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“Urban Amenities and Innovation in Developing Countries: The Case of ASEAN and East Asia”¹

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One sentence description:

This paper proposes a conceptual framework of urban amenities in order to create innovation hubs in newly developed economies in ASEAN and East Asia by attracting innovation activities as well as highly educated people, nationals and non-nationals.

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Abstract:

Newly developed economies in ASEAN and East Asia have enjoyed an unprecedented success in exploring the effective use of global value chains and now start thinking of how to climb up the last step of economic development by creating an innovation hub. Innovation activities are rapidly globalized. Although innovation is strongly dictated by agglomeration forces, dispersion forces are also large. Foreign direct investment in higher education becomes pervasive, and R&D outsourcing as well as R&D for local adaptation is also growing. Furthermore, highly educated people become considerably mobile across national borders in the globalization era, aggressively seeking better living conditions for his/her professional and family life. Thus, in addition to investing in the national innovation system, it is crucial for newly developed economies to attract highly educated people, both nationals and non-nationals, by providing urban amenities. Urban amenities proposed by Glaeser, Kolko, and Saiz (*Journal of Economic Geography*, 1(1), 2001: 27-50) consist of four elements: the presence of a rich variety of services and consumer goods, aesthetics and physical setting, good public policy (e.g., higher education, health care, and safety), and speed (e.g., urban transport). This paper proposes a conceptual framework of urban amenities for innovation and assesses the current situation of newly developed economies in ASEAN and East Asia.

JEL Classifications: F63, F43, F15, F13

1. Introduction

Production fragmentation and services linkages are the key drivers of global and regional production value-chain as industrial productions are fragmented and located across several countries due to technology and cost considerations. New global production value-chains driven by innovation and information technologies are completely changing the production patterns and the way we arrange the production structures in Asian region.

Production patterns and manner we arrange the production structure within and across countries are observed in the first and second-unbundling of production value chains (Baldwin, 2011, Obashi and Kimura, 2017). As opposed to the first stage of building-up the supply chain, in the second stage we observe greater number of production activities “joining” the supply-chains. In the first-stage of unbundling, we observe the growth of services linkages across countries and single national and multinational supply-chain across countries, which required deep and broad-based global production structure and patterns. In the second-stage, the level of industrialization is much easier and faster as countries simply “join” the supply-chains and increase the pace of industrialization. We have observed countries such as ASEAN countries and China are able to join the supply-chain activities much easier and grow faster by adopting liberal economic and less regulatory policies with little investments in the economic fundamentals necessary for supply-chain activities.

In this new global production value-chain, we observe greater regional and global integration of economic and social activities across countries. The new production structure also increases the service linkages across the supply-chains, thereby increasing the tradability of services and hence increasing the growth of services trade in the region and also globally. We also observe a greater degree of movement of skilled and unskilled workers across and within regions increasing the supply-chain activities in manufacturing and services. Further, cities and the growth of cities tend to create the key conduits to connect and drive innovation, entrepreneurships, and services trade and activities in the global production value-chain. Each of the above are not mutually exclusive but reinforcing and complementing the overall activities of the global production value-chain.

According to Baldwin (2011), in the first stage of “unbundling”, role of government has become important to drive rapid industrialization and to overcome coordination failures which requires lumpiness and complexity of industries. There is a common objective across the public and private sectors in terms of driving openness and seeking new global markets. At this stage, trade was necessary for importing key inputs that relies on export market. We will also observe agglomerative effects of industries to create the economies of scale activities and growth of industries has to be broad and deep to develop the necessary supply chain activities. There is also a need to coordinate and manage the scale of production across the supply chain across

regions and it took several decades to build-up the supply chain in Asia and East Asia.

In the second stage, particularly at the entrance, there is less need to build-up large supply chains and there is lower transaction cost to participate in the supply due to strong connectivity from information and communication technologies. In the second stage of “unbundling”, the role of governments and multinationals is completely different when a nation joins a supply chain. Industrialization is easier and faster due to the supply-chain connectivity. It also becomes more “footloose” due to rapid technological change and competition as more cost competitive economies to enter the supply-chain. At this stage, we observe greater “learning-by-governing” as governments learn how to manage the institutional development from other successful economies, thereby increasing the convergence of institutions in the region.

The first stage and second stage “unbundling” are not mutually exclusive but interconnected and linked. To be very effective and competitive in the second stage “unbundling”, it is necessary to have deep and broad based production structure for export and growth success in terms of seeking new markets and maintain the competitive position in the global production value chain. Countries with weaker fundamentals in the first stage tends to have weaker role in the 2nd stage unbundling of activities in the global production value-chain and to sustain the “disruptive” effects of new technologies.

The role and the challenges facing the government, multinationals and domestic firms are quite different in the second stage of “unbundling”. The key outcomes of supply-chains are to export within and across regions. However, several countries are faced with serious issues of which supply-chain to join to effectively create long-term sustainable production-value chains, or to create its own supply-chains, and what intellectual policies to adopt to protect its innovations and technologies. There are no clear industrial policies and countries are adopting different policies without guided by any formal models or structure that explicitly incorporate supply chains (Baldwin, 2011; Rodrik, 2008).

It is interesting to observe the increasing services activities and trade at the the second stage of production “unbundling” in terms of creating services linkages. This might be due to several factors. First, the development and improvements of skills and human capital tend to drive the key services linkages in the global production value chain. The second unbundling has actually accelerated the upgrading and sophistication of goods, and the service contents embodied in goods have gained their importance. Secondly, the production fragmentation has increased the innovation in ICT and the transaction cost of movement of goods across the global production structure. As such, we observe key services sectors tend to become important components of trade such as distributional services, financial services, transport and aviation services, telecommunication services and logistic

services. This is again driven by human capital development and urban and sub-urban amenities in the form of soft and hard infrastructure developments as the region opens up for trade and investment. The soft and hard infrastructure tends to reduce the cost of services linkages, thereby increasing the intensity for further developments and linkages to the global production value-chain activities. Thirdly, the development of infrastructure such as ports, airports, and roads creates linkages and increases the agglomerative effects for arm's length industrial activities. This increases the participation of the SMEs and thus creating the linkages with the multinational firms for product and process innovation in the region.

At this second stage, we will observe the importance of cities in creating the urban and sub-urban amenities that attracts skilled workers, which is again enhances the services sector development and trade, thereby creating the linkages to global production supply chain. Developed and mature cities needs to attract and retain skilled workers (Glaeser et. al, 2015). Cities with strong urban and sub-urban amenities tend to be more competitive to attract the skilled workers to live and work thereby creating the innovative activities in services “unbundling” and competitiveness of the services sector. More developed countries and cities need urban amenities to attract skilled workers in terms of (a) greater varieties of services and consumer goods; (b) aesthetics and physical settings of infrastructure, (c) good public goods, and (d) convenience and speed of delivery of services (ERIA CADP Research

Team, 2015, originally from Glaser, et al., 2001).

In fact, we are observing both the first stage and second stage “unbundling” occurring concurrently in the development of the Asian region. The first stage unbundling led by Japan and later joined by Korea in the 1980s, thereby setting up the stage for ASEAN and East-Asian production network. With innovation, the increase in human capital and a greater number of economic liberalization policies adopted across ASEAN countries have increased the pace of second stage unbundling in the region. The regional and global supply chain activities in Asia and ASEAN have grown and deepened as more mature economies have moved to the second stage of production fragmentation and newly emerging ASEAN countries have already built up the industrial base for the first stage of production fragmentation.

However, we also observed certain challenges emerging in the Asian region. The level of liberalization and in particular services and investment liberalization is now losing its momentum and slowing down. The Asian cities are plagued with high population densities decreasing the returns to cities (pollution and congestions) and its productive contribution to the regional growth. The level of trade and investment liberalization in the multilateral agreements such as RCEP is becoming weaker and tends to be of a very low denomination for further regional integration.

The current study focuses on the development of cities as conduits in

creating urban networks and urban amenities, attracting and development of skills and human capital, and the development and liberalization of the services sectors in the global production value chain Asian region. In fact, these issues form the key agenda for the next stage of development and growth in the services sectors and future development of the Asian region. This paper proposes a conceptual framework of urban amenities for innovation and assesses the current situation of newly developed economies in ASEAN and East Asia. In particular, the study focuses on the regional competitiveness and efficiency of cities and its links to urban and sub-urban amenities. Glaeser et al. (2015) highlight that urban networks created by urban amenities tend to increase the economies of scale of cities and thus the innovation and entrepreneurial activities of cities and country. In fact, high innovation and economies of scale of cities from urban amenities might be able to offset the cost of high density of cities from population growth. In our framework, the growth of cities is crucial for further economic and services liberalization in the region. The growth of cities creates linkages such urbanization, innovation, entrepreneurship and service linkages that drive and develop the regional and global production value-chain. Thus, virtuous cycle is created by economic liberalization that drives the growth of cities and urban network and amenities, which drives the services linkages and the second unbundling of the regional and global production value-chains. The development and management of cities in creating economic and social

returns to society and urban amenities will be very crucial for the next stage of economic liberalization in Asia and ASEAN economies.

The paper is organized as follows. The next section will provide an overview of the services development in ASEAN and East Asia. Section 3 will provide the key trends of cities and its importance for services activities and development. We will provide the policy conclusions at section 4.

2. Growth, Services and Cities in Asia

The Asian countries have observed very strong growth for the past two decades. The growth rates of selected Asian countries are given at Table 1. We observe strong growth in larger countries such as China and India growing at an average real GDP growth of 9% and 6.8% respectively from 2000-2015. We also observe strong real average GDP growth for Hong Kong (5.6%), Cambodia (8.9%), Indonesia (5.4%), Korea (4.8%), Lao PDR (6.5%), Viet Nam (6.8%), Malaysia (6.1%), and Singapore (6.2%) from 2000-2015.

However, we observe larger countries are adjusting their output growth in recent years as there are significant structural changes and rebalancing in the Asian countries from 2010 to 2015. The larger Asian countries of China and India are rebalancing their economies to lower average growth in 2015. We also observe city-states of Hong Kong and Singapore are also significantly rebalancing to lower growth rates to in 2015. The emerging economies of Cambodia, Lao PDR, Malaysia, Philippines and Vietnam are showing strong signs of resilience to the slowdown of larger economies such

as China and India. However, we do observe significant slowdown in the average growth rate of Thailand in recent years.

Table 1: Average Growth Rates of Real GDP for Selected Asian Countries (5-year averages) (%)

	1996- 2000	2001- 2005	2006- 2010	2011- 2015
China, People's Rep. of	8.6	9.8	11.3	8.0
Hong Kong, China	2.8	4.2	4.0	2.9
Korea, Rep. of	5.4	4.5	4.1	3.0
India	6.0	7.0	8.3	6.8
Brunei Darussalam	1.4	2.1	0.2	-0.1
Cambodia	7.4	9.4	6.8	7.2
Indonesia	1.0	5.1	5.7	5.5
Lao PDR	5.7	6.3	8.0	7.3
Malaysia	5.0	4.8	4.5	5.3
Myanmar	8.5	12.9	11.1	7.3
Philippines	3.6	4.5	4.9	5.9
Singapore	5.7	4.9	6.9	3.9
Thailand	0.6	5.1	3.8	2.9
Viet Nam	7.0	7.5	6.3	5.9
Australia	4.0	3.0	2.9	2.7
Japan	1.0	1.3	0.4	0.6

Source: ADB Statistical Database; Singapore's growth rate is derived from Singapore Department of Statistics (DOS)

We also observe a significant increase in services activities and as an important contributor to the GDP growth in the region. Table 2 clearly indicates a strong shift in the production structure as the share services

sector has increased across all the selected Asian countries.

Table 2: Share of Sectoral Output to GDP for Selected Asian Countries (%)

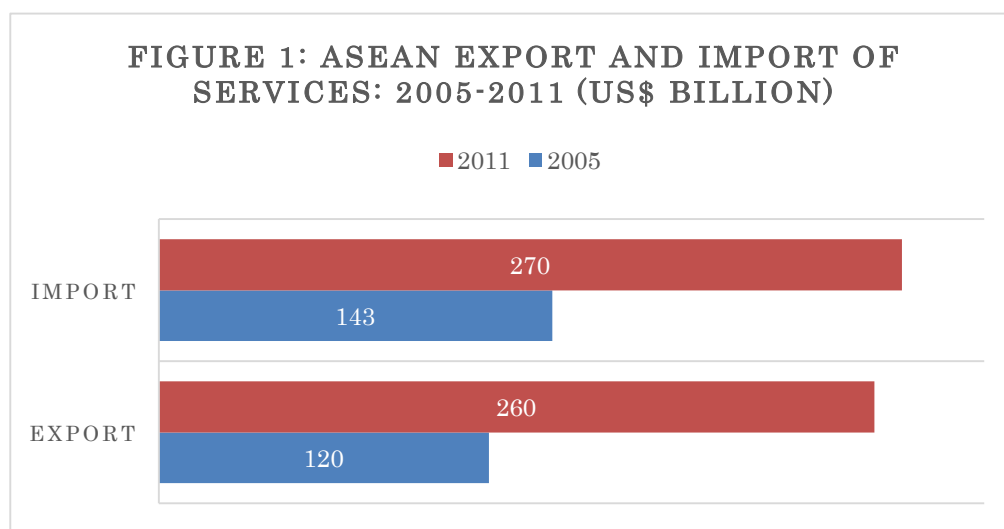
	Agriculture		Industry		Services	
	2000	2015	2000	2015	2000	2015
China, People's Rep. of	15.1	9.3	45.9	40.7	39.0	50.0
Hong Kong, China	0.1	0.1	12.6	7.2	87.3	92.7
Korea, Rep. of	4.4	2.3	38.1	38.0	57.5	59.7
India	23.4	17.0	26.2	29.7	50.5	53.2
Brunei Darussalam	1.0	1.1	63.7	60.2	35.3	38.7
Cambodia	37.9	28.2	23.0	29.4	39.1	42.3
Indonesia	15.6	14.0	45.9	41.3	38.5	44.7
Lao PDR	48.5	24.8	19.1	34.7	32.5	40.5
Malaysia	8.3	8.6	46.8	39.6	44.9	51.8
Myanmar	57.2	26.7	9.7	34.5	33.1	38.7
Philippines	14.0	10.3	34.5	30.8	31.6	58.9
Singapore	0.1	0.0	34.8	26.4	51.6	73.6
Thailand	8.5	9.1	36.8	35.7	54.7	55.1
Viet Nam	24.5	18.9	36.7	37.0	38.7	44.2
Australia	3.1	2.3	24.7	23.8	72.2	73.9
Japan	1.6	1.2	31.1	26.9	61.8	64.9

Source: ADB Statistical Database

We observe strong increase in the share of services output from 2000 to 2015 for China (Δ of 11%), Hong Kong (Δ of 5.3%), Indonesia (Δ of 6.2%), Lao PDR (Δ of 8%), Malaysia (Δ of 5.9%), Philippines (Δ of 27.3%), Singapore (Δ of 22%), and Viet Nam (Δ of 5.5%). The increase in services activities are directly linked to the global value-chain activities in the region.

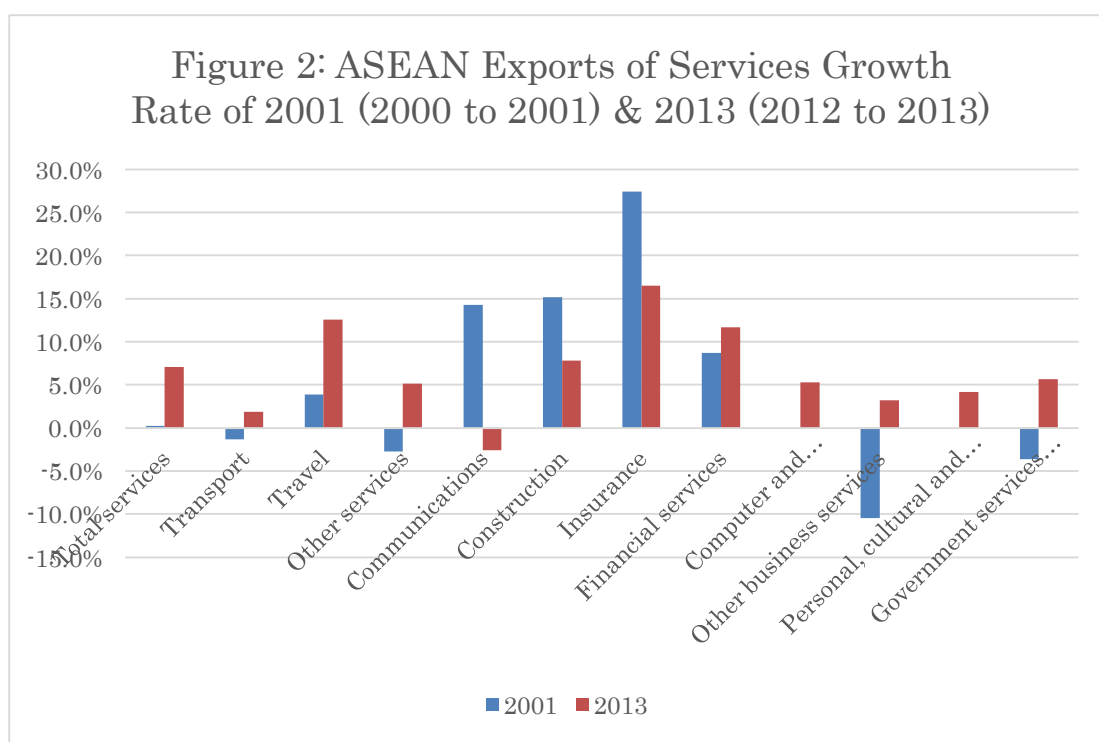
2.1 Services, Trade and Global Production Value-Chain

In Asia and ASEAN, the pace of liberalization of services for trade and investment has been slow but have increased in the last two decades. Over the past two decades, we have also experienced a sharp increase in Free Trade Agreements (FTAs) in South East Asia, which have positive impacts on the liberalization of the ASEAN economy for trade and investment. The level and growth of the services export in ASEAN is reflected at Figures 1 and 2. Firstly, we observe a strong trade growth in ASEAN in services. Both export and import of services have more than doubled in 2011 as compared to 2005 in ASEAN countries (see Figure 1). The ASEAN export of services increased from US\$120 billion in 2005 to nearly US\$260 billion in 2011. In similar trend, the import of services increased from US\$143 billion in 2005 to nearly US\$270 billion in 2011.



Source: ASEAN Secretariat

Among the services trade, we observe transport, travel, and other business services account for major components of trade in services. Travel and other services are the major export of nearly 30 percent and 27 percent of total services are the major export of nearly 30 percent and 27 percent of total export value respectively in 2011. Transport service sector is the key import of services with nearly 40 percent of total import values, followed by business services of nearly 24 percent and travel by 18 percent in 2011.



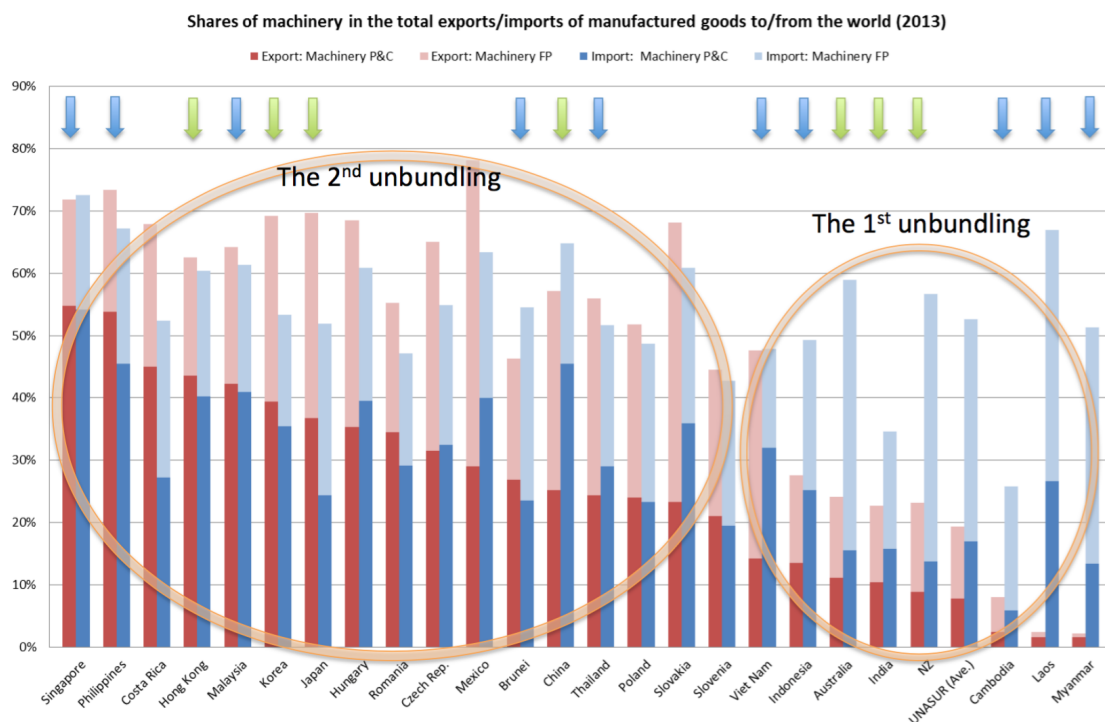
Source: ASEAN Secretariat

In Figure 2, we observe positive growth in all sectors except for telecommunications sector. There are positive and strong growth in travel and tourism, construction services, financial and insurance services, computer and information services, government services and other business

services. We also see positive but declining trend in exports for construction and insurance services.

The rising trade in services and services activities is directly related to the unbundling activities in the production value-chain in the region as given at Figure 3 (Obashi and Kimura, 2017). According to Obashi and Kimura (2017), developed and more matured Asian countries such as Brunei, China, Hong Kong, Japan, Korea, Singapore, Malaysia, Thailand and Philippines are already at the 2nd unbundling stage of production value-chain in machinery industries. At this stage, the level of services activities and linkages are expected to increase rapidly driving the services trade across these countries and also in the region.

Figure 3: Unbundling of Global and Regional Production Value-Chain in the Region



Source: Obashi and Kimura, 2017 (with some modification)

In contrast, we observe India, Indonesia, Cambodia, Lao PDR, and Myanmar are in the 1st stage of unbundling in the machinery production value-chain creating the key fundamentals for necessary value-added activities.

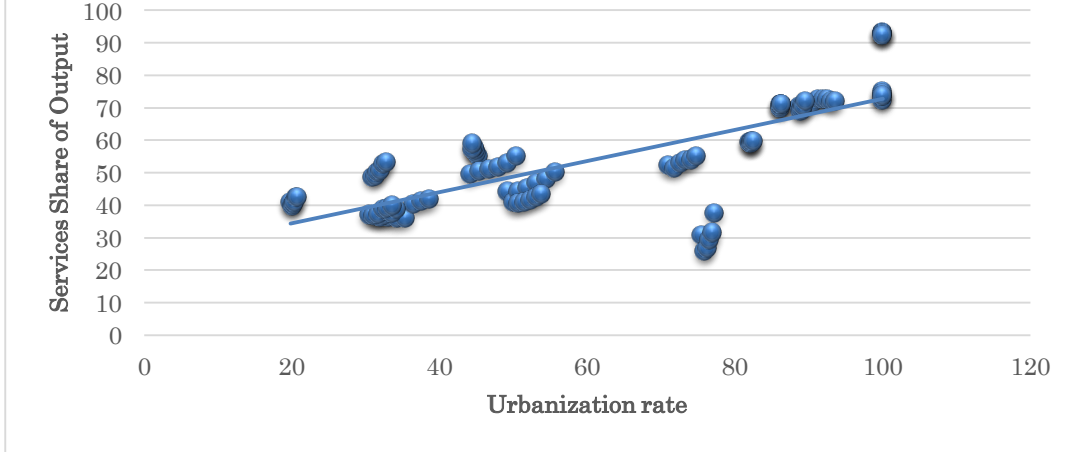
2.2 Services and Urbanization in the Region

The growth of services activities and trade is also driving the rate of urbanization in the region. We observe a positive relationship between the output share of services and the rate of urbanization in the Asia and ASEAN region². Figure 4 shows the positive relationship between output share of services and urbanization rate in Asia for 2010 to 2015. The positive relationship reflects a bilateral correlation (feedback effects) where higher rate of urbanization increases the needs for services activities and thus reinforces the rate of urbanization in the region.³ This clearly reflects that the need for urban amenities and network are critical to maintain and create new services in global production value-chain.

² Countries included in the study are Australia, Brunei, China, Cambodia, India, Indonesia, Japan, South Korea, Hong Kong, Lao PDR, Malaysia, New Zealand, Philippines, Singapore, Thailand, and Viet Nam.

³ Urbanization rate is defined as Urban population that is people living in urban areas as defined by national statistical offices. It is calculated using World Bank population estimates and urban ratios from the United Nations World Urbanization Prospects.

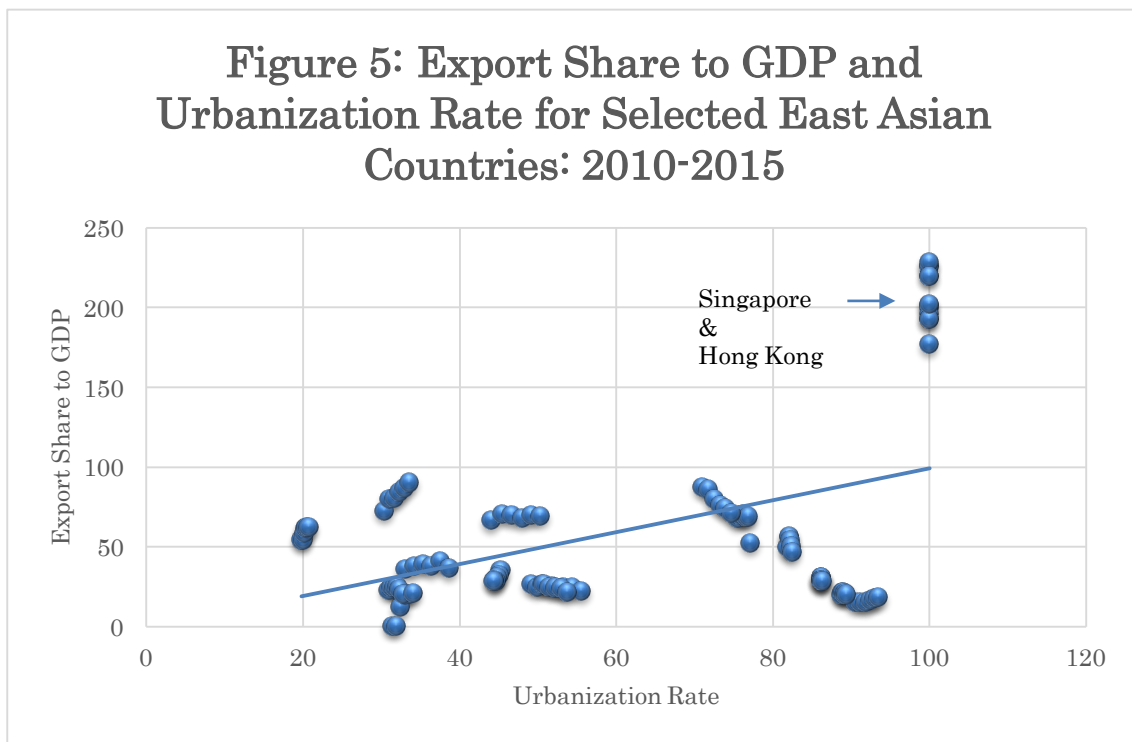
Figure 4: Services Share of GDP and Urbanization Rate for Selected East Asian Countries: 2010-2015



Source: WDI, recent years

We also explore the effects of urbanization on trade and exports of the respective countries under study. We found a positive relationship between the urbanization rate and the export ratio to GDP for the respective Asian countries under study (see Figure 5). City-states such as Hong Kong and Singapore have very high rate of urbanization and also high share of exports to GDP ratio. We also observe the similar positive relationship between the urbanization rate and the export share of the selected Asian countries. The positive relationship is likely to be driven by the services linkages and global production value-chain; in particular, we are likely to see the impact on this positive relationship on the of 2nd stage unbundling of production value-added activities in the region. We also explore the effects of services on export activities of the respective countries under study. The scatter plot

between the services share to GDP and the export share for the selected Asian countries is given at the Annex 1 (see Figure 1A). Figure 1A highlights a positive relationship between services activities and export share to GDP in the region.

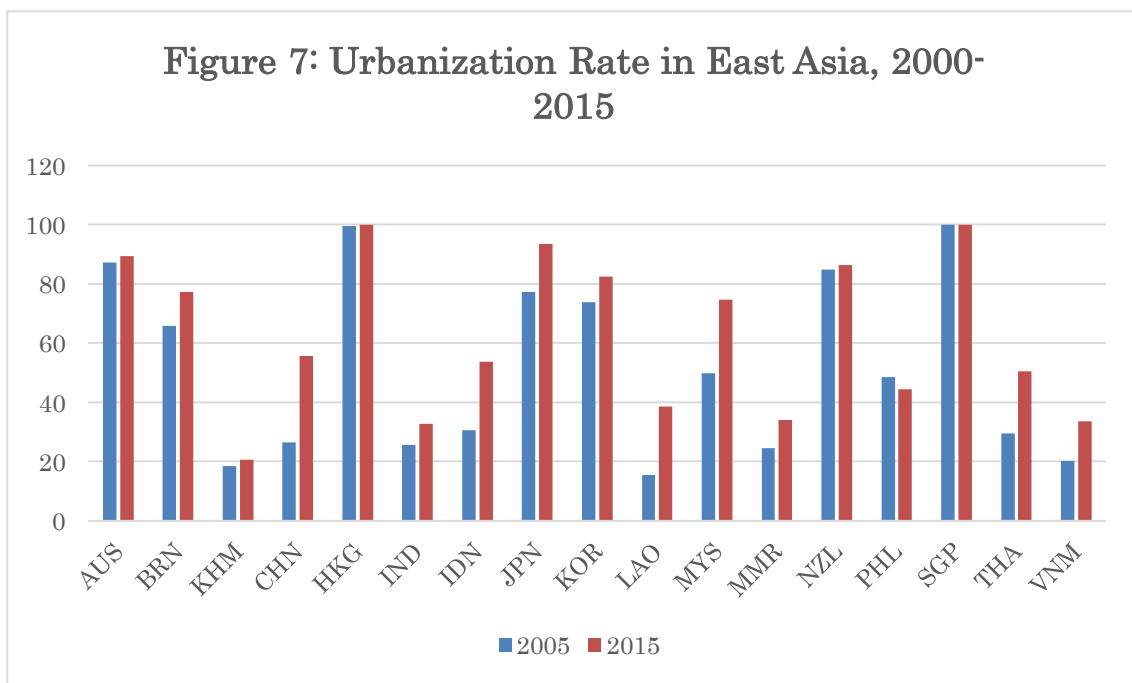


Source: WDI, recent years

3. Cities, Services and Urbanization in Asia

The Asian region has had a strong trend of urbanization as the number of urban population increased over the past two decades (see Figure 7). The urbanization rate for developed countries such as Australia and city-states such as Hong Kong and Singapore are fairly stable over the past decades. However, we do observe increases in urbanization rates for developed

countries such as Japan, Korea and New Zealand from 2000 to 2015. Across the developing Asian countries, we observe strong urbanization effects over the past two decades for China, Cambodia, Indonesia, Lao PDR, Malaysia, Thailand and Viet Nam⁴. The strong urbanization rate is expected to increase the value-added and unbundling activities of global production value-chain in the region as more education population and workforce converges to the urban areas and with more investments in urban networks and amenities.



Source: WDI, recent years

What is driving the high urbanization and services activities in the region? It

⁴ Except for Philippines, we observe increase in urbanization rate from 2000 to 2015. It is fairly stable for Philippines over the past two decades.

is the development and effectiveness of key cities that are driving the rate of urbanization and services activities in the region. We provide the basic macroeconomic trends of key cities in Asia at Table 3⁵. The key cities in Asia are driving the economic growth of the respective countries. In Indonesia, the Java island is the key driver of economic growth of the economy (see Annex 1 for the regional and provincial geography of Indonesia). The cities of Jakarta, Bundung and Surabaya accounts for nearly 14.4% of Indonesian GDP in 2010. These 3 cities account for nearly 6.1% of the total population of Indonesia, and they are likely to house skilled and semi-skilled working population both domestic and foreign human capital driving the services activities and linkages in the economy. If we add Bekasi, Tangerang and Depok with Jakarta to represent the Jakarta Metropolitan region, the Jakarta Metropolitan region represents nearly 19.2% of total Indonesian GDP in 2010 and accounts for nearly 6.4% of the total Indonesian population.

The two Malaysian cities of Kuala Lumpur and George Town, Penang, accounts for nearly 17% of total Malaysian GDP in 2010. They also account for nearly 11% of the total population and mostly accounting for higher educated population. The two cities are the key drivers of service linkages

⁵ Data sources for cities measures are from McKinsey Global Institute (<http://www.mckinsey.com/global-themes/urbanization/urban-world-mapping-the-economic-power-of-cities>)

and services trade in the Malaysian economy, supporting both the manufacturing and services regional production value-chain. The multi-media super corridor (MSC) at greater Kuala Lumpur region and the electronic clusters at Penang supports and provides linkages to manufacturing and services activities in the region.

At Philippines, the National Capital Region (NCR) that includes Metro Manila contributes nearly 35% of the total GDP (Philippines Statistical Agency, 2014; see Annex 1, Table 2B). In fact, Manila contributes nearly 31.6% of the total GDP and house nearly 13.1% of the total local and foreign population. The NCR region is mainly focused on services activities and linkages to manufacturing and services global production value-chain (see Figure 2A at the Annex 1 on contribution and activities of respective regions at Philippines). We observe similar trend at Thailand, where Bangkok accounts for nearly 32% of the Thailand's GDP and host nearly 10.4% of the total population in 2010.

The growth of cities at China also provides the similar structure. We also observe that Shanghai and Beijing accounts for nearly 8% of China's GDP in 2010 and Seoul accounts for nearly 21% of Korean GDP respectively. It is also interesting to observe Australian cities of Sydney and Melbourne account for than 50% of the Australian GDP and accounts for nearly 40% of the total population living at both cities (see Figure 3A at the Annex 1 on geographical size and contributions of the 5 key cities).

Table 3: The GDP, Population and Contribution to GDP for Selected Asian Cities in 2010

Cities	Pop ('000) at City	GDP (US\$ Billion) at city	Per Capita GDP ('000US\$) at City	Share of Total Economy Population (%)	Share of Total Economy GDP (%)	Remarks
	2010	2010	2010	2010	2010	
Key Cities in Indonesia						
Medan	2098	7	5	0.9%	1.0%	Indonesia: Key cities of Jakarta DKI, Bandung, Surabaya in Java accounts for nearly 14.4% of the total Indonesian GDP. If we add Bekasi, Tangerang, Depok to Jakarta as Jakarta Metropolitan region, the Jakarta Metropolitan region contributes nearly 19.2% of total GDP.
Jakarta	9608	71	11	4.0%	10.0%	
Bandung	2395	10	6	1.0%	1.4%	
Semarang	1556	9	8	0.6%	1.3%	
Surabaya	2765	21	11	1.1%	3.0%	
Bekasi	2335	14	8	1.0%	2.0%	
Tangerang	1799	10	8	0.7%	1.4%	
Depok	1739	10	8	0.7%	1.4%	
Batam	944	8	12	0.4%	1.1%	
Balilpapan	558	7	19	0.2%	1.0%	
Samarinda	728	12	24	0.3%	1.7%	
Key Cities in Philippines						
Davao	2239	8	7	2.4%	4.0%	Philippines: Manila accounts for nearly 31.6% of total GDP
Cebu	2459	11	8	2.6%	5.5%	
Manilla	12275	63	9	13.1%	31.6%	
Key Cities in Vietnam						
Ho Chi Minh	6166	18	8	7.1%	15.5%	Viet Nam: Ho Chi Minh and Hanoi accounts for nearly 20.7% of total GDP
Hanoi	2732	6	6	3.1%	5.2%	
Thailand: Bangkok	6876	100.5	28	10.4%	31.6%	

Data sources for cities measures are from McKinsey Global Institute

<http://www.mckinsey.com/global-themes/urbanization/urban-world-mapping-the-economic-power-of-cities>

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	2010	2010	2010	2010	2010	
Singapore	5086	223	58	-	-	
Key Cities in Malaysia						
Kuala Lumpur	1524	24	27	5.4%	9.7%	Malaysia: Kuala Lumpur and Penang at George Town accounts for nearly 17% of total GDP.
Penang: George Town	1563	18	20	5.5%	7.3%	
Key Cities in India						
Bangalore	8167	29	9	0.7%	1.7%	India: The 5 key cities of accounts for nearly 10% of the total GDP.
Chennai	8454	17	5	0.7%	1.0%	
Hydrabad	7520	16	5	0.6%	0.9%	
Delhi	16260	48	7	1.3%	2.8%	
Mumbai	18206	56	8	1.5%	3.3%	
Key Cities in China						
Beijing	18827	206	19	1.4%	3.5%	China: Shanghai and Beijing accounts for nearly 8% of total GDP
Tianjian	11090	129	20	0.8%	2.2%	
Shanghai	22315	251	19	1.7%	4.2%	
Key Cities in Japan						
Tokyo	36442	1875	41	28.6%	34.1%	Japan: Tokyo accounts for a large share of total GDP
Nagoya	8942	444	39	7.0%	8.1%	
Osaka	19144	818	34	15.0%	14.9%	
Hong Kong	7053	225	46	-	-	
Taipei	6807	160	45	28.9%	33.8%	
Seoul	9794	233	34	19.8%	21.3%	

Key Cities in Australia						
Perth	1692	132	56	7.7%	11.6%	Australia: The key cities of Sydney and Melbourne accounts for 53% of total GDP
Adelaide	1211	56	33	5.5%	4.9%	
Melbourne	4074	221	38	18.5%	19.4%	
Sydney	4593	269	42	20.8%	23.6%	
Brisbane	2044	114	40	9.3%	10.0%	

Data sources for cities measures are from McKinsey Global Institute

<http://www.mckinsey.com/global-themes/urbanization/urban-world-mapping-the-economic-power-of-cities>

*Shares of total population and GDP are derived by the authors.

It is the vibrancy and efficiency of cities that drive the economic activities of the respective countries in terms of innovation and developing service linkages to the regional and global production value-chain. In this respect, the importance of human capital, urban network and amenities, knowledge spillovers, and connectivity to the region are the key drivers that create the efficiency of the cities to drive the regional and global production activities. In addition, the efficiencies of the cities are also reflected by the social dimensions in terms of livability and social amenities it could provide to attract skilled and semi-skilled local and foreign population to locate and drive its economic activities.

It is the development and management of cities with sufficient and effective urban networks and amenities will be the key to drive the next stage of value-added activities in the region. The effectiveness of cities to attract skilled labour and create the agglomeration activities will be crucial for value-added and unbundling activities in the global and production

value-chain. The interaction and exchange of ideas between skilled individuals will be crucial to develop the entrepreneurs to invest and take risk in the global production value-chain. The complementary effects from urban networks and amenities with human capital will be crucial for diffusion of new knowledge and for skilled labor to unbundle and new create new services linkages that will enable countries to “join” and “disjoin” the various regional and global production value chains or or manage multiple production value-chains in the region. It is the liberalization policies that will empower the activities of cities and be crucial to unleash the new innovations and development in the services activities in the region.

The growth of cities, urbanization and services liberalization raise several important implications for the unbundling of global production value-chain. Increasingly, cities are facing key challenges to manage the flow of knowledge, technologies, skilled individuals and flow of goods and services. The success of cities to unbundle and develop key activities in global and regional production network seems to directed on the following key issues:

- (a) **Innovation and Entrepreneurial:** The regional competitiveness and productivity of cities to drive creativity in urban areas, leading to **innovation** and more extensive **entrepreneurial** activities. Success in this respect also leads to **larger cities**, reaping economies of scale which further reinforces the story of success. Success in these respects might then be able to offset the **cost of high density of cities** from

population growth (Glaser et al., 2015).

(b) **Urban Networks and Amenities and Skilled workers:** The attraction of cities with **urban networks and amenities** to **skilled workers** to live and work, interacting and exchanging of knowledge seems to be very crucial attraction of cities, proximity will create greater knowledge spillovers and greater innovative activities (Glaser et al., 2009). This will become an important contributing factor for greater services “unbundling” and linkages to global production value-chain activities. Cities are not only to attract ‘skilled’ workers, but also workers who are innovative and can operate and function in different ways. These developments then lead to the emergence of new types of work, thus labour institutions and regulations that creates flexibility in the labour market will be very crucial to support the unbundling activities in the region. It seems that human capital development and appropriate human capital and skills seem to have direct correspondence to new services and new services trade in global production value-chain.

(c) **Creative and Innovative Cities:** Another interesting question is the extent to which a **creative and innovative urban environment**, which is attractive to the right types of workers, leads to greater support for services liberalization. In fact, growth of cities is driven by labour mobility at regional and international level as observed by the key

cities such as LA, New York, San Francisco, Sydney, Melbourne, and Singapore.

- (d) **Cities are key for Services Liberalization:** The role of cities will have key **policy considerations** in terms strategies for the second stage “unbundling” or fragmentation of industrial production and its implications for services sector liberalization. In particular, it will be important to understand the effects of urban amenities on **development of SMEs** and entrepreneurial activities in the region.

The issues of linkages between cities, creating policy environments for creative and innovative cities and mobility of workers will have important implications for the next stage of growth of the region and also the regional FTAs such as RCEP in developing strategies for liberalizing the services sector.

4. Policy Implications and Conclusion

The paper explored the importance of urban amenities and networks in attracting skilled workers and increasing entrepreneurial activities that increase the unbundling of key activities in the regional and global production value-chain. In particular, the paper highlighted the importance of cities as important conduits for innovative activities, attracting skilled workers, and as creative entities for unbundling and developing new services activities in the regional and global production value-chain. This will be very

crucial for the second stage of unbundling in the regional and global production value-chain.

The linkage of cities and urban amenities to regional trade and hence their links to labour market reform will become more important in attracting skilled workers to work at the cities in Asia. The attraction of cities with urban networks and amenities to skilled workers to live and work will thereby contribute to greater services “unbundling” and linkages to global production value-chain activities which is critically dependent on the flexibility of the labour market. It will be important to examine the key urban amenities in the cities and its links to the labour market policy to attract skilled workers to the region.

Further, the level of services liberalization and the importance of cities and urban amenities and network for global production value chain activities in Asia will have policy implications in terms of trade liberalization in the region. This will have important implications for the next stage of growth of the region and also the regional FTAs such as RCEP in developing strategies for liberalizing the services sector. The key policy considerations should be given to strategies for the second stage “unbundling” or fragmentation of industrial production and its implications for services sector liberalization. In particular, it might be important to understand the effects of urban amenities on development of SMEs and entrepreneurial activities in the region.

It is interesting to observe that both the first and second stage “unbundling” are occurring concurrently in the Asian region. It is important to understand the policy considerations for countries in different stages of growth and different stages of fragmentation and the linkages between first and second stage fragmentation.

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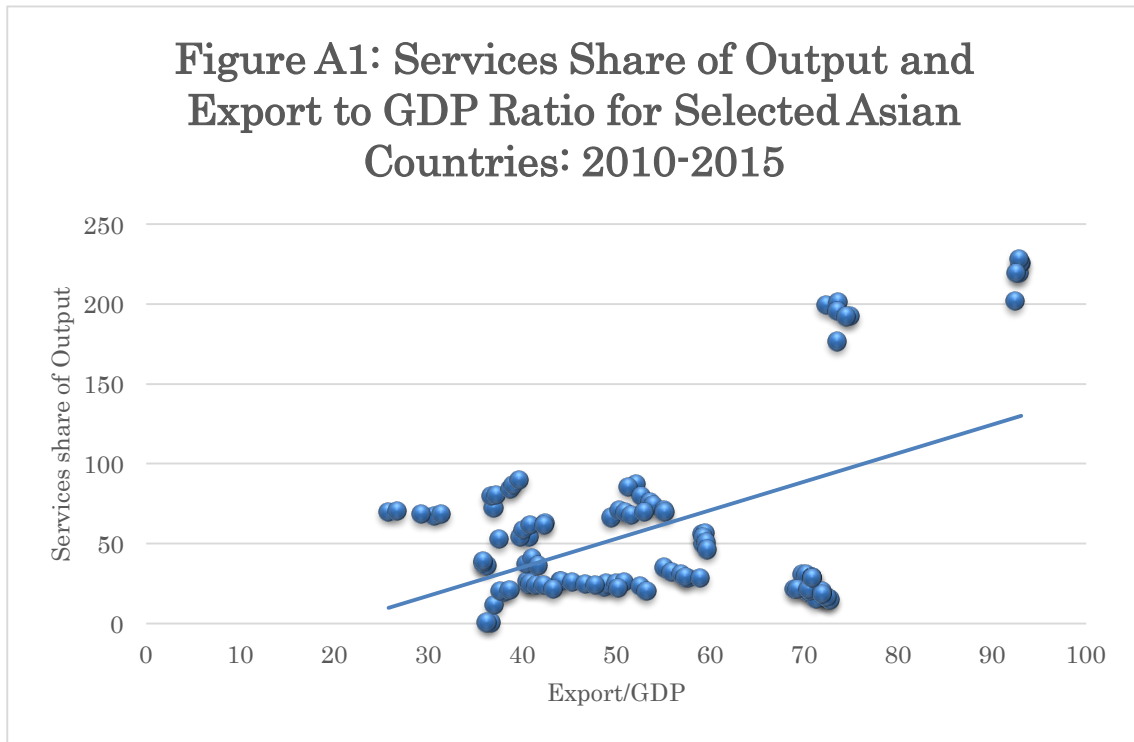
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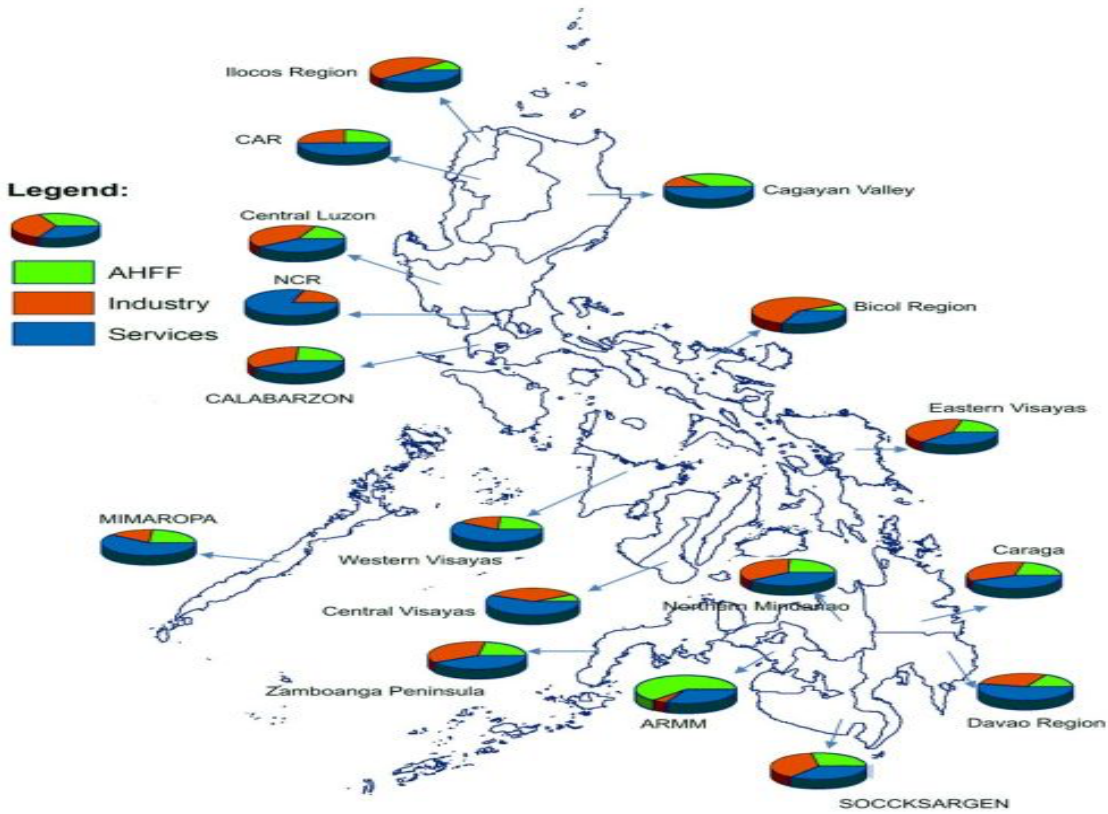
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Annex 1



Source: WDI, recent years

Figure 2A: Regional Contribution to GDP in Philippines, 2014



Source: Philippines Statistical Agency

Table 2B: Regional Accounts of the Philippines (%)				
Gross Regional Domestic Product, 2012-2014				
At constant 2000 prices				
Region / Year		2012	2013	2014
		100.0	100.0	100.0
NCR	NATIONAL CAPITAL REGION	35.7	36.4	36.3
CAR	CORDILLERA ADMINISTRATIVE REGION	1.9	1.8	1.8
I	ILOCOS	3.1	3.1	3.1
II	CAGAYAN VALLEY	1.8	1.8	1.8
III	CENTRAL LUZON	9.3	9.1	9.3
IVA	CALABARZON	17.4	17.3	17.2
IVB	MIMAROPA	1.7	1.6	1.6
V	BICOL	2.0	2.0	2.0
VI	WESTERN VISAYAS	4.1	4.0	3.9
VII	CENTRAL VISAYAS	6.3	6.3	6.5
VIII	EASTERN VISAYAS	2.3	2.2	2.0
IX	ZAMBOANGA PENINSULA	2.1	2.0	2.0
X	NORTHERN MINDANAO	3.8	3.7	3.7
XI	DAVAO REGION	3.8	3.8	3.9
XII	SOCCSKSARGEN	2.7	2.7	2.8
XIII	CARAGA	1.2	1.3	1.3
ARMM	AUTONOMOUS REGION IN MUSLIM MINDANAO	0.8	0.7	0.7
Source: Philippine Statistics Authority				

Figure 3A: Economic Geography of Australia and its Key Cities



Source: <http://www.corporatewellness.com.au/Images/CH/MapAustralia.jpg>

Figure 4A: Geographical Regions of Indonesia



Source:

<http://geocurrents.info/wp-content/uploads/2013/07/Indonesia-provinces-North-Kalimantan-Map.png>