Implications for 21st Century Trade and Development of the Emergence of Services Value Chains

Working paper

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Services industry groups have identified services supply chains as a “21st century” issue demanding specific attention in the WTO and in bilateral, regional and plurilateral trading arrangements. This is an issue for which the trade policy community seems relatively ill-prepared at present, there being a dearth of knowledge and policy research on services value chain issues. Although there has been much attention devoted in trade discussions recently to the issue of global value chains for goods, the authors highlight the fact that the concept is as relevant to services activities as it is to merchandise production. In new business models, enterprises are outsourcing not only the assembly of goods, but also many increasingly fragmented services-related tasks. Thus there is a strong need to understand better the role that services are playing in the new 21st century patterns of trade that are emerging.

This paper aims to make a contribution to the discussion of services value chains. As background, the authors highlight the growing importance of services in world trade; discuss the limitations in being able to measure the contribution of services to trade in an adequate manner, and the growth of ‘offshoring/on-shoring’, intra-firm and intermediate trade in services. The authors consider how services are embodied in and indeed “enable” value chains in manufactures through providing the links that combine the production processes in diverse geographic locations. Going further, examples of services value chains on their own are provided. Lastly they draw out some of the implications of the phenomenon of services value chains for 21st century trade, industry and development policy. The authors also touch upon the question of how to make the world trading system under the WTO, conceived for the 20th century pattern of trade, more relevant to the new patterns of services trade and investment that have recently emerged.

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1. Growing Importance of Services Trade

As measured by the balance-of-payments, World Bank data shows cross-border trade in services now accounts for around 27 percent of global exports. Research results consistently suggest, however, that adding in mode 3 transactions could roughly double this figure.

World exports of commercial services expanded 9 percent in 2010, increasing rapidly in volume in all regions. The three regions that lead in exporting commercial services and that together account for almost 90 percent of world services exports are: Europe (47 percent), Asia (26 percent) and North America (16 percent), the three regions for which the evolution of services exports is shown in Figure A: Part I.

**Figure A: Part I - Growth of Services Exports in Europe, Asia and North America**

![Graph showing growth of services exports in Europe, Asia, and North America from 2000 to 2010](http://www.wto.org/english/res_e/statis_e/its2011_e/its11_appendix_e.htm)

Source: Figures taken from International Trade Statistics 2011 (WTO). Table A8: World exports of commercial services by region and selected economy, 2000-2010
Available at: [http://www.wto.org/english/res_e/statis_e/its2011_e/its11_appendix_e.htm](http://www.wto.org/english/res_e/statis_e/its2011_e/its11_appendix_e.htm)

The greater dynamism of services exports from Asia has meant that export growth has surpassed that of North America as from 2003. Greater dynamism is also apparent in the services export performance in the four other regions shown in Figure A: Part II, where
services exports from South and Central America, the Commonwealth of Independent States, Africa and the Middle East have also expanded dramatically after 2003. The recuperation in growth of services exports after the economic and trade downturn of 2009 has been fastest in Asia and South and Central America and slowest in Europe, North America and the Middle East.

**Figure A: Part II - Growth of Services Exports in Other Major Regions**

While the world average ratio of services exports to GDP grew from less than 5 percent in 2000 to around 6.5 percent in 2008, there have been significant differences in the trend for economies in different income level groups. Services exports are already contributing over 7 percent of GDP for high income economies, but still well below 5 percent for middle income economies. Importantly, as shown in Figure B, services exports are making higher contributions to GDP for poorer economies than for middle income economies; just under 6 percent for lower middle income economies and just over 6 percent for low income economies. This suggests that the services sector offers a viable alternative development route to manufacturing, potentially enabling poorer economies to “leapfrog” over manufacturing. Finding a way to “fit” into a global value chain through taking on an outsourced services task is one of the ways that countries can target and achieve this objective.

Source: Figures taken from International Trade Statistics 2011 (WTO). Table A8: World exports of commercial services by region and selected economy, 2000-2010
Available at: http://www.wto.org/english/res_e/statis_e/its2011_e/its11_appendix_e.htm
2. “Made in the World”: The Growth of Value Chains

The pattern of world trade has witnessed remarkable changes over the past 25 years (roughly since the late 1980s.) Rather than trade in goods produced at one location and exported to a final consumer in another location, globalization is taking place such that production of goods and increasingly of services involves a combination of intermediate inputs and services activities sourced globally to make up a finished product. Sturgeon and Gereffi show that increased trade in intermediate inputs is accounting for an expanded ratio of trade to world GDP (from 16 percent in 1990 to 27 percent in 2008). Figure C sets out WTO data showing how significant intermediate trade in goods has become. This rising trade in intermediate inputs reflects the development of global production chains in the world economy. These now represent more than half of the goods imported by OECD economies and close to three-fourths of the imports of large developing economies, such as China and Brazil. 

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2 Sydor (2011), chapter 1.
3 Ali and Dadush (2011)
Trade in intermediates increasingly blurs the distinction between imports and exports and falsifies the designation of a product (or service) as produced in one location only. Drivers of the development of global value chains (GVCs) are generally accepted to be: lower transportation costs; improvements to information and communication technologies; technological innovations; availability of high skilled workforce; secure and reliable political, legal and social environment; proximity to sourcing and/or markets. An early contribution by Gereffi distinguished between global value chains as either producer-driven, where large integrated industrial enterprises control the backward and forward linkages in a global production system (typical of capital-intensive industries like automobiles, computer, aircraft and electrical machinery), or “buyer-driven”, in which large retailers, brand-named merchandisers and trading companies set up decentralized production networks in a variety of exporting countries (typical of consumer-goods industries such as garments, footwear, toys, consumer electronics, household items, furniture, etc).  

The concept of “made in the world” was coined in 2011 by the WTO and IDE/JETRO in their groundbreaking collaborative work on “Trade in Tasks” which focuses on the operation of global supply or global value chains. This cutting-edge study, in its bilateral breakdown of the production networks and intra-firm activity, radically challenges the concepts behind traditional measurements of bilateral trade flows in goods.

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6 WTO (2011)
Disappointingly, however, the study effectively ignores the contribution of the services sector, including its dominant role in FDI flows. Similarly, the study neglects to highlight not only how services contribute to the growth and operation of global value chains, but how services activities themselves are now being fragmented into value chains.

3. Embedded and embodied services

Services that are bundled with goods and that are therefore traded indirectly fall into two categories – “embodied”, and “embedded” services. "Embodied” services are the services contained in products from the mining, agricultural and manufacturing sectors and inputted during the production process (e.g. energy, transport, communications, insurance, accountancy, design, software, and other technical expertise). Other services can be “embedded” at the point of merchandise sale, for example financing, training, maintenance, repair and other after-sales service. For many manufactured goods – especially elaborately transformed, high value-added goods – embodied services can account for a very significant proportion of the value of the goods. For trade purposes, however, the full export value of embodied services is counted as manufactured exports, with no export value attributed to the services input. For many consumer goods, combinations of merchandise with embedded services are becoming key methods of merchandise differentiation in the market and key methods of achieving higher overall value-added.

Traditional statistical measurement techniques completely overlook the value of these “embodied” and “embedded” services. Embodied services alone are thought to account for a rapidly growing proportion of global merchandise exports and are estimated around an average of 25 percent. Figure D shows embodied services as a percentage of manufactures for selected OECD countries.
Outside the OECD area, one recent estimate for Indonesia puts embodied services similarly at around 25 percent on average of Indonesia’s manufactures as shown below.

Source: OECD (2005)

Figure E: Embodied Services; Estimates for Indonesia

Source: Atje, Rahardja and Maidir (2010)
A 2010 study undertaken to measure the extent of embodied services in Australia’s exports shows that services are nearly twice as important to Australian export performance as exports of services recorded in the balance of payments suggests (See Box 1). Services are embodied in all merchandise exports, even the apparently least transformed, as the example in the box on Australian coal production demonstrates. ITS Global found that the output of the Australian manufacturing industry embodied on average 26.4 percent of services and the output of the mining industry 31 percent on average.

**Box 1: Embodied Services in the Value of Australian Coal**

To extract A$100 worth of coal in 2005-06, the Australian Bureau of Statistics Input-Output Tables show that the average mining company spent A$11.40 on wages and other labor on costs, and A$30.50 on intermediate inputs. Intermediate inputs are the goods and services that mining companies buy to enable its miners to extract coal with the company’s plant and equipment.

The average company spent A$6.10 on goods — timber for construction, diesel fuel for its mobile plant, explosives, prefabricated buildings and new machinery. It also spent A$24.40 on services—specialist mining expertise such as geotechnical and mining engineering services, electricity to power the fixed plant and equipment, construction and maintenance of the plant, rail transport and property and business services such as legal services and accountancy. Over 80 percent of the intermediate inputs used to extract coal were services. Intermediate services accounted for nearly one-quarter or 24.4 per cent of the final value of the coal produced in 2005-06.

Source: ITS Global (2010)

Embodied services are an increasingly important component of value-added in regional and global value chains for many elaborately transformed manufactures. This section provides several examples of products that contain numerous embodied services and indicates the significant contribution of services to the final manufactured output, none of which is officially captured at present.

### 3.1. Services in the “American” car

A recent study suggested that for any global location, over 50 percent of the average cost of manufacturing an automobile is embodied R&D, engineering and quality assessment services.⁵ For one particular “American” car, it was shown that quite apart from the 17.5 percent of value from high tech components from Japan, 4 percent for minor parts from Chinese Taipei and Singapore and 30 percent for assembly in Korea, 7.5 percent of value

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⁵ Pasadilla (2007)
was added in Germany (design) and 2.5 percent in Ireland or Barbados (data processing). Similarly the Texas Instruments telecommunications chip was conceived in Sweden, designed in France with software instruments developed in the USA, produced in Japan and the USA and tested in Chinese Taipei.

3.2. Services in the iPad and the iPhone

The business reality that high-value-adding services are pivotal to the elaborate transformation of manufactures needs to be much better understood in trade policy circles. More than 50% of the iPod’s value has nothing to do with merchandise components and everything to do with the services activities involved in conception, design, retail and distribution.⁶

The iPhone is an even stronger example where merchandise components represent less than one third of the total value of the final product, suggesting that services account for two thirds; though exactly how much value is added by each of the individual services components such as R&D, software development, engineering, marketing, transport, packaging and others is not clear.

3.3. Services in the Nokia phone

A somewhat more detailed cost breakdown is available for the Nokia N95. In this case, as shown in Figure F, merchandise components account for one third of the total cost, value added in Nokia’s internal support functions represent another one third and distribution and retail together account for one sixth of total cost; the remaining one sixth is licenses, final assembly and operating profit.

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Such simple examples demonstrate vividly not only that current trade statistics massively overstate the value in trade attributable to goods, at the same time understating the size of trade in services; they also lead to massive distortions in overall bilateral trade balances.

### 3.4. Embodied services not captured in world trade

The official balance of payments data are completely unable to capture the business realities behind these various examples. One study based on 2004 data concluded at a global level, that taking embodied services into account would reduce the manufacturing sector’s share in world trade from 74 percent to 47 percent and increase the share of services from 17 percent to 39 percent. Another recent study measuring the linkages between services and manufacturing, based on 2007 data, shows (see Figure later in this paper) that while cross-border services exports are estimated at around 27 percent of world trade, the share of services rises to almost 50 percent if merchandise trade flows are measured in terms of direct and indirect value added content rather than on the basis of the gross value of goods crossing the border.

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8 PECC/ADBI (2012)
The ITS Global study mentioned above suggested that, on the basis of IMF forecasts of global GDP and trade volumes, total embodied services exports could increase to US$47.2b by 2014-15. ITS Global points out that the outlook for embodied services exports will depend on any shifts in the intensity with which intermediate services are used to produce and deliver merchandise exports. Every percentage point increase in the intensity of intermediate services use in merchandise production is estimated to add over US$1b to embodied services exports each year. The study notes the evidence that a convergence in production systems in manufacturing and services is underway, with embodied services intensity increasing. It observes that if the increase in the intensity of services use which occurred between 1998-99 and 2005-06 were to be repeated over the period to 2014-15, embodied services exports would be around US$53b a year in real terms by the end of the period.

4. The Shift to Higher Value-Add

Services activities are clearly providing the linkages between the segments of production in global value chains or the “glue” which holds the chains together and allows them to operate. Services activities in core “niches” serve to make cohesive both the producer-driven global value chains and the consumer-driven global value chains. Such activities that were once carried out solely within large corporations are being sub-contracted and sourced out to autonomous firms, increasingly breaking down the production process into goods and services “tasks”.

4.1. Higher Value Services increasingly dominate Production Value

As Stanley Chih of ACER computers demonstrated in his famous “Smiley Face” shown in Figure G, the highest value added services activities such as R&D/innovation or global logistics, increasingly dominate production value. While the original node of the production process is at the bottom of the “Smiley Face” in the form of manufacture/assembly, the activities that add value to this core are located on either side of the value chain as they increasing contribute in value to the final product, moving up to the R&D/innovation centre and the logistics centre, with all of the value added in between coming from services activities. To improve competitiveness, firms are seeking to move up the value chain on either side of the “Smiley Face”, to focus on each firm’s individual core competency and outsource all the rest, thus increasingly atomizing the process of international production and trade.

**4.2. Focusing on the “Ideation” end of the Value-Chain**

IBM Corporation provides a dramatic example of corporate transformation from manufacturing to services, with the focus at the R&D/innovation end. As shown in Figure H, the trend in profitability for IBM away from manufacturing and towards services was clear throughout the 1990s. By 2000, focus on hardware was no longer commercially appropriate, with software and services increasingly dominating the group’s worldwide revenue. Corporate focus is now firmly at the “Ideation” end of the value-chain.
The sourcing group Li and Fung illustrates the shift from manufacturing and services to more much complex global logistics (See Box 2). In the garment sector, for example, the group no longer merely brokers between a client and a producer, but orchestrates a sophisticated global network of suppliers of yarn, dyeing and weaving operations as well as cutting, making and trimming, for just in time supply at the retail end. These examples illustrate what appears to be a steady ongoing process of corporate transformation towards services.
Li & Fung produces more than two billion pieces of apparel, toys and other consumer items every year. Li & Fung now accounts for more than US$8 billion in garments and consumer goods for some of the best brands in the world. By the time of its one-hundredth anniversary in 2006, Li & Fung had become the world’s largest sourcing company, growing at a compound annual rate of 23 percent for the last 14 years.

Yet Li & Fung does not own a single factory. It is a flat business for a flat world. The company started as a trading broker in Guangzhou (Canton) in 1906 during the Qing Dynasty and transformed itself into a Hong Kong–based exporter and then into a multinational corporation. Finally, the company reinvented itself for the flat world in a new role, as a “network orchestrator.” It is now the orchestrator of a network of more than 8,300 suppliers served by more than 70 sourcing offices in more than 40 countries and territories. The company indirectly provides employment for more than two million people in its network of suppliers, but only less than half a percent of these are on Li & Fung’s payroll. With this lean structure, each of the company’s own employees generates about US$1 million in sales, earning a return on equity of more than 38 percent per year.

Source: Fung, Fung and Wind, Competing in a Flat World: Building Enterprises for a Borderless World.

Studies of regional and global supply chains in goods have started to confirm the predictions of the “Smiley Face”, drawing attention to the fact that for many elaborately transformed manufactures (such as the iPhone) the highest value added is contributed by services inputs, often at the R&D and design phase – or at the logistics/distribution phase. All kinds of tasks along the intermediate phase of the “Smiley Face” between these two high value-added ends are increasingly being outsourced and offshored to wherever each individual task can be most efficiently performed. This intermediate or intra-firm trade is now being described as “trade in tasks”.

The role of services in facilitating “trade in tasks” by connecting the points in the goods supply chain is increasingly recognized. So also is the fact that the embodied services component of production and trade, especially of elaborately transformed manufactures, can account for a very high percentage of the total value of the good.

What remains much less well understood is the fact that value chains exist not only in the goods sectors but also in the services sector itself. In new business models, services firms, like goods firms, are seeking to go up the value chain and to outsource non-core services functions. This leads to services becoming embodied not only in goods exports but also in final services exports. “Trade in tasks” describes these phenomena.
Evidence is emerging, though it is difficult to measure, that trade in services intermediates is increasing. Figure I illustrates the growth in intra-firm services trade for the United States, the growth in intra-firm services trade.

**Figure I: Intra-firm Trade in US Services Exports (1997-2007)**
5. Mapping the Process of Outsourcing and Off-shoring in Services

As individual firms focus on core competence to shift up the value-added ladder, a number of services activities are now being outsourced and sometimes off-shored by both multinational corporations and even middle-sized firms. A simplified conceptual framework, through which to understand this process from a services perspective, is presented in Figure J. The horizontal line shows the “supply” chain, i.e., the simplified set of activities through which the service is delivered – or what we might call the “pathway to market”. The vertical line shows the component industries that make up the total component value-add.

Figure J: Supply Chain/Value Chain


Gereffi has broken the horizontal line down further into a more granular set of activities, identifying eight separate business functions, generic across both goods and services sectors, all of which can be outsourced or off-shored. These are set out in Box 3.
Using these essential tools, researchers have started to “map” a number of specific services industry supply/value chains. The offshore aspects of these chains encompass services activities conducted in one country often as the result of foreign direct investment, often from a home-based multinational corporation, and consumed as business inputs in another. This can include a variety of business-to-business activities. Gereffi has established a complex explanatory map encompassing these offshore activities, locating the separate business functions in terms of their value-added: the resulting offshore services value chain is set out in Figure K.

The three main segments illustrated in the diagram are Information Technology Outsourcing (ITO), Business Process Outsourcing (BPO) and Knowledge Process Outsourcing (KPO). The offshore value chain is subdivided into services that can be provided across all industries (horizontal services) and services that are industry specific (verticals). Firms operating in the horizontal vector are process experts, while those operating in vertical chains have industry expertise and their services may have limited applicability in other industries.
Within the horizontal vector, activities are related to supporting generic business functions such as network management, application integration, payroll, call centers, accounting and human resources. In addition, they include higher value services such as, market intelligence, business analytics and legal services. Within the horizontal services vector, ITO make up the low, mid and high segments of the offshore services value chain, BPO activities are found in the low and mid segments while KPO are the highest segment of the chain. The value of each activity is correlated with its human capital content (education level), that is to say, lower value-added services require fewer years of formal education.

**Figure K: The Offshore Services Value Chain**

The ITO segment has four categories; software, R&D, IT consulting, software, and infrastructure. The BPO segment contains 3 main categories including enterprise resource management (ERM), human resource management (HRM), and customer relationship management (CRM). The KPO segment includes business consulting, business analytics, market intelligence and legal services. This categorization provides an initial blueprint for economic upgrading strategies within the industry, as firms attempt to “climb” the value chain for offshore services.
The substantial growth of the offshore services industry presents a challenge when it comes to collecting data for the relevant services. According to OECD estimates, the size of the offshore services market would have been about US$252b in 2010. The highest compound annual growth rate has been experienced in the KPO segment (58 percent), with ITO (26 percent) and BPO (25 percent) following.\(^\text{10}\)

6. Statistical deficiencies in measuring services trade

The growing importance of services in world trade and the new global distribution of work through the off-shoring of services tasks have implications for how trade flows take place and for their measurement. The current way in which services are measured, given the growth of global value chains, is clearly inadequate, with international trade statistics grossly understating the importance of services trade.

As international merchandise trade statistics are established from customs documents at the border, they assign the full gross value of an international transaction to the immediate economy of origin or the last producer in the value chain. However, this economy of origin is often only the last assembler in a long supply chain and will not have created nor benefited from the full value added included in the final good. The value added necessary to produce the product may be spread across several economies forming the value chain as illustrated for the iPhone in Table 2 where China is assigned the full value of the iPhone in international trade statistics, but it only contributes 4 percent to the actual value added of the final product. Japan is the largest contributor to the value of the iPhone (36 percent) but this does not show up in any statistical record.

### Table 2: US trade balance in iPhones (2009; US$m)

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>Japan</th>
<th>Korea, Rep. of</th>
<th>Germany</th>
<th>Rest of world</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional measure</td>
<td>-1,901.2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1,901.2</td>
</tr>
<tr>
<td>Value added measure</td>
<td>-73.5</td>
<td>-684.8</td>
<td>-259.4</td>
<td>-340.7</td>
<td>-542.8</td>
<td>-1,901.2</td>
</tr>
</tbody>
</table>

Source: PECC/ADBI (2012)

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\(^{10}\) Miroudot (2012)
Some of these intermediate steps will be constituted by goods components, but many will have been constituted by services “tasks”. The services sector makes a much larger contribution to exports than is recognized because services are often integrated or bundled with goods and trade indirectly as intermediate inputs into merchandise production. As discussed earlier, it is estimated that taking account of intermediate services inputs to goods trade would nearly double the services share of global trade, bringing it closer to 50 percent, and this is still without taking the dominant component of international services transactions, namely mode 3, into account.

**Figure L: Adding Indirect Production and Trade in Services**

Source: PECC/ADBI (2012)
Given the current deficiencies in measuring international trade in final outcomes only, the WTO and the OECD have concluded an agreement to develop and disseminate goods trade statistics on a value-added basis, using the inter-country input-output tables of OECD members. These new statistics should be available as of end 2012. This is a welcome development and should help to highlight the importance of value chains in current trade patterns and thus assist governments and policy analysts make better informed policy decisions when viewing trade in a realistic manner. A need is similarly emerging for a value-added approach to measuring developments in trade in services, although this will be a challenging objective to achieve, given the paucity of bilateral services trade data.

The development of services value chains and the growth of services trade have also resulted in the composition of services exports undergoing significant change. “Other commercial services” are becoming more important than the traditional “travel” and “transport” components of world services trade. The biggest contributors to the recent growth have been the knowledge-intensive business services such as telecommunications, computer and IT Services, R&D Services, financial services, legal, accountancy, management consultancy services, architecture, engineering and other technical and professional services, advertising, market research, media and energy and environmental services.

![Figure M: Changing Composition of World Services Trade](image)

Source: PECC/ADBI (2012)

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11 Miroudot (2012). The OECD maintains a website devoted to studies on the subject of trade in value-added at [www.oecd.org/trade/valueadded](http://www.oecd.org/trade/valueadded). The Press Communiqué of the WTO Director General Pascal Lamy on the WTOOECD agreement to develop trade statistics on a value-added basis can be found at [www.wto.org](http://www.wto.org)
7. Examining Services Industry Value Chains

Research on services value chains is still in the very beginning stages. In this section the value chains for banking and financial services and tourism services are set out and discussed. However, such services value chains are also being created in many other sectors such as health services, architectural services and environmental services. There is a need for further research in this area, supported by specific empirical case studies.

7.1. Banking and Financial Services Value Chain

While banking and financial services are key intermediary inputs or embedded services in nearly all manufactured outputs in some form or another, banking and financial services activities can be seen as composing a value chain on their own account. A banking and finance value chain is based entirely around the production of services. In this industry, the "raw materials" are lenders and borrowers (individuals and corporations) that appear at both the beginning and the end of the chain.

As shown in Figure N, the financial “products” provided by this services value chain are divided between credit intermediaries (both depository and non-depository) and financial intermediaries. These institutions primarily collect funds through deposits and lend funds by issuing loans, but, the fine line between the functions of commercial banks and investment banks is continually becoming thinner, and in many cases, commercial banks also conduct investment banking. Moreover, the banking transaction does not represent the end of the relationship between the lender and the borrower. Banking services, like other services, generally entail the establishment of a relationship between the two and as a result, firms perform a variety of activities before and after the sale of a product.
7.2. Tourism Services Value Chain

The tourism global production network has five segments: inputs, components of trip, organization, sales, and final tourism “product” (See Figure O). The components of trip, organization, and sales segments are represented by tourism businesses in inbound and outbound tourism destinations. The trip segment components consist of: travel, lodging, and excursions. Every segment is a mix of large and small firms and potential, if the investment regime allows it, for a degree of foreign direct investment.

The organization and sales segments act as intermediaries. Within the organization segment, tour operators knit together an array of tourism products to create the tourist experience. In the sales segment, travel agents are the strongest retail venue. They sell tourism products, online and in sales offices, and inform potential tourists about destinations and suppliers. These tourism intermediaries are often vertically integrated operations, including not only retail sales and tour operator coordination, but also hotel and air transport. All the tourist experiences can be bundled together and sold as a packaged tourism “product” by global tour operators. Travel agents can operate as subcontractors to global tour operators, but can also sell their tours directly to tourists.

**Figure O: Tourism Global Production Network**

Source: Christian (2012)
The tourism global value chain follows the tourist’s “footprint”; or the series of their interactions with firms and includes the distribution, transport, lodging, and excursion segments (Figure P).

**Figure P: The Tourism Global Value Chain**

One of the goals of countries or firms who are part of the tourism value chain is to upgrade their activities along the chain. Four upgrading trajectories are key drivers of the global tourism industry: pursuing pro-foreign direct investment policies to attract international hotels offering higher levels of luxury; upgrading the coordination and destination trip planning by global tour operators; using IT upgraded services to establish more sophisticated web presence; and catering to the growing diversity of international tourists with varied tastes and preferences with ever greater specialized “products”.

8. **Competitiveness in Services**

The opportunities offered by the new pattern of world trade in the form of value chains make it imperative that economies give greater attention to their relative competitiveness in services – or to put this another way, to their ability to attract services tasks for the global market onshore. Below we present a framework of eight factors initially proposed by Drake-Brockman to the APEC Business Advisory Council (ABAC) as appearing to have a determining role in services competitiveness. This framework draws on firm-level

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12 Christian et al (2011)  
13 Drake-Brockman (2011)  
14 ABAC (2011)
evidence emerging from business associations in the APEC region\textsuperscript{15}, and on early empirical results from a variety of developing country case studies undertaken by the World Bank\textsuperscript{16}.

8.1. Framework of Factors relevant to Services Competitiveness

i) Endowments, especially Human Capital (talent, education, skills, ideas, culture of customer focus)

In this context business stakeholder interviews refer to the importance of vocational training while firms refer to the importance of multi- and cross-disciplinary education, including languages. Work by The World Bank shows that tertiary enrolment is significant in affecting services exports.

ii) Investment in Intangible Assets (corporate Intellectual Property e.g. copyright, business methodologies, brands)

An analysis in the UK provides evidence of intangible capital deepening contributing the bulk of growth in labour productivity. Firms refer to the importance of a supportive environment for innovation, including business process innovation.

iii) Enabling Digital Infrastructure

The World Bank confirms the importance of the quality of the telecommunications network and the extent of internet penetration (though this is not always critical).

iv) Quality of Institutions

Several institutions identify transparency and the degree of corruption or the strength of the rule of law as being relevant to services competitiveness. The World Bank identifies the economic freedom index which incorporates some of these variables into its rankings. Firms refer to the role played by institutions which undertake independent analysis of the costs and benefits of regulatory regimes.

v) Efficiency of Domestic Regulation

Firms refer to constraints imposed by the complexity of the business environment. This includes rigidity or other inefficiencies in employment laws. For services companies,

\textsuperscript{15} Findlay and Drake-Brockman (2011)

\textsuperscript{16} Goswami et al (2012)
human capital costs are often 70-80 percent of total cost, which means that everything to
do with recruiting, training and deploying people is critical. Firms refer overwhelmingly to
the burdensomeness of regulatory compliance costs and to the need for an environment
which gives them flexibility to adjust to rapid changes in the marketplace.

vi) Connectedness with the International Market

Being connected with the international market involves openness for trade as well
as investment flows. Firms refer to the quality of export promotion efforts and tool kits in
providing them greater opportunities to connect with supply chains. Also important for
firms is the need for mutual recognition and interoperability of standards. Firms are
increasingly concerned about the seamlessness of regulation across markets.

vii) Services Business Stakeholder Consultation

World Bank work suggests that services business groups (such as NASSCOM in
India and BPAP in the Philippines) play a positive role in the development of services
policy. In turn, firms stress the importance of stakeholder consultation mechanisms, for
example the newly formed Indonesian Services Forum.

viii) Policy Focus

The existence of a vision and roadmap for services on the part of government and policy
makers is highlighted by the private sector. In this context firms refer to the need for
better services statistics and to the need for inter-agency coordination so that policies are
coherent across departments. Studies by The World Bank are inconclusive about the
potentially beneficial role of specific sub-sectoral targeting for services promotion.

The above framework suggests that there are many policy variables relevant to services
competitiveness, and much therefore that governments can do, both individually and in a
concerted manner, to enhance the opportunities for broader participation in global and
 regional supply chain activity.

8.2. Integrated Supply Chain/ Value Matrix for Goods and Services

The APEC Business Advisory Council (ABAC) has developed an integrated supply
chain/value matrix for both the goods sector as well as the services sector, illustrated in
Figure Q below. The services value chain is illustrated in the bottom half of the chart
shows a 'pathway to market' moving through primary services tasks to the final market
and consumers.
Importantly, the integrated supply/value chain matrix can be used to focus attention on key potential “choke points” in the chain, thus helping to highlight critical elements in the relevant policy agenda. The vertical axis focuses on the policy variables affecting competitiveness in both goods and services sectors. This axis provides an initial integrated guide to the components of a policy agenda focused on facilitating firm entry into regional and global supply chains for both goods and services sectors. While there is some commonality in the generic business functions involved in any supply chain, the factors affecting competitiveness in value chains for goods and for services are nevertheless significantly different, as are relevant policies and measurement issues. We focus in this paper on providing a specifically services perspective on the factors affecting supply chain entry.
9. **Factors affecting Entry into Services Value Chains**

Because services are more skills-intensive than the other sectors, knowledge economy infrastructure and an environment that nurtures talent, skills and ideas are critical in attracting work onshore. Services export success is similarly highly dependent on innovation, so an industry/innovation policy which recognizes services needs is very important.\(^\text{17}\) Services activities also tend to be project based. This means that firms need flexibility to be able to move people and ideas around quickly; virtual teamwork and cross-border collaboration is very important. This highlights the importance of connectivity across the border, requiring policy focus on telecommunications, aviation, global standards, openness at the border and technical inter-operability. The factors affecting the Philippines's success is a useful case study, shown in Figure R.

**Figure R: Facilitating the Philippines Participation in IT-BPO Supply Chains**

Factors accounting for the Philippines’ success

An enabling business environment behind-the-border and an efficient, transparent, domestic regulatory framework are also essential basics. For services companies (where human capital costs are often 70-80 percent of total cost) everything to do especially with recruiting, training and deploying people can be critical. The A.T. Kearney Location Attractiveness Index, which specifically looks at human resource factors, is a useful device for starting to analyze competitiveness factors affecting services supply chain entry. The

\(^{17}\) McCredie et al (2010)
position of individual countries in terms of their attractiveness for attracting services offshoring is shown in a table in Annex I.

**Figure S: Attractiveness of Asian Locations for Services Offshoring**

Source: Chanda and Pasadilla (2011)

10. **Summary of Policy Implications and Conclusions**

We have focused in this paper on providing a specifically services perspective on the phenomenon of global value chains, drawing out some of the potential policy implications for the 21st century trade and development agenda.

10.1. **Trade Policy Implications**

Trade policy of the 21st century has not yet caught up with the changes in the world market. Global value chains in goods and services and both intertwined have definitively altered the way in which firms do business and in which trade is conducted, as well as the patterns of trade. This has not yet been reflected in trade rules, trade negotiations or
trade governance structures. All of these will need to be reviewed in the light of this new reality and adjusted accordingly.

The 2012 report of the World Economic Forum’s Global Trade Agenda Council highlights a few key issues that the rise of global value chains has raised. First, bilateral trade balances are over-stated as they only relate the balance of trade in final products and not the actual contribution to trade of all of the intermediate suppliers. Second, the importance of exports as a driver of demand is overestimated, while the importance of trade as a source of efficiency is underestimated. Third, because of value chains, trade has become more volatile and a larger source of potential shocks to the world economy and individual countries. Fourth, trade in intermediates and services “tasks” means that the cost of protectionism is higher than is generally understood, and is rising. It is therefore more important than ever to be vigilant that trade flows remain open and that the world economy moves toward lower barriers to trade in goods and especially services.

The key role that services play as “links” in global value chains and in creating services value chains of their own means that modal neutrality should be enshrined in the services chapters of regional trade agreements and at the WTO level through an agreement to bind an open policy for cross-border trade flows (mode 1) as well as for foreign direct investment flows (mode 3) in a re-invigorated multilateral services framework. In addition, it is vital to include chapters on competition policy and regulatory coherence in 21st century trade agreements in order to ensure competitive neutrality. As argued in the WEF report, a violation of either of these conditions will mean that the operation of services value chains cannot function smoothly, thus entailing costs for the world economy and all trading partners.

### 10.2. Development Policy Implications

The emergence of services value chains and the growing importance of services as embodied parts of global value chains in manufactures has numerous and significant implications for development policy.

First, the value chain story is not only about large global enterprises. Small and medium-sized enterprises (SMEs) are also actively involved, and increasingly it is SMEs in the services sector which are most engaged in global value chains. OECD work shows evidence that since 1997, more services SMEs have been involved in international alliances than manufacturing SMEs; by the year 2000, there were nearly 4 times as many services SMEs engaged in international alliances than manufacturing SMEs. Services activities are

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20 Pasadilla (2007)
usually less capital intensive than manufacturing ones and require less physical infrastructure, an advantage for countries with limited physical and financial capital. The separation of services activities into “tasks” allows developing countries to choose which of those services tasks they are best suited for and aim to facilitate firm entry into a given value chain without the necessity of “capturing” the entire value chain. Unlike the goods sectors, however, very limited literature is available to help understand the workings of supply chains in services and how SMEs can best access them.

Second, the division of world trade into components or “tasks”, of which many are now services in nature, offers developing country firms a new avenue via which to integrate into world markets, given the right set of conditions. The mushrooming of services-led growth, independent of manufacturing, is being labeled a “Services revolution” i.e., a shift of activity from agriculture to services, by-passing traditional “industrialization” and moving directly into high value tertiary tasks.

Vast opportunities clearly still exist to offshore service activities across different industries, and new segments like retail banking and health care are emerging. Growth is being driven by increasing procurement services abroad to increase efficiency, enter new markets, and gain access to strategic assets in other countries (low human resource costs, technology and language skills, closer time zones, etc). McKinsey Global Institute estimated in 2009 that up to 161 million worker’s jobs can be performed remotely.21 Given the factors that are important in the creation of services value chains, an obvious conclusion is that if developing countries can create a strong human capital base, it may be possible to walk towards development by another route.

For developing countries, it may be easier and less costly to capture one or more of the “tasks” of a services value chain than to try and compete along the entire line of service activities. This may allow firms from these economies to enter world markets more readily through creating an attractive environment as an off-shoring location, as they are not required to have a cost advantage in an entire product and can choose to focus on only one “task” along the value chain. In this new world of competitiveness and changed trading structures, developing countries with a strong educational infrastructure have a competitive advantage compared with the developed world as they can offer both a low cost and educated labor force.

In summary, the offshore services industry has significant growth potential and can provide opportunities for developing countries striving to diversify and upgrade their economic activities. Highlighting awareness of these opportunities by the international trade policy community for governments and the firms in their economies would serve policy makers and the world economy well.

Annex I

Attractiveness of Countries in Attracting Services Offshoring Activities

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Financial attractiveness</th>
<th>People skills and availability</th>
<th>Business environment</th>
<th>Total score</th>
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