring in local governments which, especially in specific services sector such as environmental services, play a major role in regulations. A high-level of commitment to reforms is needed for sustaining a whole of government approach, and is likely to bolster the perceived credibility of a reform program.

8. ***Consider need to address adjustment costs.*** Structural reform may give rise to adjustment costs. Incumbent firms that have benefitted from the rents created by entry restrictions will see that source of profit eroded by reforms and workers in inefficient firms may be forced to search for new employment opportunities and require re-training. As noted in this report, the extent and distribution of adjustment costs is likely to differ for services as compared to manufacturing, with smaller negative impacts on employment. The erosion of rents for incumbent firms associated with facilitating entry of new companies in a sector is a key goal of reform and an important source of welfare gains that accrue to society at large. However, a specific feature of policy in some service markets is that that negatively impacted firms may have had to undertake significant investments in order to comply with the regulatory requirements that are being changed in a reform— the investment associated with purchasing a taxi operating license being a classic example. In such cases compensation mechanisms need to be part of the reform design. The same is true for adversely affected consumers – e.g., households that lose access to services that are no longer profitable to supply by operators in a more competitive environment. Such possibilities need to be addressed in the design and implementation of reforms. Market-based allocation mechanisms may be used to address such market failures (e.g., auctioning subsidies to cover the cost of universal service). Of particular importance is to consider complementary investments in skill development and training of workers as well as active labour market policies to support the job search process.
9. ***Design reform programs to be flexible to reflect learning by doing.*** Reforms are a dynamic process. Circumstances can evolve over time. The specifics of the design of reforms may prove to be inappropriate in some dimensions or unexpected spillover effects may emerge. Adjustments may be needed as a result of unintended consequences. This calls for mechanisms to be put in place to generate the information and feedback needed to identify when and where adjustments are needed. Building knowledge partnerships at the economy level that include industry, consumer groups and specific stakeholders to interact with the relevant regulators and government representatives can ensure that such information is generated on a timely basis. Such partnerships can become platforms for monitoring progress and provision of inputs needed for evaluation of structural reforms. Evidence-based research and analysis of reform impacts complement the process and prevent it from being a mere mechanism for policy capture. This implies putting in place mechanisms to generate needed data (see point 11 below).
10. ***At the APEC level, pursue cross-fora collaboration and joint work programs.*** The regulatory issues that are the focus of deliberations in the Economic Committee as part of the broader structural reform agenda must be informed by and involve the relevant sectoral regulators and related working groups, and vice versa. Regulators will not have

an economy-wide focus, while economic policy efforts aiming at inclusive growth are in large part conditional on regulatory reforms at sector level. Likewise, deliberations on services trade and investment policy reforms, a subset of the broader structural reform agenda and economic policy, must include sectoral regulators as well as line ministries that are responsible for policies that directly impact on the ability of firms to engage in international trade – be it through investment, data flows or cross-border movement of personnel. Multi-stakeholder fora such as the regular policy dialogues that occur in the margins of APEC meetings can be mobilized as well to act as a venue for learning and exchange of experience in implementing structural reforms.

11. ***Implement measures to measure progress and impacts of structural reforms.*** Data on services policies and services performance – productivity, employment, trade, investment – lags far behind that compiled for goods. Addressing these gaps should be a priority. Better data will support the structural reform agenda. It is needed to identify priority areas to focus on, to establish baseline performance measures/metrics for the services concerned, and to measure progress (trends) over time in indicators of performance. Monitoring and evaluation to assess impacts of reforms is needed to allow for adjustments in reform initiatives over time and to build on them with complementary actions. It is also important in assessing the extent of potential spillover effects of reforms. Such efforts should involve the private sector, including users of the services concerned. Of particular importance is firm- and household-level data that permits monitoring and evaluation of the impacts of policy reforms. A weakness of many current firm- and household surveys is that these do not collect much information on the use of and access to services of different types. Expanding existing survey instruments and censuses to do so is a necessary condition for effective monitoring and evaluation of the effects of structural reforms in services sectors. This will involve collecting data on services sector performance, market structure (e.g., number of new entrants and survival rates). This same applies to trade data, including foreign ownership and sales by foreign companies. From an APEC perspective collecting statistics on intra-APEC trade in services may be of interest – but more generally there is a dearth of bilateral trade and investment flow data that impedes analysis.

The APEC report on baseline indicators¹⁶ has identified a wide range of services data gaps and weaknesses across APEC economies, indicators and time periods. A concerted effort is needed to improve the statistics on services and for APEC economies to commit to an initiative to do so. A first step would be to constitute an ad hoc group on service statistics to identify the issues that constrain better collection and reporting of statistics and areas where technical assistance and capacity building efforts should be pursued. This could build on the current ad hoc working group tasked with compiling trade in value added tables for APEC, but should have a much broader mandate that is focused on data that will allow assessment of regulatory policies and outcomes, through for example

¹⁶ See *Report on APEC Work on Services and Baseline Indicators*, at http://publications.apec.org/publication-detail.php?pub_id=1688.

services trade restrictive indices, the extent to which APEC economies have established or participate in sectoral IRC initiatives, and the degree to which they have made commitments in trade agreements – through indicators such as sectoral coverage ratios.

While collecting such information is costly, it has high potential payoffs in helping to understand structural reform efforts and the benefits they create. Costs can be reduced by avoiding duplication and building on progress that has already been achieved. In the case of policies that impact on trade and investment use can be made of the OECD STRIs as a focal point for measurement of progress in reform. The STRIs will be regularly updated by the OECD so that APEC economies can simply rely on that initiative as one source of valuable data that can be used to track the direction of change in STRIs at the aggregate and the sector- and sub-sectoral level. The same is true for World Bank governance and investment climate indicators, and the World Bank's STRI—which is more narrowly focused on discriminatory laws and regulations. This is supposed to be updated in a partnership with the WTO, an initiative that deserves the support of APEC economies.

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