Asia-Pacific
Economic Cooperation

2007/ASCC/2.4
Session: Global Imbalances in Financial Flows

2.4.2

Currency Stability in the Asia-Pacific Region

Purpose: Information

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APEC
AUSTRALIA 2007

Annual Conference of APEC Centres
Melbourne, Australia
18-20 April 2007

Abstract

The Asian foreign exchange market may be on the cusp of a liquidity revival. This potentiality is deduced from a long running investigation into why turnover is so low in the first place. The spine of the argument is as follows.

Asia's stock of financial assets is highly skewed towards relatively unsophisticated low yielding assets, with bank deposits dominant.

The structure of the Asian financial stock has been brought about by administrative design rather than by market forces.

The conditions that have fostered risk averse financial policies have substantially receded.

The financial policy framework will reflect the altered backdrop in time.

Turnover in foreign exchange markets will be a high beta respondent to liberalisation of Asia's international financial arrangements. In other words, pent up demand for freer access to deeper foreign exchange markets in Asia is in evidence. That predicts a rapid rate of catch-up for turnover once the "supply side" policy adjustment process begins in earnest.

The strength of (domestic) bank and corporate balance sheets is a strong indicator of just who is best prepared to advance reforms in the near term. In the specific case of China, this vector implies a gradual adjustment process rather than an accelerated one.

Asian foreign exchange turnover: why so low?

Despite reasonably deep financial asset bases across Asia, these financial assets are held in relatively unsophisticated low yielding assets.

There are four underlying and related reasons for this situation. One, softly competitive domestic financial systems. Sheltered competitive conditions do not breed financial innovation. Two, under-developed private capital markets. That has kept Asia somewhat aloof from the global trend towards "arm's length" financial dis-intermediation. Three, risk averse policy making reduces opportunities for diversified asset holding, either by instrument, currency or geography. Four, in the late 1990s foreign exchange reserve accumulation became a major regional policy aim. That demands an internal austerity policy, and private holdings will come to reflect that the policy bias. It also skews the proportion of the national holding of financial assets towards the public sector, which are by nature held in high quality rather than high yielding instruments.

Chart one depicts the composition of the stock of financial assets in various Asian economies. It also shows financial depth (proxied by the asset stock value scaled by GDP) and each country's average rate of foreign exchange turnover per day, in millions of US dollars. The United States is included for benchmarking purposes.

A number of points are immediately apparent. Firstly, the deposit share of the asset base is by far the lowest in the United States. Second, (direct) corporate debt is much more important in the United States than in any other country in the sample. The public debt share of the financial asset stock is diverse, consistent with the variety of fiscal histories experienced by the economies under consideration. In the main equities appear more important to investors in the ASEAN and India as opposed to North Asia.

Turning our attention to the financial depth measure, we note that with the exception of Malaysia, only the US and Japan enjoy a financial asset stock around four times their respective annual output. No clear relationship to broadly defined living standards can be drawn from this metric, unless Korea is removed as an outlier. If that is done, we note shallower financial markets in India and Indonesia, the poorest economies in the sample, and deeper markets in China, Thailand and Malaysia. However, this is a shadowy relation that is clearly subject to a number of influences beyond GDP/capita.

The remaining line is what this paper is all about - the level of foreign exchange turnover in Asia. The United States, as the holder of the reserve currency, is always going to be over-represented in this measure relative to, say, its shares of global trade or output. Similarly, economies who defer to the US dollar for use in international transactions will appear under-represented in the foreign exchange market.

In the specific case of Asia, the degree of under-representation is almost comical. This is a region that punches substantially above its weight in terms of its share in global merchandise trade. Rapid economic growth over successive decades has boosted Asia's share of global output at a lesser but still very impressive rate. In addition, the share of trade in GDP in Asia is unusually high, as is the net export contribution to growth. All of that builds a strong argument that the natural causes of a high absolute and relative exposure to foreign exchange transactions and the attenuant risks are present in Asia.

However, excluding Japan, the Asian economies in the chart combine for just $US36bn in fx turnover per day. That represents less than 2% of global turnover. Two per cent. Stack that up against the 26% of world output accounted for by these countries. Twenty six per cent. The gap is overwhelming. Asia will not be an outlier forever.

It does not take much inspiration to show that Asia is an outlier in the field of fx turnover. It is a different matter to define exactly how it has come to be an outlier, and when and how a "normalisation" process might come to pass. To do so requires an understanding of the evolution of Asian exchange arrangement and capital controls over the past decade or so.

At the time of writing it is almost ten years since a wildly successful speculative run on the Thai baht peg became the first event of the year-long phenomenon known as the Asian crisis. This was a huge watershed for the world economy. It is the dividing line between the imbalanced global capital allocations we observe today, and the more "natural" state of play prevailing in the early to middle 1990s.

The most striking initial manifestation of the Crisis was a dramatic turnaround in Asia's investment-savings (IS) gap. The countries that suffered the most during the Crisis were those that had sustained high investment to GDP ratios via current account deficits funded by short term foreign denominated debt. Collapsing exchange rates, and a precipitous rundown in foreign exchange reserves in futile defence of them, created an immediate national net savings imperative. Put more simply, savings needed to remain high, but investment rates had to collapse. This austerity drive was required to pad the current account position, and rebuild foreign reserve holdings. At the micro level, corporate balance sheets were disembowelled, and that in turn crippled the banks. Balance sheet repair had to begin in earnest.

Further, many economies found themselves pushed to adopt a more flexible exchange rate regime than they would otherwise have done. Prior to the Crisis, the basic state of play for emerging Asian economies was to operate an inflexible exchange rate, while running a selectively open capital account. The collapse in reserves occasioned by the fall of these inflexible regimes meant that the monetary authority was unable to intervene credibly on both sides of the market. In short, the market won the battle of regimes.

What the market cannot control are the rules surrounding the capital account. When the inflexible exchange rate/selectively open capital account policy mix was made too difficult, Asian administrations changed tack. The new model featured potentially flexible exchange rates, but new restrictions on the offshore holding of currency. In effect, exchange rates became more flexible in a de jure sense, but the de facto regime was another matter.

By limiting the avenues for legal speculation, the goal of an inflexible exchange rate could remain in place. Current account convertibility is commonplace across Asia, but capital account convertibility remains the exception.
Capital account convertibility was anathema because of the balance sheet situation. Rebuilding bank balance sheets requires policy makers to engineer a sustained period of protected local trading conditions. Keeping the domestic savings pool at home is a fundamental pillar of this strategy. Soft competition, captive savings and pro-bank regulation means artificially high lending margins, and a more rapid repair profile than may have been achieved under liberal conditions. That is essentially the financial environment that persists in Asia up to this moment.

The end result of this policy strategy has been to suppress foreign exchange turnover. The link between capital account controls and the scale and number of foreign exchange transactions is obvious. The link between capital controls and a cosseted financial system is also a well understood relation. Transitive logic therefore dictates that there must also be a relationship between financial sector strength and foreign exchange turnover.

Chart four illustrates the latter point with reference to a number of Asian economies. The horizontal axis represents implied volatility over a one month duration, backed out of Westpac's option pricing models. The vertical axis measures non-performing loan (NPLs)

ratios. The strong negative relationship between volatility (which can be controlled by discretionary policy settings) and the NPL position (a proxy for financial sector strength, which we may interpret as a state of nature) is clearly illustrated. The direction of causation runs clearly from the banks (the state of nature) to the degree of flexibility administrations will allow (the discretionary element).

The above arguments imply that if a revival in foreign exchange turnover is to be predicted, the following things must happen to accommodate that shift.

1. Policy settings must be liberalised to allow greater flexibility.
2. Policy settings are dependent upon the private sector and national balance sheet situation. Therefore stark improvement must be observed in these areas.

Dealing with national balance sheets first (because it is the easiest), we note an enormous accumulation of foreign exchange reserves across the region. Large and consistent current account surpluses have produced around $US3trn in foreign reserves across Asia, including Japan. That is 1½ times the region's total import bill in calendar 2004. Most country's assess minimum reserve requirements in terms of weeks of import cover. At one and a half years of import cover, Asia clearly has a much greater reserve pool than is economically useful. It is not controversial to argue that reserve accumulation should no longer be a policy priority. Indeed, it might be argued that policy might to directed towards a slower rate of accretion - or even running reserves down to a certain degree.

The private balance sheet is more difficult to assess due to data opacity. A modicum of transparency exists regards bank balance sheets, and we will focus on this measure as an overall private sector proxy. Chart five illustrates the development of the NPL position for a number of Asian economies. The three bars represent the peak NPL position during the Crisis, the latest official estimate, and the latest estimate from the private sector ratings agency S&P. NPLs are scaled by the total loan pool in each jurisdiction.

It is immediately obvious that all countries have advanced a long way since the Crisis. Yet the divergent performances across the sample are almost as striking. In developed North Asia, NPLs are clearly no longer a major policy issue. In the ASEAN, it is not so clear cut. In China, NPLs are still a constraint on full freedom of policy action.[i]
Reiterating our logic once again, policy is currently designed for conditions where austerity is prudent. In other words, the policy framework is applicable to a fragile world recovering from deep financial and economic trauma. If the underlying assumption of vulnerability is questionable, then the design of the policy framework ought to be revisited.

To illustrate further how financial system vulnerability may constrain policy options, it is useful to consider the specific example of China. In considering the prospects for reform in China's international financial arrangements, we have recourse to the empirical experience of other countries, and the literature on optimal sequencing. The combination of the two provides the following menu of tasks for a transition from a closed, inflexible system to an open, flexible one.

1. Establish convertibility on the current account, and unify onshore trading of the currency.
2. Work towards establishing an alternative anchor for monetary policy. Inflation targeting is the popular choice, successful application of which requires central bank independence, the unification of monetary and foreign exchange policy, and the establishment of inflation-fighting "credibility" with the market.
3. Establish an onshore forward market to provide domestic institutions with the tools to hedge the risks associated with flexibility.

4. Widen the allowable trading band around the existing peg to give domestic institutions a chance to 'train' themselves to deal with moderate exchange rate volatility under protected conditions. Progressively decrease the market-making role of the monetary authority as the interbank market matures.
5. Work to alleviate any existing asymmetries in capital account regulations, to avert a bias in capital flows that will create skewed risks regarding movement in the exchange rate. Design a strategy for ensuring capital account convertibility in the future.
6. Progressively increase the allowable degree of volatility as competency improves.
7. When the allowable degree of volatility approaches a level where it is essentially redundant, quietly move to a free floating market-determined exchange rate.

In China, we have seen activity in most of these areas. Yet with the exception of the initial step of current account convertibility, which was completed in the middle 1990s, conditions remain fluid. The central bank has been working on the greater application of market based counter-cyclical tools, yet they continue to be mixed with administrative controls. Deposit and lending rates are constrained by floors and ceilings. The interbank money markets are immature and relatively illiquid, and thus ill-suited for traditional open market operations. The direction of reform is clear, but there are obvious hurdles still to surmount.

The same might be said of the onshore forward and deliverable foreign exchange markets. They have been established, but like the inter-bank money markets they are immature and illiquid. It is not credible to say on the one hand "the currency is going to be more flexible" yet withhold access to the instruments that enable firms to hedge the newly created risk. At present the newly established onshore forward market sees a mere handful of transactions concluded daily, and many of these have the central bank as counterparty. Once the market deepens and matures, the PBoC is likely to step back from its current market-making role. So the directional bias of policy is clear, but nothing to set to happen in a great hurry.

The authorities are also working hard to simulate two way risk within the band. The announced fixing rate sometimes looks incongruous in the larger context, but sometimes it must be so to train firms to expect the unexpected, and protect themselves accordingly. This activity is preparatory for a more flexible future.

The fifth item in the catalogue is the sticking point. Chinese capital controls are of the cherry-picking variety. Foreign direct investment attraction is a stated goal of policy, and a performance metric for provincial governments. That means that the capital account is somewhat porous in the inward direction, as the FDI exemption allows not only genuine investment but capital flow of a less permanent nature. Further, China's immense trade surplus generates a large and stable inward capital flow. On the other hand, domestic savings are fenced in, with outflows limited to official reserve asset management, a modest amount of debt repayments and the even more modest Qualified Domestic Institutional Investor (QDII) outward bound investment quotas.

The asymmetry inherent in this structure leads to an appreciation bias for the renmimbi. If money comes in, without a corresponding flow in the opposite direction, an excess supply of foreign currency is generated, putting appreciation pressure on the local currency. China currently runs a twin external surplus on the current and capital accounts. That is a situation far removed from the textbook world, and one that is surely only temporary.

The asymmetry may be corrected by either waiving controls on outflow, or penalising inflow. The momentum of reform clearly favours the former option. However, this is where things become a little trickier. Liberalising outflow means the potential release of captive domestic savings. 2% of China's population controls some 60% of deposits.

This wealthy population segment can safely be described as sophisticated investors. They will no doubt seek to diversify their cash holding to the four corners of the earth once the opportunity to do so arises. That would be bad news for the banks, and therefore bad news for the administration.

China's banking system relies on a fat margin between deposit and lending rates. This margin is created by official controls on "floor" lending rates and "ceiling" deposit rates. However, if the pool of domestic savings shrinks due to capital flow, these cosy arrangements must come to an end. If the banks had robust balance sheets, then this would not be a great threat. As things are, legacy NPLs have not been fully carved out, creating an inherent vulnerability. The administration knows that these loans - and those sitting unsold on asset management company balance sheets - are basically contingent fiscal liabilities.

That being the case, it is not in the government's interest to expose the banks to a deposit run just at this point in time. It will have to happen, just not right now. The recent IPOs of the major state run banks were attractive for many reasons. Not the least of which was to get strategic foreign investors to provide capital injections that paid a huge premium over book value. These new shareholders are part of the NPL bailout story, as are the existing shareholders (Ministry of Finance, Huijin). But the main loser is the taxpayer. And the administration is very sensitive to the mood of the populace. One party state or not, the Chinese leadership must continually reinforce its legitimacy. In short, a banking crisis (or even a banking wobble) is anathema to policy makers, and thus their incentives in the financial reform debate are clear.

The Chinese example highlights that even when a country might like to liberalise their international financial arrangements, reality may prudently dictate a gradual and cautious approach. But the only direction in which the Asian policy framework can credibly develop is toward greater liberalisation. Charts seven and eight illustrate foreign exchange regime choice and capital account openness respectively, in both cases with reference to GDP/capita.

The large samples in these charts incorporate a broad cross section of the world economy including the OECD, Latin America, Africa and emerging and ex-socialist Europe. They show a decent link between income levels and the degree of flexibility in international financial arrangements. The poorer the country, the less likely they are to have an open capital account and a floating exchange rate. At upper income levels, those arrangements are the norm.

Asia's strong growth performance is enabling it to transition rapidly through low-middle-income status to levels where it becomes significantly more likely that financial reform will be embraced. Korea, Hong Kong, Singapore and Taiwan have sprinted through middle income status and come out the other side. Thailand and China are making short work of the ascent to $US10k per head. Malaysia is past that mark already. India should double the size of its economy in the next decade, as should Vietnam. Strong potential growth rates promise a maturing across other areas.

Finally we would like to note that the Asian region is by no means a homogeneous bloc when international financial arrangements are concerned. This is one of the many arguments against formal monetary/currency union in the region. Another is that the standard deviation of income levels across Asia is unusually high, relative to say Western Europe or the state economies that comprise the USA. That observation makes the “homogeneous Asia” assumption a dubious one where the institutional setting for financial transactions is under consideration. Therefore the Asian reform drive will be a nuanced process - with relative financial system fundamentals the source of deviations from the median path.

Here again are the key arguments. The risk averse and unsophisticated composition of the Asian financial stock has been brought about by administrative design rather than by market forces. The conditions that have fostered risk averse financial policies have substantially receded. The financial policy framework will reflect the altered backdrop in time. Turnover in foreign exchange markets will respond sharply to the deregulation of capital flow. The strength of bank and corporate balance sheets is an important indicator of just who is best prepared to advance reforms in the near term. In the specific case of China, this vector implies a gradual adjustment process rather than an accelerated one.

Endnote:

1. The debate regarding the quality of the reduction in NPL ratios, controlling for new lending (the denominator), unsold AMC transfers, the NPLs for NP bonds issue, et cetera, is fascinating but beyond the scope of this paper. In China's case, Guonan Ma "Who foots China's bank restructuring bill" in Garnaut and Song eds. The turning point in China's economic development, ANU Press, Canberra, is the ideal starting point.

Asian FX turnover – why so low ?

Huw McKay, Senior International Economist

delivered at the
Annual Conference of APEC Centres, April 20, 2007

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Asian FX turnover: why so low?

A risk averse policy backdrop since the Asian Crisis has produced:

- **A preference for managed currency regimes**
- **A "cherry-picking" approach to capital flows**
- **A financial asset stock that is weakly diversified**
- **Huge official reserve accumulation**
- **AND EXTREMELY SHALLOW FX MARKETS**

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Asian FX turnover: why so low?

The conditions that have produced a risk averse policy bias have substantially receded:

- **Huge official reserve accumulation**
- **Stronger corporate balance sheet**
- **Stronger financial system balance sheet**
- **Huge excess of savings over investment**
- **Depreciation risk replaced by appreciation risk**

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Asian FX turnover: why so low?

The financial policy framework will reflect the altered backdrop in time:

- **Regimes will become more market oriented**
- **Outward capital controls progressively freed**
- **Inward portfolio flows progressively freed**
- **Reduced excess of savings over investment**
- **FX TURNOVER WILL BE ELASTIC TO LIBERALISATION**

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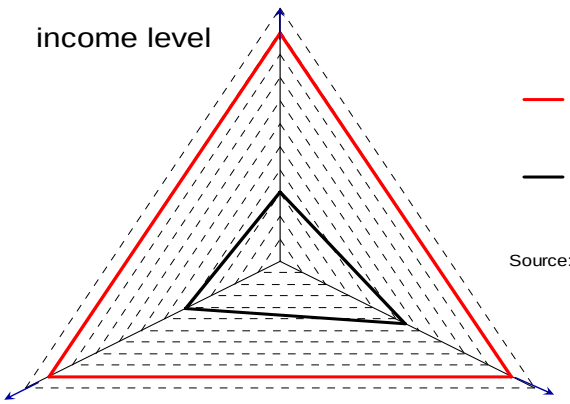
Capital freedom, fx regime & development



USA

NJA today

Source: Westpac Economics

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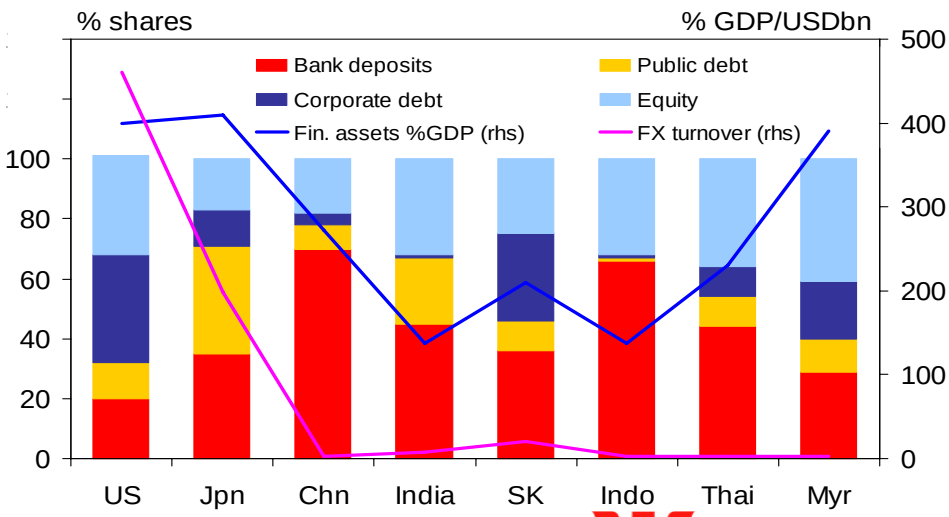
Financial depth in selected countries



Sources: McKinsey, BIS, Westpac

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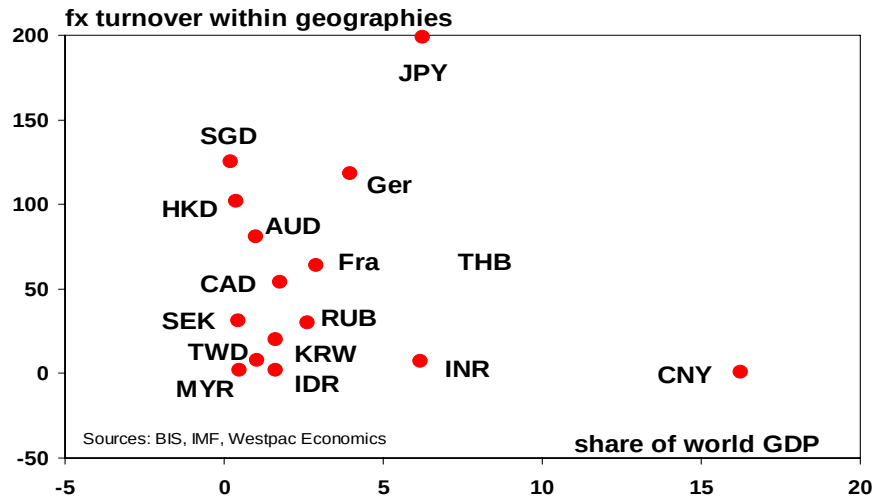
Foreign exchange market depth



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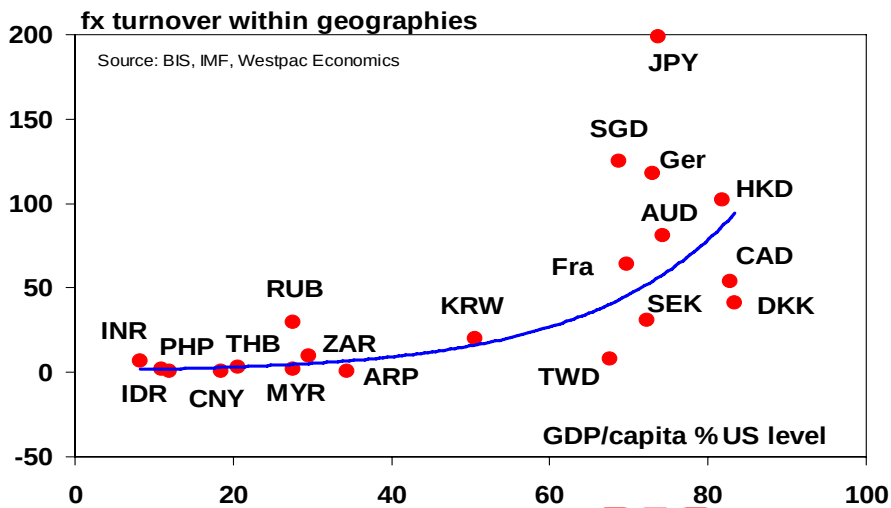
Foreign exchange market depth



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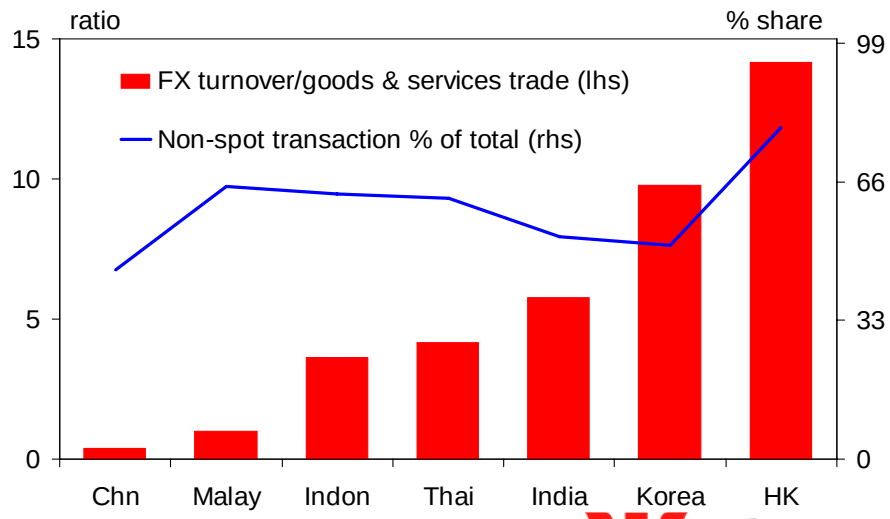
Real demand and FX market sophistication



Sources: BIS, World Development Indicators database, Westpac Economics

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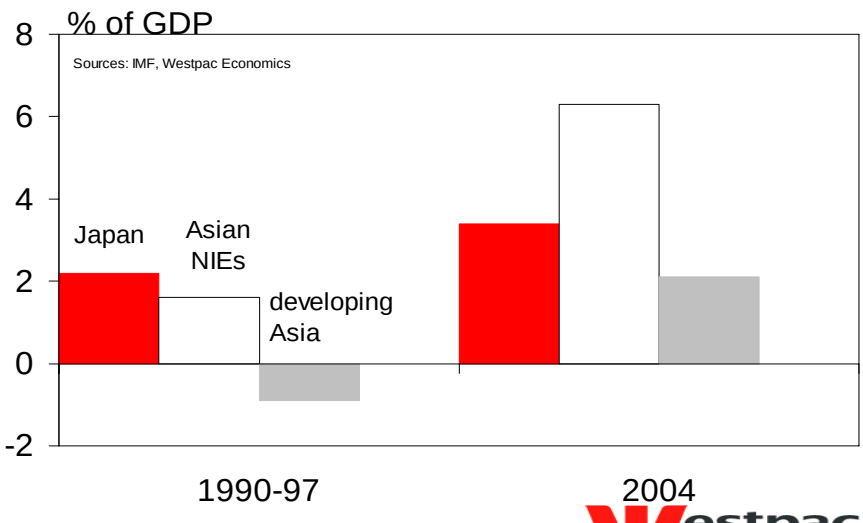
Asia's net savings positions then and now



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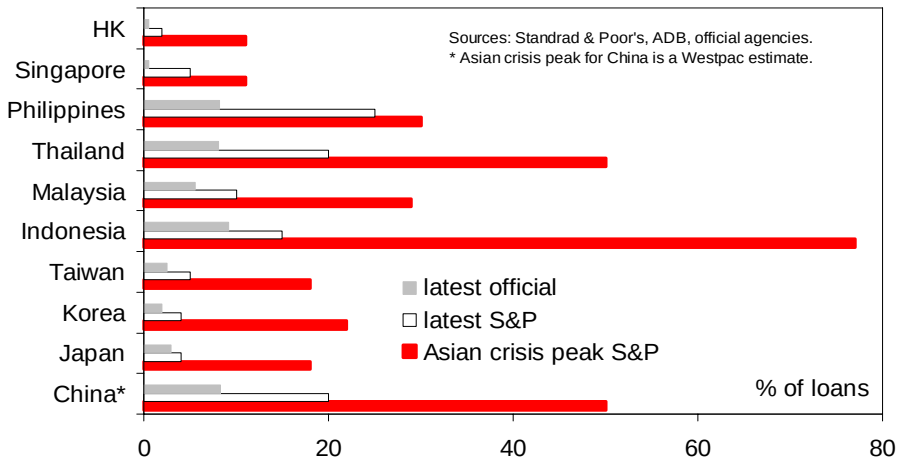
Asia has made progress on NPLs



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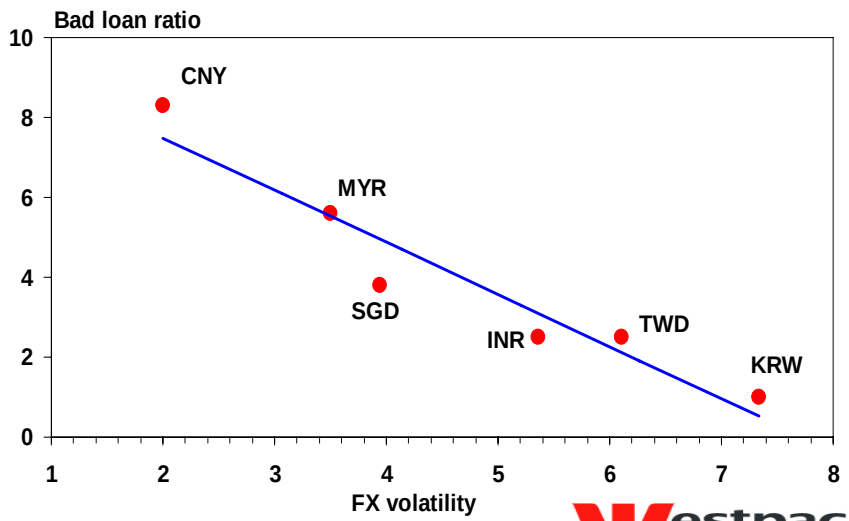
FX volatility versus financial sector strength



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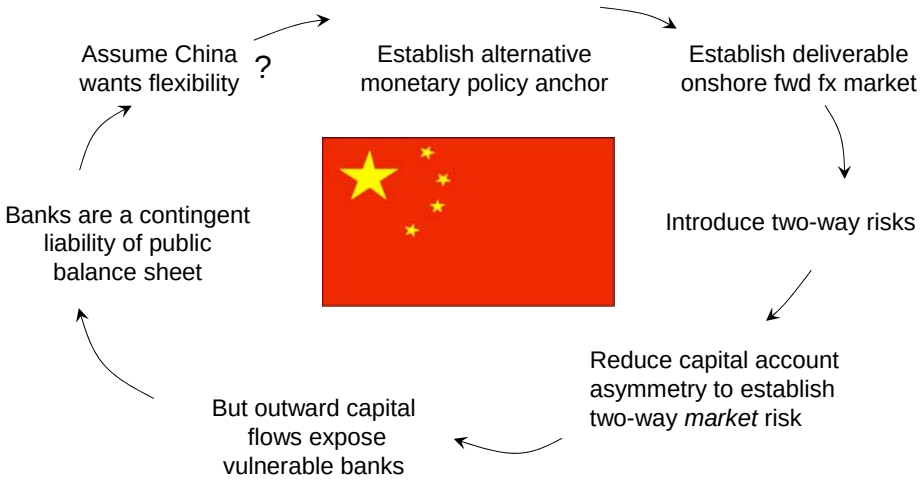
Sovereignty & suzerainty: policy conundrum



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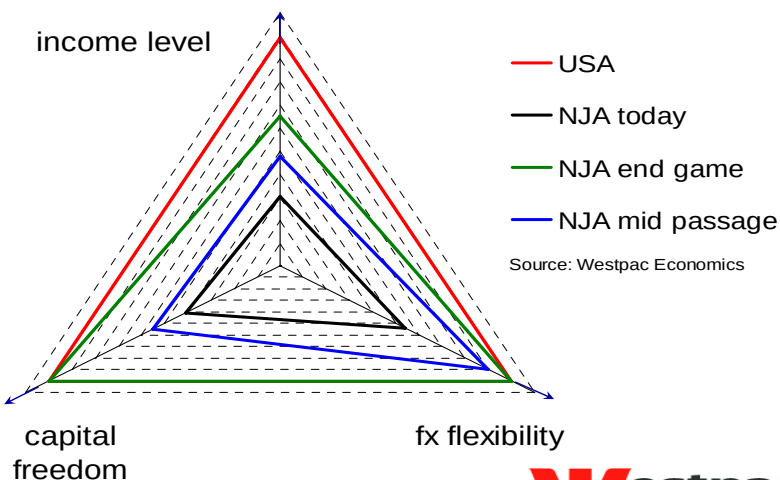
Capital freedom, fx regime & development



Source: Westpac Economics

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Asian FX turnover: why so low?

The financial policy framework will reflect the altered backdrop in time:

- **Regimes will become more market oriented**
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