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FINANCIAL INTEGRATION IN ASIA

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Table of Contents

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By
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1. Introduction

This paper provides a review and appraisal of financial integration initiatives and outcomes in Asia. For the purposes of the paper, the term Asia refers to economies in a geographical area stretching from Mongolia in the North-West, to Pakistan in the South-West, to Japan in the North-East, and to New Zealand in the South-East. This covers jurisdictions with a wide variety of economic and financial structures, from financial centers such as Hong Kong and Singapore with highly developed financial markets fully integrated with the global financial system, to economies such as Myanmar with only nascent financial markets. As a result, and because of the purposely brief nature of the paper, the discussion will necessarily be quite general touching on the main features of debates and outcomes rather than attempting to provide details of the financial integration process and achievements in each jurisdiction.

The next section of the paper provides a synopsis of the principal integration initiatives that have been undertaken in the region since the Asian financial crisis (AFC) in the late 1990s. These include discussions about exchange-rate cooperation and the formation of an Asian Monetary Fund, the establishment of an Asian Bond Fund, and the creation of a multilateral foreign exchange swap agreement under the Chiang Mai Initiative Multilateralization. The section also notes particular initiatives undertaken in regional groupings such as the ASEAN economies and debates in the People's Republic of China regarding the sequencing of capital account liberalization in relation to liberalization of domestic financial markets.

In the two subsequent sections, the paper attempts to measure the evolution of financial integration in the region, relying in turn on so-called de jure measures that codify regulations on international financial transactions on the one hand and on de facto measures that rely on actual international investment positions and asset price co-movements to assess the degree of integration on the other. Attempts to interpret the sometimes, contradictory results of these measurements are given. In the case of de jure measures, it is noted that these do not typically take into account the intensity of enforcement of formal regulations and could therefore understate the openness of the economy to international financial transactions. In the case of de facto measures, a distinction is made between co-movements of asset prices due to the effects of common external shocks and those that are due to arbitrage between financial markets in the region.

The final section of the paper briefly discusses the potential consequences of closer financial integration for the effectiveness of monetary policy and introduces two topics that warrant further study; regional versus global financial integration and whether the end goal of a financial integration process should necessarily be the elimination of all restrictions to cross-border financial transactions.

2. Integration Initiatives

Monetary and financial integration in Asia has many facets, and differing views on how rapidly to proceed and what the ultimate goal should be have evolved over time. The evolution mirrors more general views about the trade-offs between benefits and costs of integration of financial markets. At the individual country level, the desire to integrate is driven by the perceived benefits of being part of the global financial system. Among these benefits are greater opportunities for portfolio diversification and risk sharing, enhanced competition in the domestic market for financial services, and increased ability to smooth consumption amid fluctuations in domestic economic activity. Initiatives to liberalize international capital movements may also have been driven by peer pressures associated with the so-called 'Washington Consensus' according to which free mobility of capital was to be encouraged by institutions such as the International Monetary Fund.

In the years since the Asian Financial Crisis, views on the desirability of capital account liberalization have evolved. Potential costs associated with the volatility of capital flows, and consequent implications for macroeconomic instability more generally, are now routinely invoked as reasons why a completely open capital account may not be desirable, at least before domestic financial markets are sufficiently developed to intermediate smoothly potentially large shifts in international investors' risk aversion and the resulting large in- or outflows of capital from emerging market economies. A similar argument holds that opening the economy to larger capital flows should wait until instruments for hedging risks associated with exchange-rate fluctuations are readily available and routinely used by domestic economic agents.

Current debates in many Asian jurisdictions reflect these tradeoffs between the costs and benefits of capital account liberalization. This debate is particularly significant in the People's Republic of China, where proponents of external liberalization as a way to foster competition in the domestic market for financial services and to increase the role of the renminbi as an international currency are pitted against those who warn about the potential instability associated with international capital flows in the context of still not fully developed domestic financial system. The debate and the pace of opening up the Chinese financial market is significant because of the consequences they carry for other economies in the region and indeed for the international financial system as a whole. A Chinese economy that is more open to the global financial system is likely to lead to greater fluctuation of the CNY relative to the USD and the EUR, which in turn, could have significant impacts on smaller regional economies which engage in trade in goods and services with each of these three regions. A

more open Chinese economy is also significant for the international monetary system as a whole, because it is likely to lead to a greater role of the renminbi in international finance and trade alongside the US dollar. Whether a bi- or multi-polar international financial system is more or less stable than the current system dominated by the US currency is an open question. At the regional level, the most significant development is arguably the efforts of ASEAN countries to integrate their financial markets.[1] These efforts are part of a more ambitious initiative to create an ASEAN Economic Community (AEC) to promote economic, political, social and cultural cooperation across the region. The goal is for the AEC to be "highly integrated and cohesive; competitive, innovative and dynamic; with enhanced connectivity and sectoral cooperation; and a more resilient, inclusive, and people-oriented, people-centred community, integrated with the global economy"[2] by 2025. The financial aspects of the ASEAN integration process cover many areas such as banking integration, capital market development – involving efforts to facilitate cross-border securities offerings, common disclosure standards, transparent corporate governance frameworks, and cross-border settlement services – bond market development (on which more is said below), and cross-border payment simplification. A recent notable example of cross-border payments simplification involves an agreement between the central banks of Malaysia and Thailand to promote bilateral trade settlement in the local currencies rather than through a vehicle currency.

These financial integration efforts are underpinned by capacity-building initiatives undertaken bilaterally by ASEAN-5 central banks and multilaterally through such institutions as the SEACEN Centre in Kuala Lumpur and the Asian Development Bank. The objective of these initiatives is to promote greater understanding and readiness in the less financially developed BCLMV economies in the group for the challenges associated with greater financial integration in ASEAN as a whole.

At the multilateral level a number of significant developments are noteworthy. The experience with large intra-regional exchange-rate fluctuations resulting from the Asian financial crisis combined with the early positive assessment of the monetary unification process in Europe led to an interest in exploring the usefulness of some form of coordinated exchange rate policy and even monetary union in Asia.[3] This author argued that a strategy of pursuing greater financial integration, on the one hand, and coordinated exchange rate policy on the other, would be destabilizing in the absence of a much more developed institutional framework, and proposed an alternative framework for collaboration among central banks focusing on policy objectives rather than on outcomes.[4] Other papers were written to explore which countries could plausibly be considered to constitute a stable (if not fully optimal)

[1] The ASEAN members are frequently divided into two groups distinguished by their degree of economic and financial development: the ASEAN-5 which comprise Indonesia, Malaysia, Philippines, Singapore, and Thailand, and the BCLMV members – Brunei Darussalam, Cambodia, Lao PDR, Myanmar, and Vietnam.

[2] ASEAN Community Vision 2025. p. 15. http://www.asean.org/wp-content/uploads/images/2015/November/aec-page/ASEAN-Community-Vision-2025.pdf accessed 10 April, 2017. For a recent review, see Volz (2016).

[3] See Volz (2010) for a comprehensive review and analysis.

[4] Genberg (2006).

currency area based on the optimal currency are literature.[5] As it happened, policy makers were not persuaded and there is currently little remaining enthusiasm for the idea of Asian monetary unification in the foreseeable future, particularly in view of the recent difficulties in the euro area.

While formal exchange rate coordination has not been embraced, actual exchange rate movements do reflect a different reality now compared to the pre-July 2015 period when the RMB was effectively pegged to the US dollar. Since the loosening of this peg, movements in the currencies of several of the smaller Asian economies are more sensitive to the RMB/USD exchange rate than previously.[6] This may be due in part to conscious policy decisions, but it may also simply reflect market reactions to the reality of increasing economic relations and competition with China.

More progress has been achieved in the promotion of a local currency bond market. The Asian Bond Market Initiative (ABMI) signed by ASEAN+3 Finance Ministers in 2003 led to the launch of the Asian Bond Fund by the Governors of eleven central banks in the Asia-Pacific region.[7] An important achievement of the ABMI has been to foster harmonization of regulations on cross-border bond transactions in the region. Nevertheless, the size of emerging economy bond markets in the region, particularly corporate bond markets, is still small.[8]

At the time of the annual meeting of the IMF in Hong Kong in September 1997 the Japanese authorities proposed the establishment of an Asian Monetary Fund (AMF) that would assist Asian countries future economic crises. In particular, the AMF was supposed to provide liquidity support for countries with balance of payments difficulties. The proposal met with strong resistance from the IMF and the US Treasury, and the AMF never saw the day. However, the idea of a regionally funded safety net was borne and led in 2000 to an agreement among the ASEAN+3 central bank Governors to establish a bilateral network of foreign reserve swaps, the Chiang Mai Initiative (CMI), that could be used by members in the event of a crisis. The bilateral nature of the agreement was cumbersome, and it was expanded to a multilateral arrangement, the Chiang Mai Initiative Multilateralization (CMIM), in 2010. It currently as a size of USD 240 billion.[9]

[5] Genberg and Syklos (2010).
[6] See Kawai and Pontines (2016) and references therein.
[7] The eleven central banks are the Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, The Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore, Bank of Thailand. They go under the acronym EMEAP (Executives' Meeting of East Asia Pacific Central Banks) and their work has evolved to constitute an important foundation for central bank cooperation on a number of issues of common concern. See https://aric.adb.org/initiative/executives-meeting-of-east-asia-pacific-central-banks-initiative for descriptions of the initial Fund as well as the subsequent Asian Bond Fund 2.
[8] Genberg (2015). The corporate bond market in Malaysia is an exception, as is the size of the overall bond market in China.
[9] Kawai (2015).

3. Measuring Financial Integration 1: De Jure and (Quantity-based) De Facto Measures

In this section, we review attempts to measure the degree of financial integration by documenting formal restrictions placed on international financial transactions in an economy, and by measuring the degree to which domestic (foreign) residents hold foreign (domestic) assets. The former measures are conventionally referred to as de jure measures, whereas the latter are intended to capture de facto financial integration.

3.1 De Jure Measures

De jure measures are typically based on the IMF publication Annual Report of Exchange Arrangements and Exchange Restrictions, which provides descriptive accounts of measures taken by members to restrict capital account transactions. A number of authors have converted these descriptions into numerical measures of financial openness.[10] One example is the Chinn-Ito index described in Chinn and Ito (2006). The Chinn-Ito index is calculated as the first principal component of indices indicating the presence of multiple exchange rates, restrictions on current account transactions, restrictions on capital account transactions, and requirements to surrender export proceeds. It is available for 182 countries for the period 1970 to 2013.

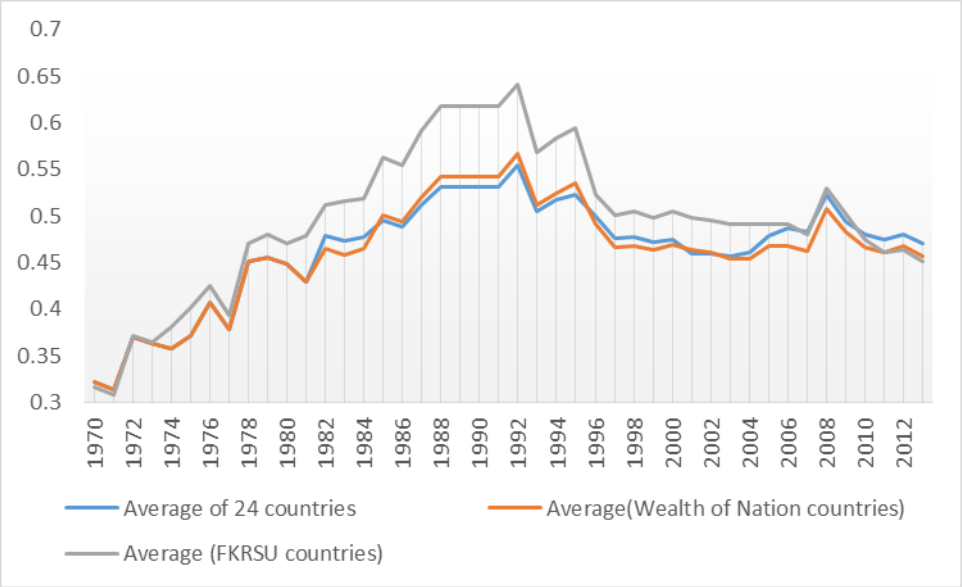
A more granular index has just been constructed and described in Fernandez, Klein, Rebucci, Schindler, and Uribe (2015) and also made available on line. It focuses only on capital account transactions, but takes into account ten different types of assets and distinguishes between capital inflows and outflows. It has been tabulated for 100 countries over the period 1995 to 2013.

Figure 1 shows the Chinn-Ito openness index in the form of an average for twenty-four economies in East Asia and the Pacific.[11] For ease of comparison with openness indices presented later, the figure also shows the Chinn-Ito average for those countries that are also included in the Fernandez et. al. data base[12] and those for which we have quantity based openness indices.[13] For all three groups, there is a clear trend increase in financial openness from the start of the sample until the early 1990s, after which there is a small but still noticeable gradual decrease.

[10] It should be noted that while the indices measure whether or not restrictions are in place, they do not capture the extent to which they are enforced.
[11] Australia, Bangladesh, Bhutan, Cambodia, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Philippines, Papua New Guinea, Singapore, Sri Lanka, Thailand, and Vietnam.
[12] Australia, Bangladesh, China, Hong Kong SAR, India, Indonesia, Japan, Korea, Malaysia, Myanmar, New Zealand, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, and Vietnam.
[13] The latter are referred to in the Figure as Wealth of Nation Countries. See below for details.

Figure 1

Degree of Financial Openness Based on the Chinn-Ito index



Source: Own calculations using the Chinn-Ito data base.

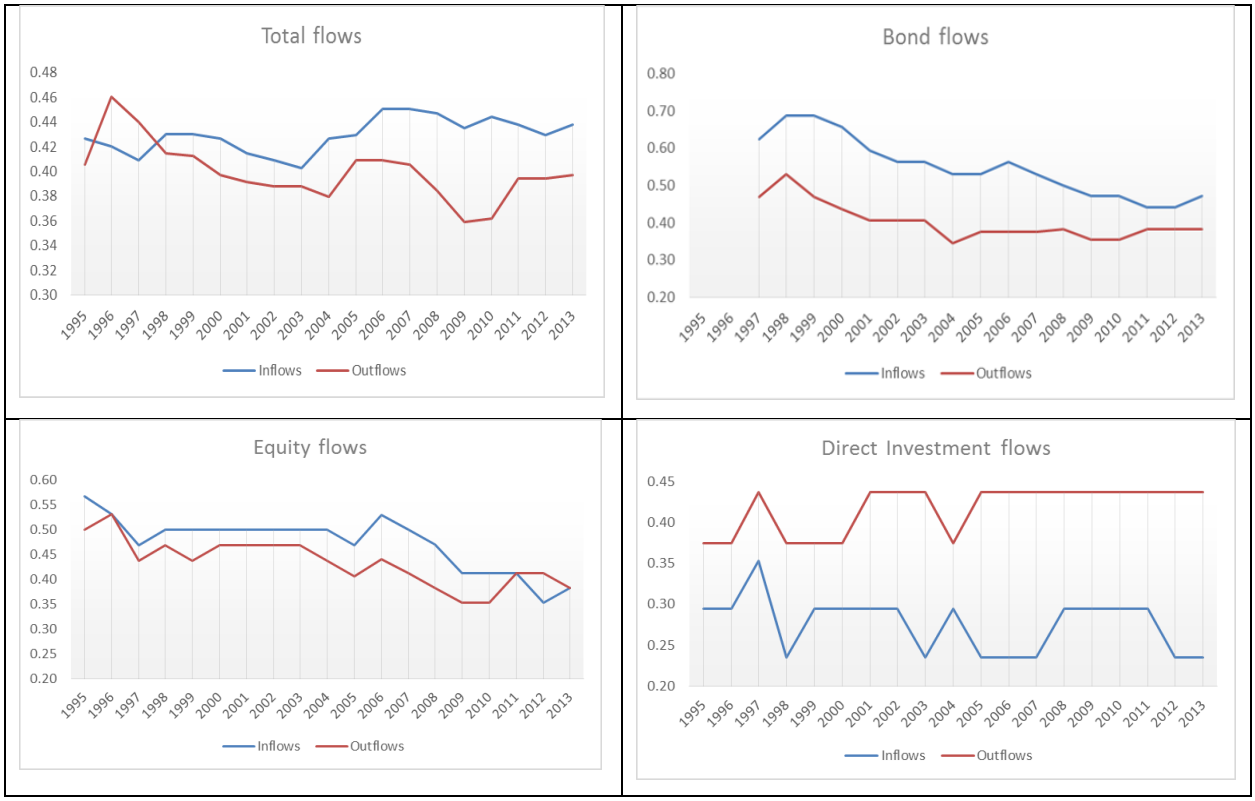
Figure 2 is based on the Fernandez et. al. data base.[14] As already noted, this data base start only in 1995 but allows for a distinction between controls on outflows and inflows and between different types of assets. For bond flows as well as equity flows there is a notable decrease in the degree of de jure financial openness in Asia based also on this index. For direct investment flows, there is a difference between outflow and inflow restrictions. The regime for outflows has become slightly more open over time whereas the opposite is the case for inflows. For total flows, which also include commercial credit; financial credit; money market; residential assets; derivatives; collective investments; and guarantees; sureties and financial backup facilities, there is also a difference between openness to inflows and outflows: on average the economies in the sample have become slightly more open with respect to inflows, whereas they have become less so with respect to outflows.

On balance the message from these two indices of de jure financial openness seems to be that while Asian economies on average became more open during the 1970s and 1980s, the trend since then has if anything been the reverse. It bears repeating, however, that these indices are based on measures of statutory restrictions on international financial transactions reported to the IMF. The degree to which the restrictions are enforced is not recorded.

[14] The Fernandez et. al. index measures restrictions on capital flows on a scale from 0 (no restrictions) to 1 (completely closed capital account). To ease visual comparison with the Chinn-Ito index, the numbers in Figure 2 show 1 minus the Fernandez et. al. index.

Figure 2

Degree of Financial Openness Based on the Fernandez et. al. Index



Source: Own calculations using the Fernandez et. al. data base.

3.2 Quantity-based Measures

Quantity-based indices of financial openness are intended to record the extent to which domestic residents hold foreign financial assets in their portfolios and correspondingly what proportion of domestic financial instruments are held by non-residents. There are two difficulties associated with constructing and interpreting these indices. First, while balance of payments statistics provide reasonably comprehensive data on the cross-border flow of financial assets, there is much less information about international investment positions which are the results of these flows but which are also affected to an important extent by valuation changes. In addition, cumulating flows to obtain stock figures require accurate starting values if they are to be reliable.

The second problem associated with quantity based measures of financial openness relates to interpretation. What would be the extent of international portfolio diversification in the absence of statutory restrictions on such diversification? Calculating the benchmark so defined would require a model of optimal international diversification rendering the interpretation of the index dependent on the appropriateness of the model.

The problem associated with measuring international investment positions has been addressed in the meticulous work by Milesi-Ferreti and Lane (2007). The latest database available contains data on stocks of assets and liabilities related to portfolio equity investments, foreign direct investments, debt, financial derivatives, and foreign exchange reserves for the period 1970 to 2011 for 189 jurisdictions/regions.[15] These data make it possible to trace the evolution of the international asset and liability position of an economy over time. In lieu of a model of optimal international portfolio diversification, a common metric used to interpret this evolution is to relate foreign asset (FA) holdings to the size of the economy, i.e. to its GDP. However, one difficulty of interpreting this metric is that financial deepening may lead to an increase in this index without there being any increase in international diversification as such. For this reason, this paper considers an alternative measure which can be thought of as the degree of de facto integration of economy *i* relative to the average integration of all other economies in the world (*W*), i.e., $\frac{\frac{FA^i}{GDP^i}}{\frac{FA^W}{GDP^W}}$. While this measure does control for generalized financial deepening, it is not perfect, since such deepening does not necessarily proceed at equal speed in all economies and regions. Nevertheless, we believe that it is a more informative measure of a region's de facto integration into the global financial market.

The index is presented in Figure 3 together with the more traditional index that measures the foreign asset position only in relation to domestic GDP. The index is calculated as the average of those twenty-two countries that overlap with the Chinn-Ito sample.[16] Two versions are presented, one with and one without Hong Kong SAR and Singapore, two economies that are large international financial centers which may distort the results.

The left-hand panel is consistent with the hypothesis that the ratio of foreign assets to GDP increases over time as a result of financial deepening. It also shows that Hong Kong SAR and Singapore are special cases due to their status as financial centers, and that averages including them need to be interpreted with care. The right-hand panel adjusts for financial deepening using an index that measures the financial openness of Asia relative to the financial opening of the world as a whole. It shows that since at least the early 1990s and possibly even the mid-seventies the integration of Asian economies into the global financial system has declined over time in comparison with the integration of other regions.

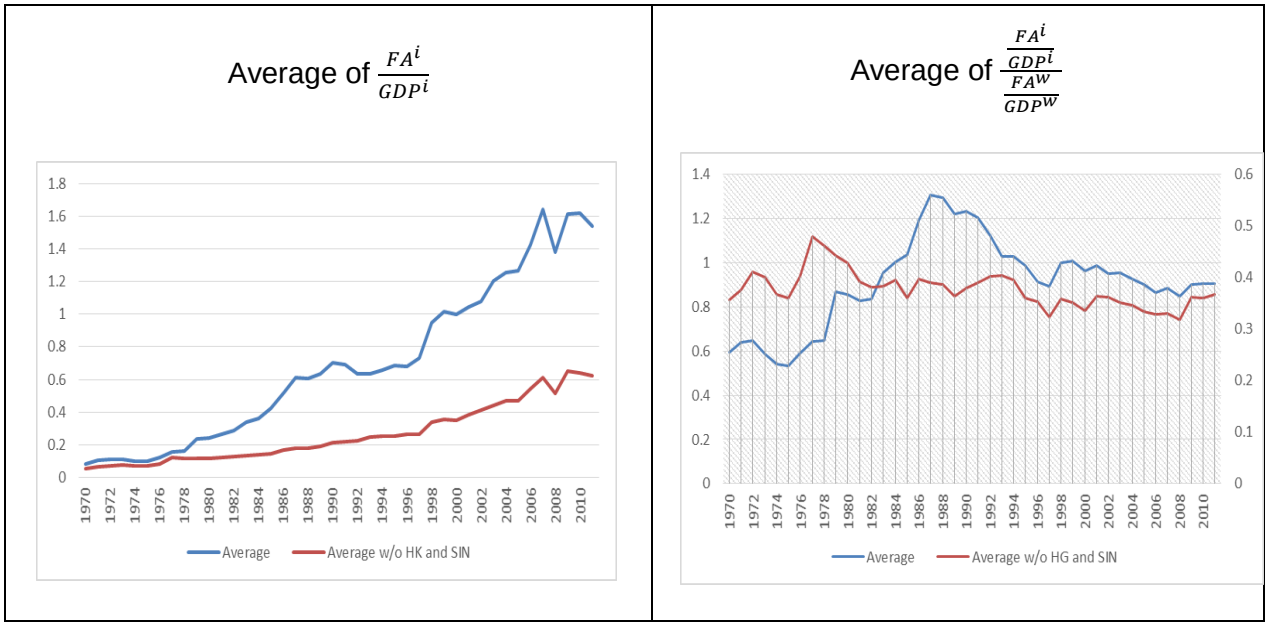
Figure 4 provides another perspective on the de facto integration of a subset of Asian economies for which the corresponding data are available in the IMF's Coordinated Portfolio Investment Survey.[17] These data record portfolio holdings of residents of an economy of liabilities issued by residents of another economy. In the figure, the issuing countries have been aggregated into Asia, ASEAN, and the World. Thus, in the left-hand panel the entries for Malaysia, for example, show the ratio of holdings in Malaysia of liabilities issued by all other

[15] http://www.philiplane.org/EWN.html
[16] The two countries missing are Bhutan and Cambodia.
[17] I am grateful to Ulrich Volz for drawing my attention to this survey.

Asian economies relative to the holdings of liabilities issued by all reporting economies. As an average for the period from 2001 to 2006 prior to the Great Financial Crisis (GFC), this ratio stood at 24%. It rose to 36% after the GFC, suggesting that Malaysia became relatively more integrated with its Asian neighbors. The same panel shows that this is the case also for the other ASEAN-5 economies. The right-hand panel contains a similar message; intra-Asian financial integration has increased from before the GFC in four of the six economies represented, with a decline only in the case of India and an unchanged level in New Zealand.

Figure 3

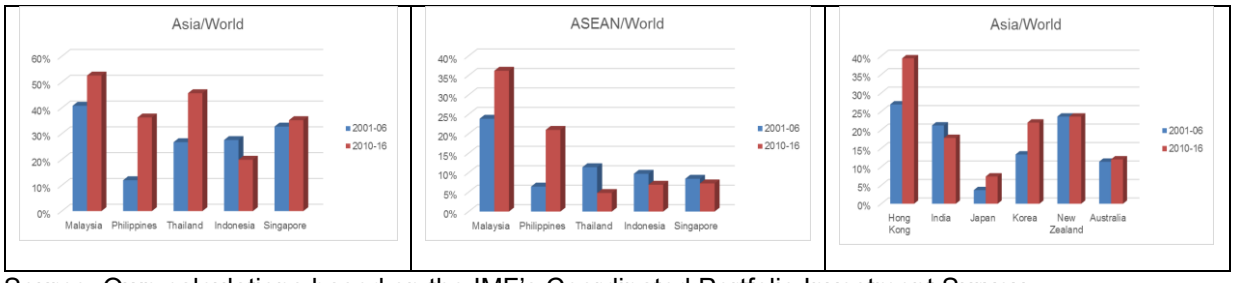
Degree of Financial Openness Based Actual Holdings of Foreign Asset



Source: Own calculations based on an updated and extended version of dataset constructed by Lane and Milesi-Ferretti (2007).

Figure 4

Holdings of Liabilities Issued by Residents of Countries in Asia (ASEAN) Relative to Holdings of Liabilities Issued by all Reporting Economies, 'World'



Source: Own calculations based on the IMF's Coordinated Portfolio Investment Survey.

Remolona and Shin (2015) contains similar information for cross-border banking relationships. Using the BIS locational banking statistics, the authors show that cross-border bank lending to emerging economies in Asia by Asia-Pacific banks has increased substantially subsequent to the GFC, outpacing considerably lending conducted by European and US

banks. They also suggest that while much of the cross-border lending is currently intermediated by banks residents in the two financial centres Hong Kong and Singapore, the Qualified ASEAN Bank (QAB) initiative adopted by members of ASEAN is likely to have an impact on cross-border banking relationships more generally. Under this initiative, ASEAN banks meeting specific criteria will be given enhanced access to other ASEAN markets. This is likely to foster increased banking integration in ASEAN economies much like the 'single passport' for banks operating in the European Economic Area did in Europe. For the time being, the QAB initiative is being implemented on a bilateral reciprocal basis until all member are ready to open their banking sector to external competition.

3.3 Provisional Conclusion

The measures shown in this section do not present a clear trend in the degree of integration of financial markets neither within Asia and the Pacific nor between Asia and the Pacific and global financial markets. While some measures do suggest that integration both within the region and externally has increased, others are less equivocal. The lack of a clear-cut assessment is likely a reflection of the difficulty in measuring financial integration. As already noted, there are reasons why the conventional measures proposed in the literature and used here may not give an accurate picture of the actual degree of integration. In particular, de jure measures do not take into account the level of enforcement of statutory regulations on capital flows, and the quantity-based de facto measures may be contaminated by financial deepening. In addition, it should be stressed that the measures presented represent averages; results for individual countries may tell different stories, but to uncover them is beyond the scope of this paper.

4. Measuring Financial Integration 2: Price-based Measures

As noted, de jure and quantity-based de facto measures of financial integration are not without drawbacks. For this reason, researchers have turned to price-based measures. The underlying principle is simple; in the absence of restrictions on arbitrage, prices of two assets with identical attributes should be the same, even if they are traded in different locations. In practice, it is difficult to identify assets with identical attributes, so tests for integration in this spirit are typically concerned with co-movements over time in asset prices and returns across jurisdictions.

A very large number of studies have been undertaken to assess financial integration using price-based measures applied to equity markets, bond markets, and to a lesser extent money markets. For equity markets the emphasis has been on correlations between market indices across jurisdictions. Four main results emerge. First, although the correlations fluctuate, there is a tendency for them to increase over time. Second, correlations between Asian markets and world markets, often represented by the US market, are typically larger than the correlations between markets within Asia. Third, although it is not generally emphasized, it appears that correlations with the world market tend to increase during turbulent

periods. Fourth, correlations involving the Chinese stock market are generally lower than correlations that do not.

How to interpret these results? The last seems the easiest to explain. Controls on capital account transactions in China prevent significant arbitrage activities between the domestic market and foreign markets, thus limiting co-movements of prices. A particularly vivid example of this lack of arbitrage is the large price differences between prices of shares of the same company listed in the Mainland (so-called A shares) on the one hand and on the Hong Kong market (H shares) on the other. The former have typically traded at a considerable premium without the possibility of traders to benefit from the price difference.

What about the result that correlations have tended to increase over time? One likely reason is that financial integration has effectively increased tying markets together more closely as fund managers are increasingly able to diversify their portfolios across jurisdictions without being encumbered by legal restrictions. But such diversification would not necessarily lead to greater co-movement of prices unless there are fundamental reasons why share prices in different economies should move together, at least partially. Increased trade integration, and increased use of cross-border production chains – so-called global value chains – provide such a reason however. If trade integration leads to increased real linkages between companies across borders, then the share prices of those companies will show certain co-movements whether or not there are actual cross-border trading in such shares. Of course, if there are such cross-border trading, the co-movements will tend to be correspondingly larger.

The preceding paragraph illustrates a general point, namely that co-movements of equity markets across jurisdictions may not necessarily be the result of transmission from one market to another, but rather of the reaction of several markets to common shocks. This could then explain the third result mentioned above, that correlations between stock markets tend to increase during turbulent periods in financial markets such as during the Asian financial crisis, the dot-com bubble, and the recent GFC originating in the US and Europe. In the last of these, when global stock market correlations seem to have increased particularly significantly, the common external shock was particularly large in Asia compared with the idiosyncratic shocks affecting each Asian economy separately. It is easy to show that in such a situation, the correlation with the global (read US) market will increase.

The common-shock hypothesis is also consistent with the second result in the literature, that correlations between each Asian market separately and the world market are larger than the correlations between two Asian markets. This result does not necessarily mean that Asian markets are not integrated, but that they are driven in part by country-specific idiosyncratic shocks. In addition, if the structures of Asian economies differ, they may react differently to common external shocks so that bilateral correlations will be lower than the correlation with the world market. A particularly vivid illustration of this is the reaction of equity markets in different countries to commodity price shocks. The market in a commodity exporting country could be expected to react very differently from that in a commodity importing country.

Results from comparisons of sovereign bond yields across Asian economies share some characteristics of those for equities, but they also display some noteworthy differences. First, interest rate spreads on sovereign bonds over comparable US Treasury securities have declined since the Asian financial crises with a notable exception of a large increase during the great financial crisis. The declining spread over time is consistent with the idea that Asian bond markets have become increasingly integrated with global bond markets, just like the increased correlation of equity indices with their global counterparts could be interpreted as increased integration of equity markets. The increasing bond spreads during crisis periods is, however, contrary to the increasing correlation in equity markets during such periods. The likely explanation is a 'flight to safety' in bond markets in crisis times leading to sharply increased spreads in emerging markets.

Second, cross-country differences in bond spreads have also declined over time, again with breaks during periods of market turbulence. The first part of this finding is again consistent with the hypothesis of increased regional integration of bond markets, whereas the second part suggests that global investors' flight to safety is differentiated according to country specifics, and that regional investors do not counter this tendency.

Third, just like in equity markets, global factors play an important role in the evolution of bond spreads in Asia, although domestic factors are also significant.

Overall, the results are consistent with the hypothesis of increasing bond market integration in the region. However, an alternative explanation of the results is also possible. According to this, the reason for declining Asian bond spreads over US Treasuries and for declining cross-country differences of these spreads is that the risk of Asian sovereigns has declined over time and has also become more similar across countries. In part, this would be a reflection of increasingly prudent fiscal policies and more transparent monetary policy regimes pursued by central banks with increased independence from their political masters.[18]

5. Policy Implications and Issues for Further Analysis

5.1 Monetary Policy

As already noted, financial integration influences the impact of monetary policy, a point that has been appreciated in the literature at least since the work of Robert Mundell and Marcus Fleming in the 1950s which has since been incorporated in standard international macroeconomics as the Mundell-Fleming model. It says that when exchange rates are fixed, monetary policy will gradually lose its effectiveness as financial integration (capital mobility) increases. With floating exchange rates, on the contrary, monetary policy will gain effectiveness as financial integration proceeds. An important part of the transmission takes place through the exchange channel.

[18] Filardo and Genberg (2010).

Recently a body of literature exemplified by Rey (2013) and Turner (2015) argues that monetary policy has become less effective as financial integration has increased even in economies with flexible exchange rates.[19] The argument is based on empirical results indicating that interest rates in such economies co-move with conditions in the global financial markets, particularly during turbulent periods. But as already noted the relatively less strong influence of domestic monetary policy during such period could simply be the result of external shocks being larger as noted in the previous section. Central bank policy can still influence monetary conditions even with increased financial integration. This is even more so when the exchange rate channel is taken into account.[20]

It should also be remembered that co-movement of domestic and international interest rates which are interpreted as a sign of reduced monetary policy effectiveness may instead be the result either of central banks reacting in similar ways to common external shocks or not pursuing output and inflation stabilization objectives as vigorously as previously, because they are concerned with other objectives, in particular exchange-rate fluctuations. Such fluctuations may have become larger as a consequence of increased international integration of financial markets. The implication here is not that monetary policy has become less effective, but rather that central banks have chosen to use it less aggressively for demand management purposes.

5.2 Regional Versus Global Integration

Monetary and financial integration in Asia is an evolving project. As we have seen, in some cases it involves purely regional initiatives, but in others it involves integration with global financial markets. Indeed, financial centers like Hong Kong and Singapore are essentially fully integrated with global markets. This raises issues related to the benefits from regional integration among a set of countries as distinct from each one separately integrating with the global financial system.[21] Pursuing capital account openness on a regional level has been offered as a way to modify the terms of the trade-off between efficiency gains from an open capital account and the associated risk of instability. While foregoing full integration with global financial markets would constitute a cost, this would be more than compensated for, the argument goes, by having a larger regional capital market that would be better able to absorb swings in international investor sentiment. The threat of financial stability would be reduced.

This of course presumes that financial shocks originate primarily in the global financial system rather than within the integrating region. This may be a reasonable assumption at present, but policy makers should not lose sight of the possibility that when a region becomes more financially integrated, disparate economic developments and country-specific shocks will more easily spill over and threaten financial stability in neighboring countries. Recent developments in the euro area offer a vivid example. To guard against this possibility, regional

[19] Much the same argument had been made a decade earlier in Frenkel, Schmukler, and Serven (2004).
[20] Georgiadis and Mehl (2015).
[21] On this topic, see Martin (2011).

integration initiatives should be accompanied by enhanced surveillance of financial markets and coordinated supervision of institutions that have substantial cross-border activities.[22]

Another aspect of the regional-versus-global integration question relates to the benefits from international portfolio diversification. Information from the IMF's Coordinated Portfolio Investment Survey on cross-border asset holdings used in Figure 4 above to show that while intra-Asian cross-border holdings of assets have increased since before the GFC relative to holdings of assets issued in other jurisdictions, the intra-Asia holdings are still smaller.[23] This echoes results in Park (2013) which showed that advanced economies still account for a major share of international asset portfolios of economies in Asia. One interpretation of these results would be that there are still obstacles to diversification across regional markets and that integration efforts should be strengthened so that the share of regional investors' portfolios held with the region will increase at the expense of the share held outside the regions. This, however, overlooks the possibility that gains from diversification within a region have limitations due to similarities of the economic structures and the intra-regional co-movements of business cycles. What optimally diversified portfolios should consist of in 'typical' Asian emerging economies, and how this compares with actual portfolio allocations would be an interesting topic to investigate.

5.3 What Should Be the End Goal of Asian Financial Integration?

A thoughtful study sponsored and published by the Asian Development Bank in 2013 contains two statements that illustrate the complexity of the issue of financial integration. On the one hand, it states that "ASEAN does not envision the complete elimination of all restrictions, prudential or otherwise, on cross-border capital flows, even by 2020 or 2025" (p. 26) thus reflecting the increasingly common view that removal of all controls on cross-border financial transactions may not be desirable because of the heightened risk of financial instability originating in volatile capital flows. On the other hand, the on-line summary of the study also states that "Full and complete capital account and financial services liberalization is ultimately key to the success of the AEC".[24]

To reconcile the two statements, it is necessary to think of the full liberalization process as taking a long time because of the need to build the institutional and policy infrastructure that can support completely integrated financial markets. The recently coined term "financial trilemma" contends that financial stability, financial integration and national financial policies

[22] Indeed, the establishment in 2011 of the ASEAN+3 Macroeconomic Research Office (AMRO) by the ASEAN+3 governments goes some way towards addressing this need for regional surveillance. According to the agreement establishing the office, "the purpose of AMRO is to contribute to securing the economic and financial stability of the region through conducting regional economic surveillance and supporting the implementation of the regional financial arrangement".

[23] In view of the efforts made by ASEAN economies to promote financial integration, a somewhat surprising result in Figure 4 is the middle panel which shows that intra-ASEAN cross-border holdings have declined in four of the five reporting ASEAN economies relative to their holdings of assets issued by non-ASEAN Asian economies.

[24] https://www.adb.org/publications/road-asean-financial-integration. Accessed 10 April 2017.

are incompatible.[25] Any two of the three can prevail, but not all three. As giving up financial stability is clearly not an option, some coordination of national financial policies will thus be necessary if full financial integration is the goal. It is perhaps for this reason that ASEAN does not envision that full capital account liberalization can be achieved before 2020 according to the ADB study.

In fact, the most recent blueprint for the ASEAN economic community does not mention full capital account liberalization as an objective even for 2025. Instead, its vision for financial market integration in 2025 mentions financial inclusion and financial stability as important complements to integration as such. It explicitly recognizes the dangers associated with increased financial integration by noting the necessity of adopting "...adequate safeguards measures against potential macroeconomic instability and systemic risks that may arise from the liberalization process, including the right to adopt the necessary measures to ensure macroeconomic and financial stability" (ASEAN Secretariat 2017, p. 10).

But if dismantling restrictions on capital account transactions is pursued, even gradually, might the region not arrive at a tipping point where the remaining controls become ineffective? And if so, what will be the consequences for financial stability? The answer may be that building a robust framework for domestic and cross-border financial regulation must come prior to capital account liberalization between integrating economies. While this is recognized by ASEAN policy makers, its implementation faces both conceptual and practical hurdles discussed elsewhere in the Routledge volume.

[25] Schoenmaker (2011).

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