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Reconstructing the Concept of "Single Market and Production Base" for ASEAN beyond 2015

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Abstract: *This paper examines the true meaning of the key word of ASEAN economic integration "single market and production base." Heading for "single market" is a right direction to go, but "single market" cannot literally be achieved with two-dimensional development gaps: geographical and industrial. The paper claims that "single or integrated production base" should be prioritized to narrow the development gaps and direct ASEAN toward "single market."*

Keywords: economic integration, price equalization, factor mobility, development gaps, the 2nd unbundling

JEL classification: F15, O47, R12

1. Economic Integration and Development

The ASEAN Economic Community (AEC) initiative has generated huge expectation as well as anxiety in journalism. A frequently asked question is how our daily life would change with the formation of AEC at the end of 2015 or whether ASEAN would suddenly become like the European Union (EU). We have to answer, "No, it will not happen immediately." Then, will it be a failure of our integration effort? No, it won't. AEC will be a great accomplishment but will not be the final goal. We have to understand that economic integration is an incremental process. The year 2015 will certainly be an important milestone though it will not be the end of our integration effort (ERIA (2012a)).

Key words of AEC are "single market and production base." These are beautiful words, provide good orientation, but are not well defined. If we rigorously interpret them, we immediately realize that it is impossible to be achieved literally. They include two elements: "single market" and "single (or integrated) production base." This paper tries to redefine these two to make the target more sensible.

Our starting point is to think of the relationship between economic integration and stages of development. As explained in the following sections in details, with the existence of development gaps, we cannot achieve pure economic integration or a "single market." Development gaps can be thought of in two dimensions: geographical and industrial. In these two dimensions, there exist market segmentation and immobility of economic elements. We claim that by prioritizing

"integrated production base," integration forces can work for the narrowing of development gaps at the same time and allow us to move toward the direction of a "single market."

The paper plan is as follows: the next section goes back to the basics of international trade theory and examines the concept of "single market" in the context of economic development. Section 3 argues that the effort toward "integrated production base" would narrow the development gaps in two dimensions and head for a "single market." Section 4 checks the macroeconomic consistency of our development scenario. The last section concludes the paper.

2. "Single Market" and Development Gaps

2.1. The Integrated World Economy Equilibrium and Measures for Integration

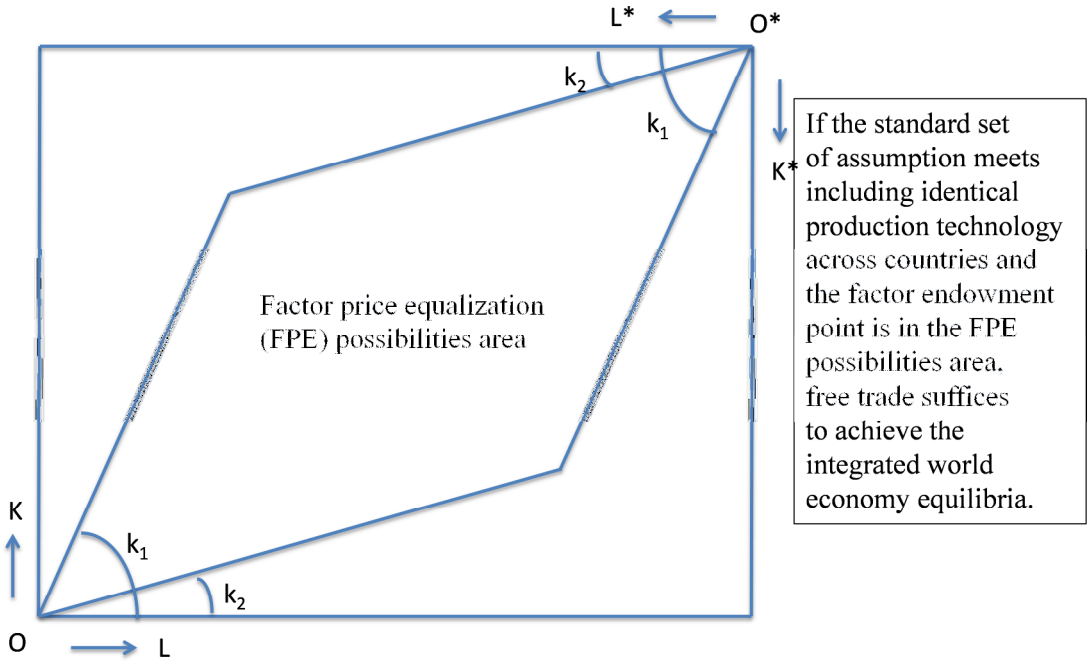
A prime claim of AEC Blueprint is to achieve "single market and production base." To do so, it claims that we have to have free flow of goods, free flow of services, free flow of investment, freer flow of capital, and free flow of skilled labor. This is a right direction to go but cannot be interpreted literally as a target.

In the international trade theory, a pure theoretical economic integration is characterized by the concept of "the integrated world economy" (Helpman and Krugman (1985)) where the international economy will achieve the same equilibria in terms of the total production/consumption and equilibrium prices just as a

completely integrated economy in zero dimension (i.e., the economy is a "point").

The theory does not necessarily mean that all goods and productive factors (and, in an extended model, other elements such as production technologies) should be internationally mobile to achieve such an equilibrium; in the standard 2x2x2 Heckscher-Ohlin model, for example, free international trade in goods suffices for having factor price equalization and reaching "the integrated world economy" if two countries have the same production technologies and stay in the same cone of diversification (i.e., capital-labor endowment ratios are not very different between countries) (Figure 1). This is the claim by the factor price equalization theorem. However, in a looser link with the actual world, more mobility may achieve an equilibrium closer to "the integrated world economy."

Figure 1: The Integrated World Economy Equilibria in the 2x2x2 Heckscher-Ohlin model



Source: Helpman and Krugman (1985).

Along the theoretical thought, there are two ways to assess the degree of economic integration. One is to check the "process" of economic integration by looking at the mobility of goods, services, investment, capital, labor, technology, and so on. The other is to evaluate the "results" of economic integration by measuring how closely prices of economic elements are equalized.

2.2. Geographical Dimension

First, let us look at the geographical dimension of economic integration. In ASEAN, tariffs among six forerunners are almost perfectly removed, and four latecomers cut tariffs as scheduled. Although substantial non-tariff measures and physical/institutional barriers to trade remain, we have to appreciate that integration in traded goods markets is substantially advanced. However, prices of other things widely vary across countries as well as regions within national border.

Tables 1 and 2 show over-time growth of GDP per capita in ASEAN and East Asia with some other countries/regions as a reference, estimated by the Asian Productivity Organization (APO (2013)). Table 1 tabulates nominal GDP per capita using exchange rates, which is roughly parallel to international gaps in wage levels. Table 2 presents real GDP per capita using PPP (purchasing power parity), which reflect the welfare level of people. Differences between the former and the latter are generated by international differences in final demand prices, particularly prices of nontraded goods. These two tables indicate that ASEAN and East Asia are obviously far from a single market.

Table 1: Per Capita GDP Using Exchange Rate, 1970, 1980, 1990, 2000, 2010, and 2011, GDP at Current Market Prices per Person, Using Annual Average Exchange Rate (Thousands of US Dollars)

1970		1980		1990		2000		2010		2011	
Japan	1,992	Brunei	28,252	Japan	25,102	Japan	37,352	Singapore	45,640	Singapore	51,242
Brunei	1,492	Japan	9,282	Brunei	12,915	Singapore	23,415	Japan	43,009	Japan	46,248
Singapore	0,925	Singapore	4,990	Singapore	12,745	Brunei	17,749	Brunei	35,599	Brunei	43,464
Malaysia	0,356	Malaysia	1,776	Korea	6,308	Korea	11,347	Korea	20,540	Korea	22,388
Korea	0,277	Korea	1,689	Malaysia	2,494	Malaysia	3,997	Malaysia	8,337	Malaysia	9,601
Thailand	0,212	Philippines	0,742	Thailand	1,619	Thailand	2,081	Thailand	5,127	Thailand	5,500
Philippines	0,200	Thailand	0,742	Philippines	0,804	Philippines	1,056	China	4,423	China	5,432
Cambodia	0,115	Indonesia	0,541	Indonesia	0,709	China	0,946	Indonesia	3,025	Indonesia	3,575
India	0,112	China	0,307	India	0,387	Indonesia	0,813	Philippines	2,158	Philippines	2,389
China	0,110	India	0,265	China	0,341	India	0,461	India	1,403	India	1,529
Myanmar	0,100	Myanmar	0,178	Lao PDR	0,210	Vietnam	0,405	Vietnam	1,237	Vietnam	1,423
Indonesia	0,085	Cambodia	0,122	Cambodia	0,190	Lao PDR	0,315	Lao PDR	1,096	Lao PDR	1,305
Vietnam	0,028	Vietnam	0,019	Myanmar	0,127	Cambodia	0,308	Cambodia	0,829	Cambodia	0,935
				Vietnam	0,099	Myanmar	0,145	Myanmar	0,709	Myanmar	0,920
ASEAN	0,126	ASEAN	0,562	ASEAN	0,839	ASEAN	1,187	ASEAN	3,198	ASEAN	3,663
(reference)		(reference)		(reference)		(reference)		(reference)		(reference)	
US	5,064	US	12,270	US	23,237	US	35,269	US	46,869	US	48,383
EU15	3,493	EU15	8,961	EU15	16,831	EU15	25,244	EU15	34,987	EU15	35,863
						EU27	21,914	EU27	31,810	EU27	32,772
Australia	3,560	Australia	11,777	Australia	18,917	Australia	21,261	Australia	57,744	Australia	67,424

Data source: APO Productivity Database by the courtesy of Koji Nomura.

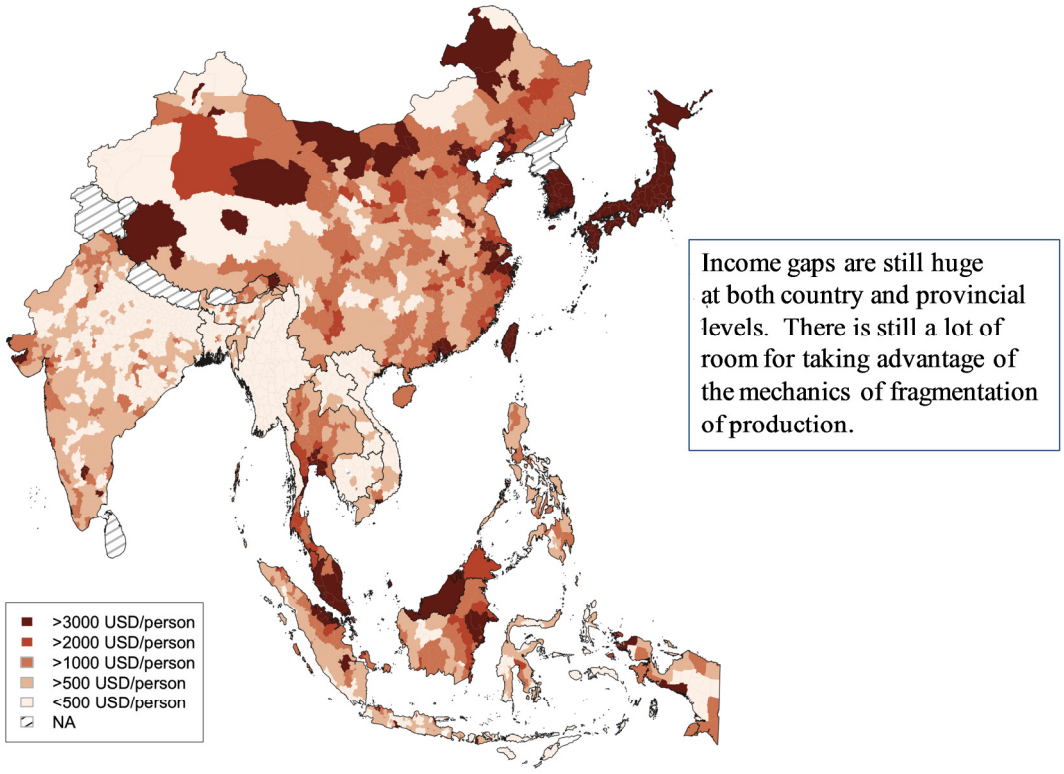
Table 2: Per capita GDP, 1970, 1980, 1990, 2000, 2010, and 2011, GDP at Constant Market Prices per Person, Using 2005 PPP, Reference Year 2010 (Thousands of US Dollars, as of 2010)

1970		1980		1990		2000		2010		2011	
Brunei	55,641	Brunei	94,145	Brunei	53,343	Brunei	51,778	Singapore	58,062	Singapore	59,798
Japan	14,344	Japan	19,787	Japan	29,479	Singapore	42,246	Brunei	50,209	Brunei	50,576
Singapore	8,212	Singapore	16,778	Singapore	28,006	Japan	32,115	Japan	34,346	Japan	34,219
Malaysia	2,998	Korea	5,384	Korea	12,109	Korea	20,789	Korea	29,717	Korea	30,583
Korea	2,699	Malaysia	5,218	Malaysia	7,283	Malaysia	11,305	Malaysia	14,603	Malaysia	15,150
Philippines	2,260	Philippines	3,063	Thailand	4,766	Thailand	6,687	Thailand	9,592	Thailand	9,570
Thailand	1,857	Thailand	2,724	Philippines	2,858	Indonesia	3,060	China	7,553	China	8,216
India	0,899	Indonesia	1,523	Indonesia	2,314	Philippines	3,018	Indonesia	4,419	Indonesia	4,661
Indonesia	0,863	India	0,949	India	1,353	China	2,949	Philippines	3,982	Philippines	4,068
Vietnam	0,695	Vietnam	0,717	China	1,212	India	1,910	India	3,438	India	3,533
China	0,376	China	0,578	Lao PDR	1,042	Vietnam	1,788	Vietnam	3,227	Vietnam	3,384
Myanmar	0,327	Myanmar	0,402	Vietnam	1,009	Lao PDR	1,523	Lao PDR	2,563	Lao PDR	2,714
				Cambodia	0,780	Cambodia	1,203	Cambodia	2,279	Cambodia	2,413
				Myanmar	0,370	Myanmar	0,596	Myanmar	1,563	Myanmar	1,633
ASEAN	1,225	ASEAN	1,914	ASEAN	2,687	ASEAN	3,703	ASEAN	5,369	ASEAN	5,554
(reference)		(reference)		(reference)		(reference)		(reference)		(reference)	
US	23,093	US	28,497	US	35,692	US	44,121	US	46,869	US	47,373
EU15	16,093	EU15	21,033	EU15	26,097	EU15	31,643	EU15	34,035	EU15	34,361
						EU27	27,669	EU27	30,632	EU27	31,024
Australia	20,603	Australia	23,729	Australia	27,517	Australia	34,753	Australia	40,840	Australia	41,742

Data source: APO Productivity Database by the courtesy of Koji Nomura.

Figure 2 presents differences in income levels across provinces in East Asia, estimated by the ERIA=IDE-JETRO GSM Team. Income disparity is evident even among provinces in one country. Such disparity is much larger in less developed countries (LDCs) than in developed countries (DCs).

Figure 2: Income Levels at the Provincial Level (2005)



Source: ERIA=IDE-JETRO GSM Team.

If development gaps exist, prices are not equalized among countries and regions. Prices of traded goods would converge if free trade of goods were achieved. However, prices of other economic elements would not narrow down automatically. Price differences in nontraded goods are substantial, which is known as the Balassa-Samuelson effect. Wage gaps are evident even though a certain portion of the

gaps may be interpreted as intrinsic labor productivity gaps. Production technologies are not same across the countries and regions, on the contrary to one of the basic assumptions for the Heckscher-Ohlin model.

How about mobility? Even if trade and investment liberalization proceeds, we still have economic elements that are not perfectly mobile. In particular, natural persons cannot be perfectly mobile, partially due to restrictive policies with considering social impact and partially due to language/cultural/social barriers. Other elements such as production technologies are not perfectly mobile even though substantial foreign direct investment is conducted.

In reality, across countries and regions, even within a region, price differences do exist. "Single market" cannot be literally achieved with development gaps. Although even among developed countries price differences remain due to some natural barriers to trade such as geographical distance, they are substantially smaller than those among countries and regions with development gaps.

2.3. Industrial Dimension

Second, there exist industrial development gaps. Even within a country or a region, there are gaps between multinationals and local firms, large firms and small/medium enterprises, and manufacturing and non-manufacturing. This is another aspect of incomplete economic integration.

What happens is market segmentation by market failure due to industrial development gaps. There emerges a sort of dual economy in factor inputs including

labor, human capital such as entrepreneurs and engineers, and capital. Production technologies are not fully shared, either. Such industrial development gaps are interpreted as internal integration issues.

Why is the market segmented? What sort of market failure? Positive externalities are not fully exploited; for example, opportunities for local firms to take advantages of technology transfer or spillover from MNEs are not entirely utilized. Dynamic economies of scale are not also fully captured in the development of local firms, traditional industries, and human capital. There is incomplete information, too; for example, paucity of local information on potential business partners is evident. These end up with inefficient segmented markets.

2.4. Proper Sequencing in a Way toward "Single Market"

Heading for a "single market" itself is not a bad move. However, with market failure such as static and dynamic economies of scale including agglomeration effects, existence of public goods and externalities, and incomplete information, we may need to think of a proper sequence. We have noticed by now that opening of capital market before fostering competitive financial sector would be dangerous. Allowing the movement of natural persons across national borders may generate huge social costs. Paths to a single market are not unique. Properly prioritizing integration effort may be necessary to smoothly move toward a single market.

3. "Integrated Production Base" and Development Gaps

We claim that "Integrated production base" should be prioritized in a sequence toward single market in ASEAN. Again, there are two dimensions: geographical and industrial.

3.1. Geographical Dimension

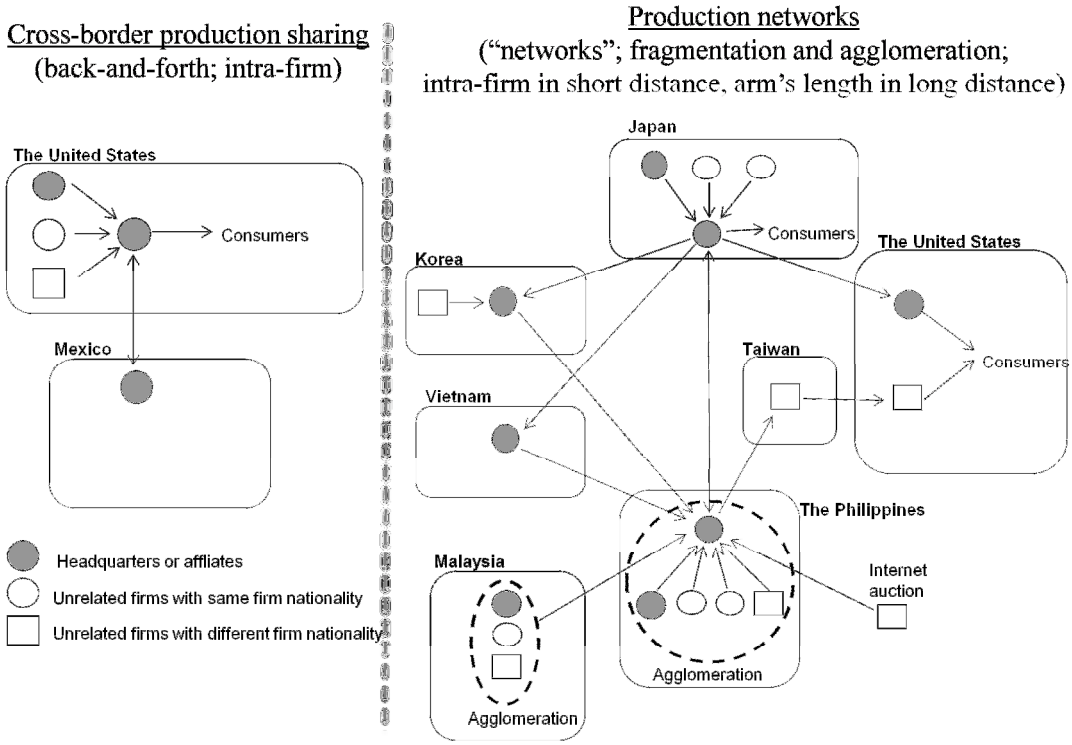
Geographical development gaps generate differences in location advantages. The 2nd unbundling (Baldwin (2011) actually exploits differences in location advantages more aggressively than the 1st unbundling, once service link costs are properly reduced and institutional/physical connectivity is enhanced.

In the world of the 1st unbundling, a LDC must raise up a whole industry, which is sometimes costly and requires a long time. We know numerous cases of failure in import substitution strategies for fostering a whole industry, particularly in cases of small countries. Simple export-oriented development strategy may not work well, either. Pure labor-intensive industries such as garment and footwear may stand and work for immediate job creation. However, rudimentary operation and slow logistics do not generate much technological progress, and weak linkages with other industries do not typically link to wider and deeper industrialization.

With the 2nd unbundling, it is much easier for LDCs to participate in a part of sophisticated production activities by inviting fragmented production blocks. Such international division of labor improves investment climate with faster and more

reliable logistics links. Local linkages may emerge among multinational enterprises and eventually with local firms. Thus, wider and deeper industrialization as well as the formation of industrial agglomeration would be developed while simplistic cross-border production sharing would evolve into production "networks" (Figure 3).

Figure 3: The Evolution of the 2nd Unbundling



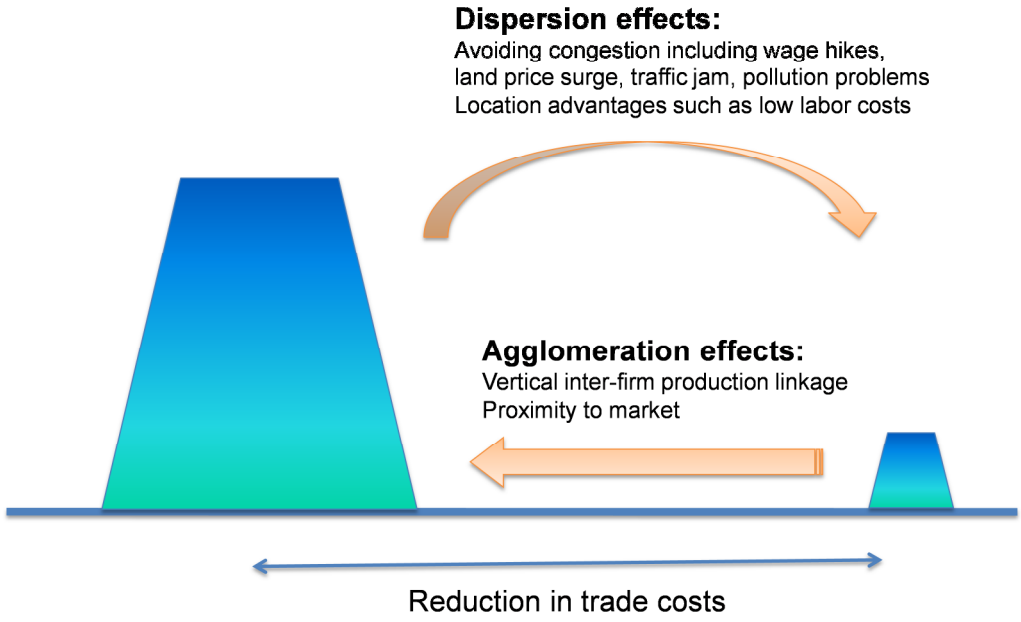
Source: Ando and Kimura (2010).

In the development of production networks, economic activities move from advanced countries/regions to latecomers. As a result, it can contribute to the narrowing of geographical development gaps and the move in the direction of single market. Of course, as new economic geography suggests, reduction in trade costs between the core and the periphery generates both agglomeration and dispersion forces

(Figure 4), and thus we need to make proper adjustments to keep good balance between the two forces by conducting other supplementary policies, particularly on the side of latecomers.

Figure 4: Agglomeration and Dispersion in New Economic Geography

To achieve proper balance between agglomeration and dispersion effects, supplementary policies to enhance location advantages, particularly on the periphery side, are necessary.



Source: ERIA (2010).

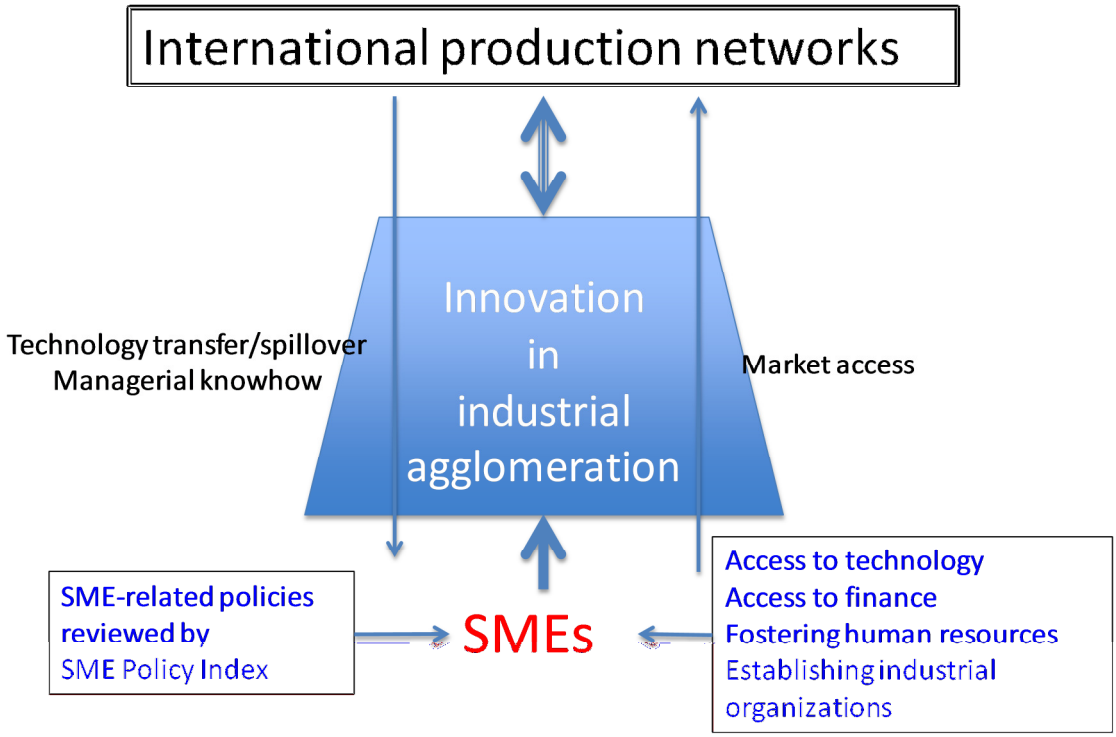
3.2. Industrial Dimension

In the industrial dimension, overcoming market failure and market segmentation are essential processes for industrial inclusiveness, which is important particularly after reaching the middle-income level. Losing competitiveness in purely labor-intensive activities forces countries/regions to enhance location advantages for more capital-intensive or human-capital-intensive production processes or tasks (industrial

upgrading). A shift is required from heavy dependency on MNEs to more active participation by local firms in order to enhance location advantages as well as addressing industrial inclusiveness.

To do it, well-functioning industrial agglomeration is necessary (Figure 5). Proper physical designing of logistics and other economic infrastructure is the starting point. Economic institutions and legal system should be constructed in order to reduce transaction costs and encourage local firms to participate in production networks. We have to make sure for local firms to get access to finance, technology, and market information. Nurturing human capital is also essential. We start a gradual built-up of the basis for knowledge economy including enhancing R&D stock.

Figure 5: Innovation in Industrial Agglomeration



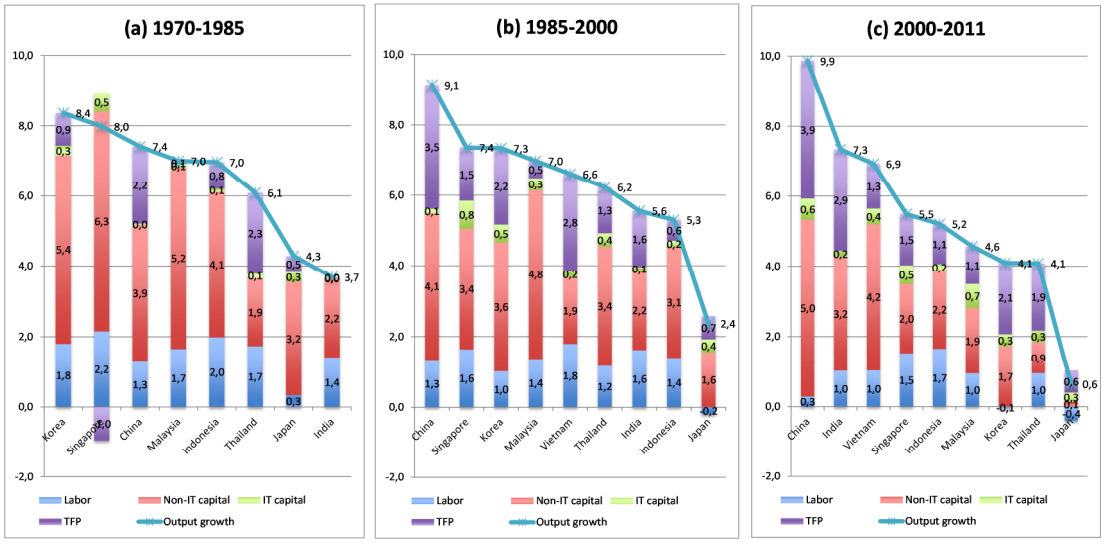
Source: ERIA (2012b).

4. Consistency with Macroeconomic Growth

Can ASEAN overcome development gaps with vigorous economic growth? Let's check the consistency of our development strategy with macroeconomic growth.

Figure 6 presents growth accounting decomposition of economic growth for the East Asian countries, as far as the data are available, by APO for 1970-1985, 1985-2000, and 2000-2011. Overall, the growth rates in ASEAN seem to slow down a bit, but the proportion of TFP in total economic growth seems to increase over time. In the early 1990s, Krugman criticized low TFP growth in East Asia, particularly in Singapore and Malaysia (Krugman (1994)). However, such criticism does not seem relevant in the past two decades anymore.

Figure 6: Sources of Economic Growth (%)



Data source: APO Productivity Database by the courtesy of Koji Nomura.

Why did the growth rates slow down in ASEAN in the 2000s? Table 3 presents macro growth rates, gross investment ratios, and incremental capital output ratios (ICOR) for these countries. ICOR is a simplistic indicator for investment efficiency, calculated by dividing macro growth rates by gross investment ratios. If ICOR is 3 to 5, investment is regarded as pretty efficient. ICOR tends to increase as a country reaches higher stages of development and capital-labor ratios are getting high. Although Thailand seems to have increasing ICOR in the 2000s, Vietnam, Indonesia, Malaysia, and Singapore still have respectable levels of ICOR. We may rather need to watch a decreasing trend of gross investment with these macro growth rates.

Table 3: Annual Growth Rates, Gross Investment Ratios, and Incremental Capital Output Ratios

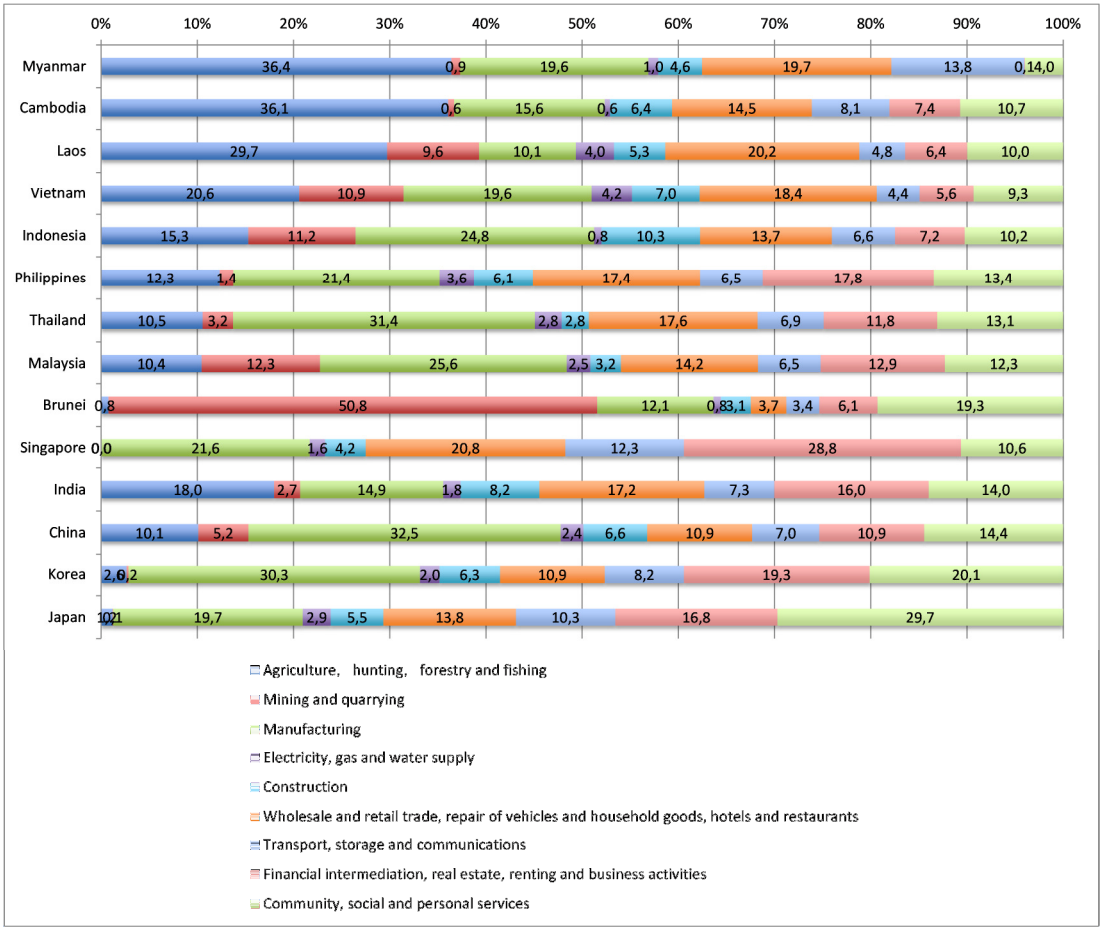
		Vietnam	Indonesia	Thailand	Malaysia	Singapore	India	China	Korea	Japan
Annual growth rates (%)	1970-1985		7,0	6,1	7,0	8,0	3,7	7,4	8,4	4,3
	1985-2000	6,6	5,3	6,2	7,0	7,4	5,6	9,1	7,3	2,4
	2000-2011	6,9	5,2	4,1	4,6	5,5	7,3	9,9	4,1	0,6
Gross investment ratios (%)	1970-1985		25,1	26,6	27,4	41,7	19,2	34,2	29,4	32,8
	1985-2000	20,3	32,9	34,4	32,6	34,5	23,7	38,6	34,1	29,3
	2000-2011	35,9	26,2	25,2	21,9	23,5	30,4	42,4	29,5	22,5
ICOR	1970-1985		3,6	4,4	3,9	5,2	5,2	4,6	3,5	7,7
	1985-2000	3,1	6,2	5,5	4,7	4,7	4,3	4,2	4,7	12,3
	2000-2011	5,2	5,0	6,2	4,8	4,3	4,1	4,3	7,2	35,1

Data source: APO Productivity Database by the courtesy of Koji Nomura.

Figures 7 and 8 present industry shares of value added for the whole economy and within the manufacturing sector. Along the development path, the share of agriculture seems to steadily come down, and manufacturing sector presents a strong growth. In

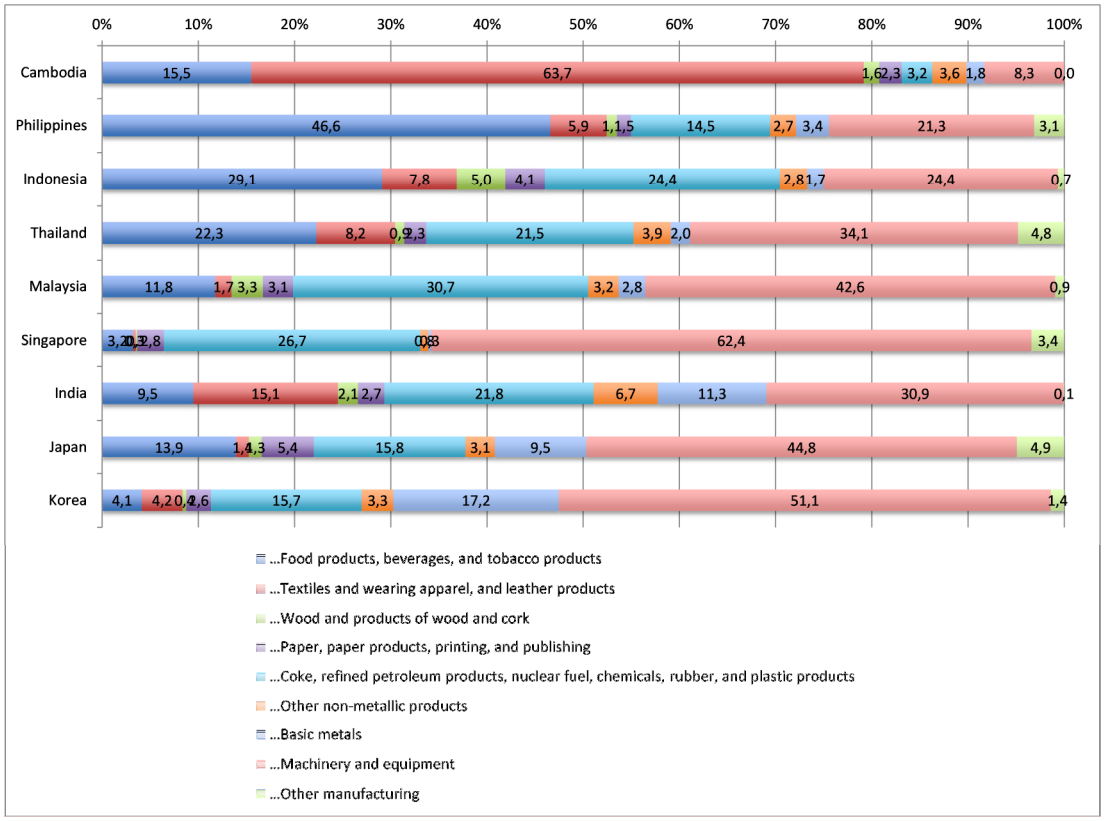
the manufacturing sector, the share of machinery industries would increase. ASEAN can continue growing with the steady development of manufacturing sector and related services.

Figure 7: Industry Shares of Value Added, 2010



Data source: APO Productivity Database by the courtesy of Koji Nomura.

Figure 8: Industry Shares of Value Added in Manufacturing, 2010



Data source: APO Productivity Database by the courtesy of Koji Nomura.

5. What Should ASEAN Pursue beyond 2015?

What to do with the words "single market and production base"? Unless we can think of better, more charming words, we can keep it as the key words toward deeper economic integration of ASEAN. We however have to understand what they really mean. First, the words "single market" show the direction to go but cannot be literally achieved until geographical and industrial development gaps are filled. Second,

achieving "integrated production base" must be prioritized in the integration effort, which can effectively narrow geographical and industrial development gaps. Third, ASEAN economic integration is an incremental process in which economic dynamism with the 2nd unbundling (international division of labor in terms of production processes and tasks) deepens economic integration and narrows development gaps.

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