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Assessing Asian Economic Integration With Cautionary Notes*

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At the end of the day, regional cooperation should be directed towards deepening and broadening the benefits of human development, narrowing the development gap between and within countries, and advancing common interests in a global-rule setting. More often than not, these can be done more effectively and realistically through domestic national policies. Absent of regional cooperation and integration does neither reduce the intrinsic benefits of such policies for the individual countries nor cause disaster for the regional economy (unlike in the concept of regional/global commons). Such benefits can even make the whole region better off. Risk sharing being a clear reward of increased integration is a sound and valid concept. But that is an ideal situation. A growing number of evidence including in Asia has shown that the degree of risk sharing given an idiosyncratic shock in a more integrated regional economy has neither improved nor high. The impact of regional integration must be predicated not on an ideal world but on the world as it is.

INTRODUCTION

Economic integration and cooperation in Asia has traditionally been more market-driven and institution-lite. The Asian Financial Crisis (AFC) in 1997/98 and the Great Recession in 2008 changed that. As the number of Free Trade Agreement (FTA) in Asia increases, intraregional trade has intensified and it continues to grow. In the financial side, the

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cross-border holding of financial assets is still low but began to expand especially since 2008.

In this short manuscript I will first evaluate Asia's integration in trade and financial sector before looking at the progress of regional cooperation. The subsequent section looks at the risk sharing among countries in the region. By using some standard measures, it is shown that the degree of risk sharing in Asia has been limited, making the benefits of regional integration so far to be questioned. I will then provide my critical assessment on the concept of regional integration and cooperation.

TRADE INTEGRATION

Trade integration has progressed significantly in Asia driven mainly by market forces. The emergence of cross-border production networks and China's rise as a manufacturing and export base further strengthened the integration[1]. The proliferation of FTAs, especially after the AFC, also contributes to the process. But for long it has been the unilateral liberalization policies that have played a major role in Asia. Then came the Lehman collapse in 2008. This changed the world's economic landscape. The impact of a sharp fall in world trade during the crisis was particularly severe in export-oriented economies such as Japan, Korea, PRC, Malaysia, Singapore, and Thailand. Industrial countries including the US are important markets for their final goods exports Asia's intraregional trade was mainly in intermediate goods. Production network emerged strongly along with such a trade pattern.

With the declining role of the United States and the European Union's preoccupation with its own financial crisis and unification process, it would be ill-advised for Asia to continue relying on markets in these countries for their final goods exports. With the falling demand from the slow-growing industrial countries, intraregional trade in final goods is expected to increase. Recent data after 2007confirm this (Table 2.1).

Table 2.1 *Shares of East Asia trade partners(%) to individual country's total exports*

Shares of East Asia trade partners (%) to individual country's total exports

	East Asia			US			eurozone			Other Emerging and Developing Economies			Rest of the World		
	2001	2007	2011M2	2001	2007	2011M2	2001	2007	2011M2	2001	2007	2011M2	2001	2007	2011M2
BRU	79.25	74.85	77.52	11.55	5.35	0.73	0.15	0.08	0.04	0.72	3.67	0.15	8.32	16.06	21.5
CAM	9.39	13.21	16.66	63.67	58.15	43.79	14.27	14.94	16.26	0.55	1.64	3.52	12.11	12.07	19.77
PRC	47.17	37.28	30.06	19.95	18.70	20.28	12.11	14.80	16.50	11.94	19.59	20.48	8.83	9.63	12.6
HKG	50.77	61.39	67.94	22.05	13.65	8.25	10.00	9.39	7.24	6.43	6.66	9.18	10.74	8.91	7.3
INO	54.89	58.93	58.74	13.19	9.71	9.30	10.55	9.38	8.75	10.51	14.43	15.49	10.87	7.55	7.71
JPN	37.17	44.11	50.45	28.56	19.13	14.53	11.91	10.44	8.35	8.63	13.09	13.48	13.72	13.23	13.1
KOR	42.68	46.52	47.67	19.88	11.80	9.90	10.38	10.33	6.83	16.58	22.04	25.02	10.48	9.30	10.5
LAO	42.52	62.13	76.88	0.96	1.42	1.36	25.76	7.98	4.35	0.88	1.00	0.45	29.87	27.47	16.9
MAL	52.99	53.67	61.19	19.27	15.09	8.98	10.30	9.83	7.88	7.59	12.28	12.31	9.85	9.13	9.64
MYA	47.07	65.30	67.68	17.18	0.00	0.00	11.09	5.21	2.98	16.36	24.56	26.38	8.30	4.94	2.97
PHI	47.21	58.66	65.39	25.40	16.30	13.21	14.56	14.92	8.68	2.08	3.30	4.52	10.75	6.81	8.2
SIN	53.00	60.77	61.02	14.96	8.75	5.89	10.95	7.36	6.93	9.36	11.57	15.93	11.73	11.56	10.2
TAP	52.54	52.33	52.23	17.06	12.09	9.33	9.93	7.72	7.33	11.22	19.87	22.84	9.26	7.99	8.27
THA	47.76	51.73	54.38	19.68	12.33	9.89	11.62	9.70	7.31	8.54	14.20	16.17	12.41	12.05	12.2
VIE	49.36	41.76	38.30	6.89	20.37	19.70	15.50	13.75	16.36	7.31	6.02	9.59	20.93	18.10	16.04
EAST ASIA	45.97	46.94	46.43	21.67	15.73	14.08	11.26	11.34	10.82	9.81	15.59	17.28	11.30	10.40	11.3

Source: processed by ARIC-ADB

Notice the opposite trend of the relative share of Asian trade with other Asian countries and other emerging market economies (increasing) viz the Asian trade with the US and EU (declining). In these kind of circumstances, freer trade among Asian countries (and other emerging market economies) is a reasonable solution that will simultaneously lower the global imbalances. It is therefore important for the region to dismantle any barriers to intraregional trade. Here, the proliferation of FTAs among Asian countries is helpful.[2]

No less important is the stability of intraregional exchange rates. Evidence has shown that stable intraregional rates can help foster intraregional trade[3]. But external forces can bring more volatility. The second round of quantitative easing (QE2) by the US Federal Reserve aimed at preventing a possible deflationary spiral at a time of fiscal policy paralysis, is adding more pressures for capital to flow out from the US. Even before QE2 the interest rates in the US and other industrial countries were already low, triggering a wave of capital outflows where a substantial amount of them flowed into emerging Asia with its high returns, robust growth, stable macroeconomic conditions, and strong currencies. This brings me to the topic of financial integration.

FINANCIAL INTEGRATION

The extent of financial integration in Asia remains limited (even more so when countries in South Asia is included). Asian economies have closer financial linkages with developed countries rather than among themselves, although intraregional financial flows began to increase after the Great Recession in 2008.

Based on the intraregional correlation matrix for stock and bonds, it is revealed that from the pre to post AFC the intraregional correlation of most ASEAN countries'stock market increased except for Indonesia. The correlation is relatively high during the post AFC especially between the Philippines and Vietnam, between Indonesia and Singapore, and between Malaysia and Singapore (there is also a strong correlation with India). In the case of ASEAN-China, the highest correlation is with Vietnam, although it is also not insignificant with Singapore and Indonesia. After 2008 the region's stock market correlation increases, as most extra regional market became less attractive and some even went into difficulty. In the case of bonds market, the intraregional correlation is weaker.

Another indicator often used to proxy financial integration is the correlation of real interest rates. Here shows that Asia is hardly integrated. The correlation coefficients are either small or negative. One of the sources of negative correlation is the fact that in some small countries (e.g., Myanmar, Lao PDR) the real interest rates have been negative given the relatively high inflation rate. By 2009, however, the real interest rates in all countries (except Myanmar due to lack of data) turned positive, although the monetary policy integration in the region continues to be low.

Some analysts may evaluate the regional financial integration from different perspectives, i.e., looking at the cross-border holding of financial assets. Data show that cross-border equity investment among Asian countries increased from 10.6 to 23.6 percent, or US$38 to US$373 billion, from 2001 to 2010. US investors invested about 24.1 percent of its equity investment in Asia, while EU-15 invested around 12.1 percent by end of 2010(Tables 2.2 and 2.3). Among investors in Asia, those in Indonesia, Singapore, Malaysia and Korea are the most regional-bias in equity investment, although with the exception of Singapore the pair of cross-border investment has been concentrated in only few countries; i.e., Indonesia-India, Malaysia-Singapore-Hong Kong, China, and Korea-PRC-Hong Kong, China. A significant increase of investment by regional investors has taken place in India, jumping from a quarter of a billion to almost US$28 billion. Singapore an investors have been particularly attracted to the Indian market, and more recently Indonesian investors have begun to follow suit.

In the debt market, the size of Asian cross-border holding increased from 4.2 percent in 2001 to 7.2 percent in 2010, or US$53 to US$233 billion, of which short-term debt account for a larger share. The lack of regional bias is clearest in the case of Japanese investors, who invested only 1.1 percent of their total debt portfolio investment in Asia, while Korean investors about 8.8 percent, down from 21 percent in 2001 (see Tables 2.4 and 2.5). By end of 2010, investors from Thailand are the most regional bias with respect to debt investment. Their exposure in Asia is roughly 71.1 percent, mostly in Korea. Malaysia is ranked the second, 54.3 percent, also mostly in Korea.

Table 2.2 *Asia cross border equity securities investment (in million USD)*

Investment from: end-2001

Investment in:	Hong Kong China	India	Indonesia	Japan	Korea Republic of	Malaysia	Philippines	Singapore	Thailand	Total Asia	United States	EU15	Total value of investment
China P.R.	5,813	–	–	789	15	8	–	1,035	1	7,801	2,310	3,083	13,239
Hong Kong China	..	–	11	1,048	100	47	–	3,125	6	8,135	30,154	34,258	79,853
India	–	–	–	31	–	1	–	218	–	260	6,897	6,492	13,276
Indonesia	–	–	–	80	13	44	–	302	15	428	1,626	1,164	3,850
Japan	2,145	–	2	..	101	7	–	1,836	1	3,193	110,714	126,796	332,338
Korea, Republic of	1,311	–	–	381	..	8	–	1,034	–	2,735	23,537	15,400	51,853
Malaysia	601	–	–	239	121	..	–	5,295	–	6,581	2,578	3,169	12,822
Philippines	60	–	–	213	3	61	..	420	1	758	1,014	579	3,447
Singapore	1,100	–	2	824	1	461	2	..	6	2,801	21,378	9,220	36,885
Taipei China	1,464	–	–	354	–	8	–	987	1	2,875	19,507	13,609	39,023
Thailand	440	–	–	230	36	15	1	1,320	..	2,234	1,536	3,068	7,791
Vietnam	–	–	–	1	6	10	–	25	3	46	–	10	86
Total Asia (A)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37,837	[illegible]	[illegible]	[illegible]
Total value of investment (B)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ratio of A to B	0.7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
United States	15,459	–	–	123,511	454	58	92	6,034	31		–	690,374	1,026,741
EU15	29,627	–	1	63,924	160	55	14	5,271	8	–	843,101	1,383,616	2,637,840

Source: Author's calculation based on data from IMF, Coordinated Portfolio Investments Survey
Notes: The data are derived from the creditor side for both assets and liabilities
– Indicates a zero value or a value less than US$ 500,000
... Indicates an unavailable datum
(p) Indicates preliminary data
(c) Indicates that a non-zero datum was not disclosed for reasons of confidentiality

Table 2.3 *Asia cross border equity securities investment (in million USD)*

Investment from: end-2010

Investment in:	Hong Kong China	India	Indonesia	Japan	Korea Republic of	Malaysia	Philippines	Singapore	Thailand	Total Asia	United States	EU15	Total value of investment
China P.R.	119,252	1	10	13,496	10,639	347	..	34,317	182	205,954	100,624	106,245	438,904
Hong Kong China	–	63	3	16,654	6,134	2,599	–	9,192	206	33,752	172,520	132,971	290,375
India	690	..	–	5,163	3,192	66	–	16,680	1	27,725	86,477	75,011	317,490
Indonesia	1,224	44	..	3,341	415	706	–	2,877	21	8,849	25,239	21,612	130,625
Japan	5,507	31	–	..	4,459	147	–	14,713	16	24,872	450,095	214,386	913,813
Korea, Republic of	1,606	32	–	5,816	..	400	–	6,385	1	16,293	82,416	98,952	269,921
Malaysia	949	1	–	1,851	119	..	–	8,613	12	11,746	20,270	16,748	54,315
Philippines	134	1	–	271	416	26	..	976	2	1,529	9,026	5,456	18,720
Singapore	6,410	7	22	6,427	959	7,186	0	..	595	23,583	56,356	38,047	131,726
Taipei China	3,791	13	–	3,366	797	629	..	3,365	–	11,901	84,279	68,103	185,043
Thailand	694	42	–	1,605	321	320	–	2,973	..	6,150	20,899	24,094	64,752
Vietnam	140	–	–	222	480	31	–	335	12	1,281	407	287	2,676
Total Asia (A)	[illegible]	240	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total value of investment (B)	[illegible]	1,007	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ratio of A to B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
United States	18,768	204	871	269,567	22,465	8,487	9	30,073	1,215		–	1,193,219	2,921,539
EU15	66,741	506	2	154,847	11,695	2,489	3	32,073	1,669	–	1,629,567	3,451,082	8,317,213

Source: Author's calculation based on data from IMF, Coordinated Portfolio Investments Survey
Notes: The data are derived from the creditor side for both assets and liabilities
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Table 2.4 *Asia cross border debt securities investment (in million USD)*

Investment from: end-2001

Investment in:	Hong Kong China	India	Indonesia	Japan	Korea Republic of	Malaysia	Philippines	Singapore	Thailand	Total Asia	United States	EU15	Total value of investment
China P.R.	2,367	..	–	880	147	..	–	102	–	1,481	534	1,112	7,025
Hong Kong China	–	..	96	1,258	296	29	25	1,432	118	3,484	1,909	3,717	16,089
India	–	–	–	158	66	3	–	289	–	584	301	434	2,003
Indonesia	–	..	–	108	43	4	3	300	–	741	395	422	1,867
Japan	7,103	..	1	–	75	15	6	3,848	–	10,213	27,326	75,370	203,707
Korea, Republic of	3,748	..	–	5,454	–	3	7	2,292	–	11,623	4,938	2,360	24,920
Malaysia	1,817	–	2	2,200	330	–	3	1,159	–	8,647	1,680	1,732	8,705
Philippines	1,179	–	–	1,347	106	41	–	781	–	3,455	2,671	1,820	9,904
Singapore	1,282	–	48	1,209	87	12	63	–	34	2,847	1,412	3,351	14,588
Taipei China	689	..		82	8	15	9	219	–	1,064	253	977	2,074
Thailand	689	..	–	719	351	21	–	681	–	2,403	782	768	4,317
Vietnam	–	..	–	30	18	–	–	–	–	49	21	37	106
Total Asia (A)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total value of investment (B)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ratio of A to B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
United States	27,385	–	213	358,689	3,303	110	1,702	10,577	226	412,150	–	626,335	2,074,148
EU15	22,565	–	214	422,088	1,017	493	41	29,498	198	480,536	369,865	2,218,956	3,473,376

Source: Author's calculation based on data from IMF, Coordinated Portfolio Investments Survey
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Table 2.5 *Asia cross border debt securities investment (in million USD)*

Investment from: end-2010

Investment in:	Hong Kong China	India	Indonesia	Japan	Korea Republic of	Malaysia	Philippines	Singapore	Thailand	Total Asia	United States	EU15	Total value of investment
China P.R.	45,675	..	106	494	167	9	–	1,870	1	49,622	1,602	6,332	59,447
Hong Kong China	..	–	64	1,484	405	234	207	6,410	419	9,341	2,297	6,023	22,380
India	8,014	–	10	1,057	94	226	–	10,520	446	21,542	5,609	17,665	58,309
Indonesia	378	–	..	2,843	74	203	697	12,637	43	16,730	9,622	4,480	42,694
Japan	11,832	4	56	–	1,220	65	82	10,558	73	38,419	52,700	114,567	534,465
Korea, Republic of	16,383	–	115	12,200	..	2,427	–	17,543	11,612	52,079	25,772	40,249	117,936
Malaysia	6,575	–	49	2,774	106	–	21	8,261	109	16,982	11,940	23,366	61,503
Philippines	1,151	–	1	2,807	219	512	..	2,769	45	7,646	7,506	7,177	26,655
Singapore	5,204	7	221	4,959	163	1,891	119	–	576	13,496	7,592	11,149	49,432
Taipei China	1,661	..	6	26	17	–	–	4,287	–	5,956	377	6,576	10,226
Thailand	128	–	2	896	93	165	–	3,116	..	5,090	2,036	4,910	12,360
Vietnam	290	–	1	28	22	–	–	113	1	464	874	2,003	3,158
Total Asia (A)	[illegible]	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total value of investment (B)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ratio of A to B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
United States	72,109	175	215	658,675	12,760	1,047	1,694	35,315	1,604	331,407	–	1,328,354	6,969,405
EU15	95,912	202	1,069	471,776	7,971	1,182	1,114	69,392	1,065	1,040,060	325,686	9,309,008	13,454,332

Source: Author's calculation based on data from IMF, Coordinated Portfolio Investments Survey
Notes: The data are derived from the creditor side for both assets and liabilities
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Although as a share of their total investment US and EU15 exposure in the Asian debt market is smaller than in equity investment (majority of this is in Japan), the size of their total investment in Asia far exceeded that of Asian investors themselves. By the end of 2010, the exposure of US and EU15 investors in the Asian equity market reached more than US$1.1 and US$0.8 trillion, respectively, compared to the intra-Asian investment of only US$373 billion. In the debt market, the EU15's exposure in Asia (US$342 billion) was not only larger than that of the US (US$ 127 billion), but it also exceeded the intra-Asian investment (US$233 billion). This has raised concern among Asian policy makers during the Eurozone crisis.

Broken down into short-term and long-term debt, most cross border debt within the region is long-term with a total intra-Asian value of US$150 billion in 2010, where Hong Kong, China (US$15 billion), Japan (US$13 billion) and Singapore (US$10 billion) dominate. In the case of short-term debt, where total intra-Asian value amounts to US$45 billion, Singapore and Thailand's investments in Korea take the lead (US$3.8 and US$3.5 billion, respectively). In general, non-Asian investors hold more long-term than short-term debt in the region.

Why is there a lack of regional bias? What are the most critical criteria that regional investors use in their investment decision? García-Herrero, Wooldridge, and Yang (2009) looked into the issue of why Asian foreign investment is concentrated in financial markets outside of the region instead of in Asian markets - analyzing empirically the geographical composition of the cross-border portfolio holdings of more than 40 source countries.

By conducting field surveys covering 69 respondents in 10 countries from March to mid-May 2011 using the method of the *Analytic Hierarchy Process* (AHP), it is found that the primary driver for Asian investors to invest outside home country's bond market is also to improve overall returns. Lowering portfolio risks is in a close second, followed by improving portfolio diversification. We also segregated the respondents into high-yield and low-yield investors' categories. The field survey reveals that high-yield investors prioritize higher absolute returns more significantly than reducing risk - compared with the total sample. The wider the gap between return and risk the more reluctant high-yield investors in doing intra-regional investment as domestic yields provide the highest returns in the region. Meanwhile, the gap between return and risk for low-yield investors is minimal - an indication of a more conservative investing approach as minimizing risk is almost as important as chasing higher returns. This explains the limited investment of low-yield investors in high-yield countries. Diversification - despite being important in reducing correlation in the items in a portfolio basket - is the least important motivational factor for intra-regional investment. Investors in the region believe that bond returns in the ASEAN region are highly correlated.

Low-yield investors (mostly Japanese) place great value to liquidity compared with other investors - tilting the total sample to favor this factor. It is vital for these investors that markets in which they plan to invest have ample liquidity as well as the necessary depth to execute trade views or portfolio rebalancing with ease and precision. The magnitude of funds these investors can deploy prevents them from participating in small high-yield markets without adversely affecting prices. Thus, any added benefit of investing intra-regionally in high-yield markets is difficult to achieve upon implementation. Further, low-yield investors believe that during crises liquidity vanishes first in high-yield markets. They cannot immediately liquidate their holdings, resulting in huge losses.

Meanwhile, high-yield investors (mostly Indonesians) attach more importance to the risk-return profile of the investment on a stand-alone - and on an aggregate basis - with respect to their portfolio holdings. These investors are willing to allocate their portfolios in regional investment if it shows higher risk-adjusted returns compared with their domestic market. Since these investors operate in high-yield countries already, they are not attracted in investing outside their home market.

The emphasis on liquidity by low-yield investors reinforces their conservative bias, and they are likely to forego higher risk-adjusted returns for higher liquidity. Meanwhile, high-yield investors showed more rational aggressiveness in their investment choices, since they carefully study the risk-return profile of the investments that interest them.

Finally, investors addressed structural issues in executing intra-regional investments. Openness and trading barriers were given almost equal importance, followed by a challenging regulatory framework and transparency of governance. Low-yield investors' bias towards openness can be viewed in the context of their preference for liquidity in the investment factors. Since these investors value liquidity, they are on the look out for any form of explicit or implicit capital control. Restricting capital flows prevents execution of trade views and portfolio rebalancing resulting in lower risk-adjusted return. For example, if the Japanese investor has a target price, he will liquidate the investment once the target is achieved and return to his local-currency. If the target country imposes capital control, the investor will not be able to liquidate his holdings and execute his investment strategy with precision.

REGIONAL COOPERATION

Coincidently or not, Asia's stronger integration in trade than in finance has been in line with the fact that regional cooperation in trade is ahead and having a longer history than cooperation in finance. Numerous things have been proposed, tried, and implemented in regional trade cooperation. What the region may now need to shift to is the "second generation" of cooperation that focuses on behind-the-border barriers (institutional or regulatory deficiencies, protection to sensitive sectors etc). This is more difficult than the "first generation" cooperation (dealing with tariff-related issues) because it is more sensitive to domestic political affairs. It is important to note, however, that we have to be more careful in contrasting the Westphalian idea of government defining sovereignty, as strongly held by most Asian countries in many regional agreements, with the 'celebrated'concept of regional cooperation. I will discuss further this issue in the next section.

It is the regional cooperation in financial sector that is lack behind, yet increasingly more important in Asia given what happens in the current global economic sphere. Let me begin with the background. Disappointed with the IMF-driven policy during the AFC in 1997, a number of countries initiated regional cooperation to deal with future crisis. The early proposal to set up an Asian Monetary Fund (AMF) was shelved because of the rejection of the United States and the IMF who argued that it would be an unnecessary duplication since the IMF can continue functioning as a lender of last resort through its Supplementary Reserve Facility (SRF) and Contingent Credit Line (CCL). The counter-argument, however, pointed to the fact that the severity of Asian crisis required fast and large amount of disbursement of liquidity support that put serious constraints on the IMF to act in a timely manner with sufficient financial resources[4].

The episode, however, did not stop governments in the region from pursuing its efforts to strengthen the cooperation. In May 2000, they declared the Chiang Mai Initiative (CMI) that effectively expanded the swap arrangements among ASEAN countries to include Japan, PRC and Korea (hence the term ASEAN+3)[5]. Intended to focus on closer cooperation and concrete regional financial arrangement, the proposal stipulated the importance of regional surveillance and monitoring, particularly of capital flows, and the need to complete a network of Bilateral Swap Arrangements (BSA) that would provide liquidity support for member countries when needed. Although the name Asian Monetary Fund was no longer used in order to avoid a further conflict, all the above components are essentially similar to what constitutes the IMF's standard tasks. Following intense discussions, Finance Ministers and Central Bank Governors of ASEAN+3 and the Monetary Authority of Hong Kong, China declared that the expanded CMI, which is called the Chiang Mai Initiative Multilateralization (CMIM), became effective in March 2010.For crisis prevention, they stressed the importance of enhancing market confidence by raising the committed amount within the CMIM framework (currently $ 120 billion), and to collaborate with the IMF particularly on the surveillance work[6]. As the new crisis prevention mechanism will apply only for member countries with strong policy track records, questions were raised how to deal with those countries that would not be qualified for it. The difference of designs between the IMF's traditional Stand-By Arrangements (SBA) and the Flexible Credit Line (FCL) was also highlighted, where the latter may help overcome the IMF stigma which remains widespread throughout the region.

On April 2010, ASEAN+3 finance ministers agreed to establish an independent regional surveillance unit, ASEAN+3 Macroeconomic Research Office (AMRO) to monitor macroeconomic and financial conditions, to detect emerging vulnerabilities, and to support the CMIM decision-making. Not meant to replace the IMF, this Singapore-based office can and will play a crucial role for the future of CMIM, as long as it is credible, competent, and independent. The effectiveness of CMIM also depends on whether the AMRO can perform the regional surveillance work effectively.

Another important development in regional cooperation is the establishment of Asian Bond Market Initiative (ABMI). Through this Initiative the ASEAN+3 officials intend to develop and integrate the region's bond markets where the underlying objective is to promote the utilization of the region's savings for investment within the region and the resilience of the economies to external shocks. The ABMI has contributed to the remarkable growth and development of the region's bond markets since its inception in 2003 and is expected to further contribute to their integration. There are currently discussions about expanding the Initiative beyond bond markets to include stock markets, essentially scaling up ABMI to ACMI (Asian Capital Market Initiative), despite concerns over a possible duplication of the efforts.

Within the context of ABMI, Credit Guarantee and Investment Facility (CGIF) was set up in May 2010 as a trust fund of ADB with an initial capital of US$700 million (the ADB contributes $130 million as paid in capital). The main function of the CGIF is to provide credit enhancement to allow the region's marginal issuers to issue local currency bonds and larger issuers to issue across national border by overcoming the sovereign credit ceiling. In the future, the CGIF could develop further as an investment facility. CGIF is expected to be operational in early 2012

Recently, ASEAN+3 finance ministers have endorsed to study three possible areas for future cooperation; i) infrastructure financing, ii) disaster risk insurance, and iii) using local currencies for the regional trade settlement. Infrastructure financing was discussed in the ASEAN+3 working group meeting on 14 September this year (a seminar on the issue is planned to be held in November), while Japan's Ministry of Finance (JMOF) will organize discussions on disaster risk insurance in October. The issue of regional trade settlement is planned to be held in Korea also this year. One of the sticking issues on infrastructure is about financing; either to increase the resources for multilateral financial institutions to provide significantly larger lending for infrastructure, or to establish a new mechanism to channel resources for infrastructure development.

Next is cooperation in macroeconomic affairs. With spillovers from national policies (e.g., capital controls of various forms to respond to increased capital flows and current global economic problems)and the growing interdependence among region's economies, the next step for regional cooperation could possibly be in macroeconomic policy. Given the potential spillover effects and externalities of any unilateral policy, Asia can benefit from a stronger mechanism of macroeconomic monitoring, information sharing, and even in policy cooperation. One of the emerging issues that increasingly needs coordination and cooperation is on maintaining exchange rate stability, particularly the stability of intraregional exchange rate to support the intra-Asian trade. This will also be consistent with the rebalancing efforts as stressed by the G20. The modality of cooperation, however, remains to be explored.

Following the collapse of Lehman, capital inflows into Asia surged, exerting strong pressure on exchange rates to appreciate. The resulting dollar depreciation and Asian currencies'appreciation led many countries to respond by either imposing capital controls or conducting exchange rate intervention. This makes efforts to maintain stability of intraregional exchange rates more difficult, but at the same time it opens up the possibility of policy coordination. Indeed, some countries in ASEAN+3 have initiated a series of discussions and policy dialogues on this issue[7]. The phenomenon of a sudden stop (as happened in 1997) is another source of concern.

But the difficulty in finding an acceptable modality of cooperation due to the diversity of exchange regimes and associated political sensitivity may have put off any formal arrangement from emerging. A classic case of the prisoner's dilemma thus prevails.

Indeed, since the nature of cooperation in Asia has been traditionally institution-lite, and individual countries always tend to put a huge weight on the value of national sovereignty, cooperation began only informally through dialogues and discussions among policy makers, allowing mutual understanding about the potential spillover effects of national policies. Only after greater trust among member countries is established, a deeper form of cooperationcan be pursued. There is a whole spectrum of options to select, ranging from a basket system that can be designed to avoid the "N-1" problem, to Bretton Woods-like systems where countries directly peg their currencies to each other and let them float jointly against other currencies, say, the US dollar. The latter is similar to what happened in Europe before a common currency was adopted and managed by a supranational body, the ECB. The rates against a regional basket (e.g., the Asian Monetary Unit, AMU) as a reference zone can also be considered, where certain deviations from it will trigger some policy measures.

Asia is likely to shy away from a strong form of cooperation or other forms that require strong institutions such as monetary union or common currency. The current sovereign debt crisis in Europe made the benefit of having such arrangements more doubtful. Asia also does not have a good track record of institution-heavy economic cooperation[8]. An alternative approach maybe to assess policies that have been taken by governments throughout the region before offering alternative cooperative policies. Building on the region's recent experience of capital controls to deal with massive inflows of capital and realizing the political sensitivity of the issue, member countries can then gradually move to more formal exchange rate cooperation.

RISK SHARING

The effect of financial integration on economic growth has been well documented, more so than the effect of integration on international risk sharing. Theoretically, the consumption growth rate in countries participating in integration will be cross-sectionally independent of idiosyncratic variables as financial integration increases (Cochrane, 1991). The key factor is greater insurance. If interregional or international capital markets are well integrated, countries can insure against idiosyncratic shocks. As argued by Obstfeld (1994), individuals will invest more in high risk and high returns assets if the risk can be shared or diversified.

By looking at the impact of financial integration on macroeconomic volatility (one of the indicators of risk sharing), Prasad, Rogoff, Wei and Kose (2003) shows that for more financial integrated developing countries, the consumption volatility relative to GDP volatility has increased. Looking at seven developed countries in East Asia, Brouwer and Dungey (undated) tested for Granger-causality between growth rates in consumption, investment and GDP between countries, and found that despite the evidence of common trends and factors, the patterns of commonality differ between these variables[9]. Most of the pairs of data do not reject the null hypothesis that there is no causality between growth rates in those variables across pairs of countries. Thus, there is little evidence of an East Asian business cycle. The authors used these results to advance an argument that there is a scope for policy action to advance integration. The large idiosyncrasy component especially of investment, they argued, suggest that there will be large gains from further integration and cooperation that deepen investment links in the region.

Since the work of Backus, Kehoe and Kydland (1992), there has been a number of studies to examine the presence of full risk sharing using cross-country income and consumption correlations. Most of these studies found that the hypothesis of perfect risk sharing tends to be rejected. Attention has therefore been focused on investigating the incompleteness of risk sharing by looking at the extent of consumption smoothing.

By using data from 1994q1 to 2006q1, I find no support for consumption smoothing among six East Asian countries. The coefficients either have a wrong sign or are insignificant (Table 2.6* indicates a 10 percent significant level). Within ASEAN, only for Malaysia and Thailand the coefficients are positive and significant. Even when the period is split into before and after the AFC the results are generally the same: no evidence of consumption smoothing. If the integration in the region is more global, as argued by some observers, this result is not surprising. But when individual country is paired with Japan or with the U.S the results are generally the same, i.e., no evidence of consumption smoothing (available upon request)[10].

Table 2.6 *Consumption smoothing among East Asian countries*

$$\Delta\log(C_{i,t}) = \alpha + \beta\Delta\log(C_{b,t}) + \gamma\Delta\log(Y_{i,t}) + e_{i,t}, i = 1,2,\ldots,R$$

	With all countries		Within Asean	
	C	Y	C	Y
Japan	0.008	0.977*		
Indonesia	0.09	0.96*	0.27	0.86*
Korea	-0.17*	1.2*		
Malaysia	-0.04	1.13*	0.12*	0.97*
Philippines	-0.04	0.98*	-0.03	1.01*
Thailand	-0.08*	1.07*	0.07*	0.96*
	With all countries			
	Before crisis 1994q1-1997q2		During and after crisis 1997q3-2006q1	
Japan	0.04	0.99*	0.02	0.95*
Indonesia	0.23*	0.95	-0.05	0.98*
Korea	0.01	0.91*	-0.20*	1.20*
Malaysia	-0.02	1.18*	0.2*	0.43*
Philippines	-0.004	0.95*	-0.1	1.01*
Thailand	-0.05	0.59*	0.01	1.05*

The results for investment show that there are slightly more co-movements. The coefficients are significant for Indonesia and Thailand, and with respect to ASEAN-4 the coefficient for the Philippines has also become significant. But there is no improvement in co-movements after the crisis (Table 2.7). The significant results for all ASEAN-4 during and after the AFC when Singapore is used as the reference country reflect the aggressive move of Singapore in investing in the neighboring countries during the last few years[11].

Table 2.7 *Investment co-movements among East Asian countries*

$$\Delta\log(I_{it}) = \alpha + \beta\Delta\log(I_{bt}) + \gamma\Delta\log(Y_{it}) + e_{it}, i = 1,2,\ldots,R$$

	With all countries		Within Asean	
	I	Y	I	Y
Japan	0.008*	0.91*		
Indonesia	0.9*	1.26*	1.18*	0.62*
Korea	-0.1	1.74*		
Malaysia	0.08	1.85*	-0.01	1.93*
Philippines	-0.04	1.11*	0.16*	0.78*
Thailand	0.51*	1.51	0.45*	1.56*
	With all countries			
	Before Crisis 1994q1-1997q2		During and After Crisis 1997q3-2006q1	
Japan	0.22*	0.78*	0.06*	0.97*
Indonesia	-0.08	1.44	-0.51	1.55*
Korea	0.01	1.15*	-0.03	1.74*
Malaysia	0.6*	0.76	-0.15	2.01*
Philippines	-0.6*	0.79	0.23	0.91*
Thailand	-0.02	2.15*	0.58*	1.5*
	With Singapore**			
	Before crisis 1994q1-1997q2		During and after crisis 1997q3-2006q1	
Indonesia	-0.75	-0.59	5.13*	4.58*
Malaysia	3.03*	1.48*	2.91*	2.57*
Philippines	-0.1	-0.4	1.06*	0.95*
Thailand	1.12	1.54*	2.39*	2.32*

Controlling for investment and consumption, the calculation for GDP indicates that there are strong co-movements during the period of observation, except for Indonesia.

Most of the improved co-movements occur during and after the AFC, except for Thailand. A similar trend is observed for the co-movements within ASEAN-4. Thus, there is an indication of greater synchronization of business cycles among these countries.

By using simple 10-year moving correlations between GDP growth of individual ASEAN+3 members and the group (excluding the individual member) for 1989-2003, it was also found that the GDP correlations among East Asian countries increased after the financial crisis. On the other hand, with a few exceptions, co-movements with the US declined. Interestingly, by imposing an external shock from the US and a regional shock from Korea and Thailand, it is found that the responses in East Asian countries in terms of industrial production became more pronounced in the post-crisis period.

All in all, while the level of East Asian financial integration may have increased, its benefits in terms of consumption and investment risk sharing have been limited. Even the advantage of having greater resilience to external shock, that could be potentially reaped from greater synchronization of business cycles, has not been evident. The mismatch can be caused by several factors, ranging from substantial share of domestic equity market as a source of finance (French and Poterba, 1991), time horizon and measurement errors (Canova & Ravn, 1996), consumption endowment uncertainty (Obstfeld, 1994a; Mendoza, 1995), to limited size of capital flows and higher sovereign default (Bai & Zhang, 2005).

With evidence showing that risk sharing across countries is far from perfect, alternative measures of welfare gains have been developed. One of such measures uses the permanent percentage increase in expected consumption by utilizing the information about mismatch factors mentioned above, the degree of risk aversion, and the elasticity of substitution between traded and non-traded goods (van Wincoop, 1999). Assuming that preferences are additively separable in tradables and non-tradables, and risk sharing with respect to non-tradables is not possible, Figure 1 shows the welfare gains from the risk sharing (see Appendix for the formula). As it turns out, even with this approach the gains are small for all ASEAN countries. Even for Japan and China the gains are only over 1.5 and less-than 3 percent, respectively

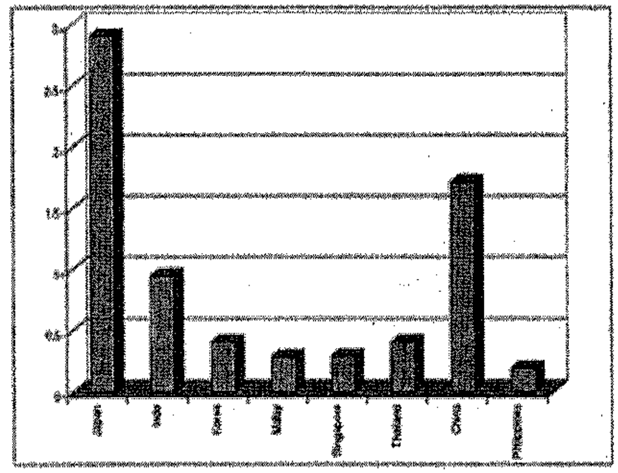

Figure 2.1 *Welfare gains from regional risk sharing*

Put in the context of East Asian financial integration, and referring to the formula in the Appendix, the welfare gain will be larger the longer the time horizon, and when some of the variables can change over-time (endogenous). Thus, looking at the glass half full, although the level of risk sharing in the region is so far limited, the prospective benefits of increased financial integration could be large as the level of risk sharing increases.

CRITICAL ASSESSMENT

I want to end this manuscript with my critical assessment on the concept of regional integration. Is deeper integration desirable? I would argue that it's not always. We often heard an assertion about the benefits of integration especially when a new agenda of regional cooperation to strengthen integration is being promoted, e.g., risk sharing, locked-in domestic reform, positive spillover, ease of market penetration, division of labor, etc.[12] What is missing in the analysis is the systematic evaluation of the risks (beyond a standard risk sharing discussed in the preceding section) that often arise. Examples abound showing the contagion and rapid transmission of financial crisis in one country to another, especially when they are all integrated due to either geographical proximity or regional arrangement.

Take the case of regional financial arrangement that can lead to further financial integration. As I have shown elsewhere, the benefits and opportunities of closer and formal regional financial cooperation with a single currency (basket)system in Asia is large, and it can lead to stronger regional integration. However, when the costs and the risks are taken into account, including those that are intangible, such an arrangement becomes unfavorable[13].

Even after running some sensitivity tests the results remain robust. Clearly, neglecting the risks and costs of regional cooperation could have led to wrong conclusions and misguided policy recommendations

Another caution is with regards to the ultimate goal of regional cooperation and integration. Like any policy and strategy, the goal has to be welfare improvement, especially for the largest segment of society. To evaluate whether or not a regional trade agreement is beneficial, measures related to the volume and composition of trade maybe used as the indicators. This, however, should only be a part of the story. The extent to which changes in those indicators result in the improvement or deterioration of a number of socio-economic indicators ought to be gauged as well. True, the latter may not be the direct focus of the trade arrangement agenda, but from the overall development goal perspectives, missing this part of the story may make the policy and strategy unsustainable. Worse, it may pose a serious risk of misguided policy.

My other critical assessment is on the notion that individual countries would be better off to cooperate in order to foster regional integration. That is, collective regional policies are superior than unilateral policies. I have no serious problem with the logic, but to derive from it that unilateral policies will not have any benefit for the region is misleading. Or, to say that unless individual countries cooperate something bad will happen, that is farfetched. My suspicion is that, we often think of an integrated regional economy like global economy, implying a regional or global commons. By participating in a regional cooperation or agreeing on some regional agenda we think we will provide benefits to the whole region. Even leaving aside the risks of integration as discussed earlier, this is the wrong way to think. Countries commit to a regional agenda because it provides opportunity and allows them to allocate their own resources more efficiently. If they fail to see so, and decide not to participate, no disastrous outcome for the region will emerge (this is very different than the regional or global commons case as in climate change affair). On the other hand, if unilateral policies improve a country's economic performance, it is not difficult to imagine the positive spillover impact of it on the region's economy. In the case of trade and financial integration, if countries adopt policies that are good for themselves instead of signing up for regional cooperation, they will have more robust and stable economic growth, which by itself is advantageous for the whole region.

Even in today's more globalized world, nation states remain dominant, where democratic deliberation is still largely organized around it. Each country has the right to protect its own regulatory arrangements and institutions. In view of regional integration and cooperation, it is important to provide national or domestic policy space in order to maintain the integrity of domestic institutions[14]. Filled in with the right measures, the policy space can contribute positively to the regional economy. The key principle here is, make clear and transparent that the unilateral policy and the national deliberation are taken based on facts and evidence, e.g., for welfare improvements. The agenda of regional cooperation can then focus on the rules and monitoring that will ensure more effective implementation and that the negative spillover is minimized (act as a safeguard). This approach of regional cooperation may also improve the quality of the national deliberation, making it more effective to achieve the ultimate goal of welfare improvement.

The case of cross border holding of financial assets comes to mind. As discussed earlier, the size of such cross-border flows in Asia is relatively small. In the case of fixed income assets, even after the regional initiative (ABMI) has been implemented, the size remains small. But the market in individual countries grew significantly, providing the necessary alternatives of investment and ways to raise long term fund. More importantly, this can avoid the potential maturity mismatch. Since the growing market is in local currency, this will also avoid the currency mismatch (double mismatch played a central role in the 1997 AFC). It was domestic national policy that spurred this development. While a strong fixed income market in individual countries is welfare-improving, it also spells favorably to regional bond market and the regional economy.

This issue of associating regional integration with regional/global commons is a less-explored frontier. I suggest that if policy makers really want to be more realistic about the concept of development, governance and integration, and to focus more on the welfare improvement as the ultimate goal, which they should, this type of evaluation has to be conducted.

CONCLUDING REMARKS

In the Asian context, regional cooperation and integration have been more market-driven than institution-driven. Signs began to emerge, however, that this may change in the post 1997 Asian Financial Crisis and 2008 Great Recession. True, that the rising intraregional trade and increased integration may have occurred irrespective of the 1997 and 2008 event, but judging from the rate of acceleration those two events acts almost like a structural break. The timing is more than just serendipity.

The fact that trade integration is stronger than financial integration, is already expected. By extension, the rapid growth of intraregional trade after 2008 will lead to greater financial integration, is also expected. But the question is, how much integration we want to have. If market dictates that the current level can go further higher, which I believe that is the case for Asia at this stage specially for the financial integration, policies can and should facilitate such a trend, e.g., trade facilitation, standardization, payment settlement, etc. But if even with these policies and various regional initiatives the integration remains limited, I would argue let's be it. There is nothing wrong with it, especially when the resulting degree of risk sharing from integration is limited. Like anything else, regional integration can provide benefits but it can also be costly and risky (look what happens with the Eurozone).

At the end of the day, regional cooperation should be directed towards deepening and broadening the benefits of human development, narrowing the development gap between and within countries, and advancing common interests in a global-rule setting. More often than not, these can bedone more effectively and realistically through domestic national policies. Absent of regional cooperation and integration does neither reduce the intrinsic benefits of such policies for the individual countries nor cause disaster for the regional economy (unlike in the concept of regional/global commons). Such benefits can even make the whole region better off. Risk sharing being a clear reward of increased integration is a sound and valid concept. But that is an ideal situation. A growing number of evidence including in Asia has shown that the degree of risk sharing given an idiosyncratic shock in a more integrated regional economy has neither improved nor high. The impact of regional integration must be predicated not on an ideal world but on the world as it is.

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APPENDIX. WELFARE GAINS FROM RISK SHARING

Consider the following expected utility:

$$U = E\int_0^h e^{-\alpha.t}\frac{(c_{it}^T)^{1-\delta}}{1-\delta}dt$$

where δ is the rate of risk-aversion, $c_{it}$is the consumption of tradables by residents of country i, and h is time horizon. Assuming consumption endowment of tradables, y_{it}, follows a random walk, then if there is no risk sharing at all the expected utility would be (van Wincoop, 1999):

$$U = \frac{(y_{i0}^T)^{1-\delta}}{1-\delta}\cdot\frac{1-e^{-[(\alpha+(\delta-1)(\rho-0.5\delta\sigma_T^2)]T}}{\alpha+(\delta-1)(\rho-0.5\delta\sigma_T^2)}$$

from which the welfare gain is:

$$[1-h(r-\overline{\rho})\frac{e^{-(r-\overline{\rho})h}}{1-e^{-(r-\overline{\rho})h}}]$$

where r is the risk-adjusted growth rate of consumption, r is the risk-free adjusted interest rate, and *(r-r)* is the discount rate.

In calculating the welfare gains for East Asian countries, some of the employed parameter values are taken from Kim, Kim and Wang (2004), and following van Wincoop (1999), the risk-aversion parameter is set to 3. The risk-free real interest rate r=2.62 is calculated from the average risk-free rate of ASEAN+3.

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[1] The production network has also played an important role in forging the region's productivity.

[2] Although some agreements that cover all Asia are still elusive, and in some cases the pace of implementation remains questionable.

[3] After Lehman's collapse, interregional rates started to become more volatile and intraregional trade fell. It is also important to note that greater intraregional exchange rate stability can also help reduce policy tension. It is, however, to the region's advantage if flexibility of their currencies against non-regional currencies is maintained. The flexibility is important for managing external shocks and further capital flows.

[4] A case in point was the far too small supplementary support from the IMF to Thailand and Indonesia during the 1997 crisis. The disbursement of financial support was also not timely, because it was done in several tranches. See Azis, I.J (2009), *Crisis, Complexity and Conflict*, Emerald-London

[5] The Association of Southeast Asian Nations (ASEAN) was founded on Aug. 8, 1967. It is geo-political and economic organization of 10 countries located in Southeast Asia. The latest important effort by ASEAN that will affect the economic integration among member countries is to establish the ASEAN Economic Community (AEC), intended to integrate member countries' economies by 2015.

[6] Under the current arrangements, a country can draw up to 20% of its quota for up to six months without being subjected to IMF conditionality. Some argued that this may discourage member countries to use the facility, and therefore it is now under review.

[7] Because the PRC's trade balance with most ASEAN countries is in deficit, a scenario of simultaneous exchange rate adjustment through cooperation will also make the realignment of the Chinese Yuan easier. It may be more effective than pressuring a country to adopt a particular exchange system.

[8] Even during the Great Depression of 2008, the CMI facility was not used

[9] The countries covered are: Australia, Japan, U.S.A, Korea, Singapore, Taiwan, and Hong Kong-China

[10] As a comparison, although statistically and economically different from unity, the consumption correlations in European countries are higher than in other regions. This suggests that more risk sharing is taking place within the EEC. See Backus, Kydland and Kehoe (1992), Devereux, Gregory and Smith (1992), and Canova and Ravn (1996). As expected, a more substantial risk sharing usually exists among sub-national regions due to greater physical mobility, common language, currency and institutions, and better insurance within a country. See, among others, Kalemli-Ozcan, Sorensen and Yosha (2003).

[11] Using either Japan or the U.S as the reference country does not result in improved co-movements after the AFC.

[12] In some cases, cooperation and integration are promoted for political reasons and trust building. Even if that is the case, the resulting political windfall can lead to significant economic benefits.

[13] See Iwan J. Azis, "Articulating the Benefits and Costs of Regional Financial Arrangement in East Asia," in Simorangkir (ed) *Global Imbalances and Their Impact on Emerging Market Economies: Issues and Challenges*, Bank Indonesia, Jakarta, 2004; and Iwan J. Azis"A Regional Cooperation To Support Financial Crisis Management and Prevention: An Application of A Model With Uncertainty and Feedback Influences," *International Journal of Organizational Analysis*,2005, Vol 13, No 3

[14] A similar principle applied to the concept of globalization is proposed by DaniRodrik in his article "The Globalization Paradox," *Making It*, August 24, 2011.

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