

Akyuz, Yilmaz

**Working Paper**

## The Current Global Financial Turmoil and Asian Developing Countries

Discussion Paper, No. 2008/15

**Provided in Cooperation with:**

Turkish Economic Association, Ankara

*Suggested Citation:* Akyuz, Yilmaz (2008) : The Current Global Financial Turmoil and Asian Developing Countries, Discussion Paper, No. 2008/15, Turkish Economic Association, Ankara

This Version is available at:

<https://hdl.handle.net/10419/81612>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



# **TURKISH ECONOMIC ASSOCIATION**

DISCUSSION PAPER 2008/15

[http ://www.tek.org.tr](http://www.tek.org.tr)

## **THE CURRENT GLOBAL FINANCIAL TURMOIL AND ASIAN DEVELOPING COUNTRIES**

**Yılmaz Akyüz**

**Sept, 2008**

**THE CURRENT GLOBAL FINANCIAL TURMOIL  
AND ASIAN DEVELOPING COUNTRIES**

*YILMAZ AKYÜZ*

This is a slightly revised version of a paper prepared for the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and presented at the Ministerial segment of its 64<sup>th</sup> commission session in Bangkok on 29 April 2008.

**TWN**  
Third World Network  
twnet@po.jaring.my

May 2008

# **THE CURRENT GLOBAL FINANCIAL TURMOIL AND ASIAN DEVELOPING COUNTRIES**

*Yilmaz Akyüz\**

- 1. INTRODUCTION**
- 2. THE ROLE OF FINANCE IN THE RECENT GLOBAL EXPANSION**
- 3. EXPANSION AND CRISIS IN THE UNITED STATES**
  - a. The subprime boom and bust
  - b. The policy response and prospects
- 4. CAPITAL FLOWS AND VULNERABILITY IN ASIA**
  - a. Lessons from the 1997 crisis
  - b. Capital flows
  - c. Credit, asset and investment bubbles
  - d. Current account balances, exchange rates and reserves
  - e. Capital account measures
- 5. EXTERNAL SHOCKS AND POLICY OPTIONS IN ASIA**
  - a. Growth prospects: projections and beyond
  - b. Financial contagion and shocks
  - c. Trade linkages and growth in Asia
  - d. Policy challenges
- 6. CONCLUSIONS**

References

---

\* Former Director of the Division on Globalization and Development Strategies at the United Nations Conference on Trade and Development (UNCTAD) in Geneva. I am grateful to Andrew Cornford, Martin Khor and staff members of ESCAP for comments and suggestions on an earlier draft, and to Lean Ka-Min of the Third World Network for editorial assistance. The usual caveat applies.

## **1. INTRODUCTION**

After almost six years of exceptional performance, the world economy has now entered a period of uncertainty due to a financial turmoil triggered by the subprime mortgage crisis in the United States. World economic growth and stability in the next few years will depend crucially on the impact of the crisis on the United States economy and its global spillovers. The resilience of emerging markets to direct and indirect shocks from the crisis will no doubt play an important role, since much of global growth in recent years has been due to expansion in these economies, notably in Asia. The extent to which growth and stability in Asian emerging markets can be decoupled crucially depends on prevailing domestic economic conditions as well as the policy response to possible shocks from the crisis.

This paper takes up these issues. The following section posits the main theme of the paper that current difficulties in the United States economy and vulnerabilities in emerging markets are not unrelated to financial excesses that made a major contribution to global expansion in the past six years, including credit, asset and investment bubbles triggered by rapid expansion of global liquidity.

Section 3 takes up the causes, nature and the severity of the crisis in the United States and the policy response already under way, with a view to assessing their possible effects on growth and external adjustment. The role that regulatory shortcomings have played in the subprime crisis is examined in some detail because it provides useful lessons for emerging markets where such shortcomings are often seen as the root cause of crises.

This is followed in section 4 by a discussion of key aspects of prevailing economic conditions in major Asian developing economies affecting their vulnerability to financial shocks from the crisis, examining the extent to which they have been successful in managing the surge in capital inflows and preventing the emergence of fragility and imbalances, drawing on the lessons from the 1997 crisis. Greater attention is paid to China and India since these two countries together account for about four-fifths of the total output and two-thirds of the total trade of developing

countries in the region, and China has strong intra-regional trade and financial linkages in East and South East Asia.

Section 5 looks at possible trade and financial effects of the crisis on Asian developing economies; makes an assessment of mainstream projections and scenarios; and discusses policy challenges and options. It is argued that the larger economies of the region, China and India, have fragility and imbalances which could be laid bare by shocks from the subprime crisis. However, in general, countries with strong fiscal and balance-of-payments positions, including China and several East and South East Asian countries, have adequate policy space to respond positively to shocks from the crisis. But others, including India, may face difficulties if the crisis leads to a reversal of direction of capital flows – an outcome which is not likely but which cannot be ruled out. There is a need to secure intra-regional consistency in policy response, notably with respect to expansionary macroeconomic policies and currency adjustments. Consideration could also be given to establishing mechanisms for regional exchange rate cooperation on a more durable basis.

## **2. THE ROLE OF FINANCE IN THE RECENT GLOBAL EXPANSION**

To many observers the sudden turnaround in world economic prospects has come as a surprise in view of the strength and persistence of economic growth and stability since the early years of the decade. From 2002 until the end of 2007 world economic growth averaged 4.5 per cent per annum compared to 3 per cent in the 1990s. Growth has been particularly strong and broad-based in the developing world, reaching some 7.5 per cent, twice the rate of the 1990s. Real commodity prices rose to levels not seen since the 1970s and developing countries as a whole started to run trade surpluses with advanced countries thanks to the strong export performance of China and trade surpluses of fuel exporters. After a short interruption in the early years of the millennium, private capital flows to developing countries recovered strongly and spreads on emerging-market debt fell to historical lows. Price stability in the developing world has been unprecedented for many decades, with single-digit inflation rates being the rule rather than the exception. There has been no major

exchange rate and financial turmoil in the developing world, including in emerging markets with large and widening current account deficits.

Current economic difficulties and vulnerabilities, however, are not unrelated to forces driving this expansion. As a result of continued deregulation of financial markets and further opening of national borders to international capital flows, economic activity in both advanced and developing countries has come to be increasingly shaped by financial factors. The pro-cyclical behaviour of financial markets tends to reinforce expansionary and contractionary forces, amplifying the swings in investment, output and employment.<sup>1</sup> Risks are often underestimated at times of expansion, giving rise to a rapid credit growth, asset price inflation, over-indebtedness and excessive spending, and adding to growth momentum. However, these also produce financial fragility which is exposed with a cyclical downturn in economic activity and/or increased cost of borrowing when incomes can no longer service the debt incurred, giving rise to defaults, credit crunch, asset price deflation and economic contraction – the kind of difficulties that the United States economy is now facing.

From the early years of the decade the world economy went through a period of easy money as policy interest rates in major industrial countries, notably the United States and Japan, were brought down to historically low levels and international liquidity expanded rapidly.<sup>2</sup> These, together with stagnant equity prices in most mature markets, led to a search-for-yield by creditors and investors. In the United States ample liquidity and low interest rates, together with regulatory shortcomings, resulted in a rapid growth of speculative lending and a bubble in the property markets, providing a major stimulus to growth, but also sowing the seeds of current difficulties. Low interest rates in some other advanced countries, notably in Japan, encouraged

---

<sup>1</sup> This is the essence of the financial instability hypothesis developed by Minsky (1978) following in the footsteps of Fisher and Keynes. Minsky starts from the proposition that stability (tranquility), including that of an expansion, is destabilizing since it increases confidence, reduces the value placed on liquidity and raises the acceptable debt-to-equity ratios. He sees financial instability as an intrinsic feature of market economies and financial fragility as endogenous. For a discussion of the relevance of this analysis to boom-bust cycles in emerging markets, see Akyüz (2008).

<sup>2</sup> See IMF (2007c) for the notion of global liquidity and the role of monetary policy in advanced economies and financial innovation in global liquidity expansion and risk appetite. See also BIS (2007a: 8-10) for a similar discussion.

cross-currency flows towards countries with higher interest rates, including in the form of highly leveraged carry trades. The very same factors have played a major role in the strong recovery of capital flows to emerging markets, contributing to currency appreciations, asset bubbles and credit expansion, and stimulating spending and growth in the recipient countries. The credit crunch unleashed by the bursting of the subprime bubble and its global spillovers now threatens to reverse this process and produce a sharp slowdown in global growth.

### **3. EXPANSION AND CRISIS IN THE UNITED STATES**

#### **a. The subprime boom and bust**

Since the 1980s the United States economy has been increasingly driven by financial boom-bust cycles. Economic expansions are generally accentuated by credit and asset bubbles which eventually lead to credit crunch and debt deflation, and threaten to push the economy into a deep and long recession. Monetary policy largely ignores financial excesses at times of expansion, but tends to be deployed rapidly when the bubbles burst, and in doing so prepares the ground for the next bubble.

The United States economy had entered the 1990s with a recession deepened by a banking and real estate crisis produced by a combination of financial deregulation and deposit insurance in the previous decade. The response was a sharp reduction in policy interest rates to allow debtors to refinance debt at substantially lower rates and banks to build up capital by riding the yield curve – that is, by borrowing short-term and investing in higher-yielding medium-term government securities.<sup>3</sup> This, together with advances in information technology, created the dot-com bubble in the second half of the 1990s. The Federal Reserve refrained from applying the brakes even though its chairman recognized that the United States economy was suffering from "irrational exuberance" as the stock market, led by the information sector, was booming. But when the bubble burst in the early 2000s, it

---

<sup>3</sup> On financial deregulation, banking and real estate crisis in the United States in the 1980s and the policy response in the early 1990s, see UNCTAD TDR (1991; 1994; and 1997).



came to the rescue, bringing policy interest rates to historical lows and expanding liquidity rapidly for fear of a credit crunch and asset deflation throwing the economy into a deep recession.

This, together with the continued deregulation of the financial system, resulted in another bubble, this time in the real estate market supported by subprime mortgage lending. Despite warnings, the Fed ignored the bubble and refrained from using monetary instruments and the regulatory authority it had been granted to stem speculative lending.<sup>4</sup> But, again, it has responded rapidly to the subprime crisis by large cuts in interest rates and massive expansion of liquidity, raising concerns that the United States economy may be poised to go through yet another boom-bust cycle.

A brief examination of the role that regulatory shortcomings have played in these boom-bust cycles helps reveal the nature and origin of the present crisis and produce valuable policy lessons. During the past few decades the banking industry in the United States and most other advanced countries has been losing its relative position in the financial sector as deposits became a less important source of funds for financial intermediaries. Furthermore, the margin between credit and deposit rates has been falling because of growing competition from non-bank financial intermediaries. In the United States the pressure on bank profits intensified during the 1980s with the removal of control over deposit rates, losing the banks the cost advantage at a time when accelerated growth of markets for commercial papers and junk bonds and increased securitization of assets put pressure on lending rates.<sup>5</sup>

The response was twofold. First, banks increasingly went into new, riskier areas of lending, notably for commercial and residential property and leveraged takeovers and buyouts. Second, they expanded their fee-based, off-balance-sheet activities in the capital market through subsidiaries and affiliates. Simultaneously, securities firms and insurance companies started engaging in traditional banking

---

<sup>4</sup> On the reluctance of the Fed to use the direction and authority given in 1994 to clamp down on dangerous and predatory lending practices, see Kuttner (2007).

<sup>5</sup> On the decline of traditional banking and earlier response, see Kaufman and Mote (1994) and Edwards and Mishkin (1995).

activities through various affiliates and these non-bank lenders have become increasingly important in the credit market, without, however, having access to insured deposits or being subject to conventional prudential restraints. These developments have strengthened the link between credit and asset markets whereby credit expansion has increasingly resulted in asset bubbles which have, in turn, provided the basis on which credit could grow thanks to the practice of mark-to-market valuation of assets.

Regulatory policies have not been adapted to this new financial environment even though there was considerable awareness of the risks involved.<sup>6</sup> Rather, the authorities submitted to pressures for further deregulation. Until recently, in the United States the banks' off-balance-sheet activities in non-traditional areas through affiliates and subsidiaries were subject to specific limits. In 1999, however, new legislation effectively demolished the firewalls between commercial banking and investment banking by allowing the former to expand into capital market activities and the latter to enter more deeply into the territory of traditional commercial banking – a step which has played a major role in the subprime boom-bust cycle.<sup>7</sup>

The new legislation allowed the banks to join mortgage companies and rapidly expand high-risk mortgage lending as well as credit card and car loans, and move them off their balance sheets through securitization. In search for yield in conditions of exceptionally low interest rates, many banks enticed households into taking up so-called “teaser loans” in very much the same way they had done in Asia in the run-up to the 1997 crisis; that is, loans for which a borrower is qualified “based on an artificially low initial interest rate, even though he or she doesn't have sufficient income to make the monthly payments when the interest rate is reset in two years” (Pearlstein 2007). They then put them into packages of mortgage-backed securities as collateralized debt obligations and sold these in the capital market with the help of

---

<sup>6</sup> This was clearly stated by one of the present members of the Federal Reserve Board in a co-authored article in 1995: “The decline of traditional banking entails a risk to the financial system only if regulators fail to adapt their policies to the new financial environment that is emerging” (Edwards and Mishkin 1995: 42).

<sup>7</sup> In the new legislation depository institutions are permitted to own other financial institutions or to be affiliated with them through financial holding companies. On the role of deregulation, notably the repeal of the Glass-Steagall Act, in the subprime crisis, see Kregel (2007) and Kuttner (2007).

credit rating agencies, thereby eschewing capital charges while earning handsome fees and commissions. The special investment vehicles (SIVs) created for this purpose have acquired large amounts of securitized higher-yielding long-term loans with funds raised by issuing short-term commercial paper, often with the support of their sponsoring banks.<sup>8</sup>

As banks' profits from these non-traditional activities were boosted, there were strong incentives to expand such loans. This sustained the growth in demand for housing which, in turn, kept prices rising, thereby validating the underlying credit expansion. It also provided a strong stimulus to investment in housing construction, which became a main driving force of expansion: during 2002-06 real residential private investment increased by almost one-third while non-residential fixed capital formation rose by a mere 4 per cent (OECD 2007: annex tables 6-7). However, as the housing market was satiated, prices levelled off and policy interest rates were raised, there was a sharp increase in foreclosures in the course of 2006, leading to declines in house prices, bursting the bubble.<sup>9</sup> The market for mortgage-based securities has totally seized up, as has the market for commercial paper issued by SIVs to fund securitized loans. Many of these securities have now been downgraded from triple-A ratings to the class of junk bonds.

High-risk financial operations concerning subprime lending, securitization and investment are not confined to the United States. Many of the banks involved are global banks operating in several mature and emerging markets. Banks in major European countries have been involved directly or indirectly by issuing or holding securitized subprime assets and running or sponsoring SIVs. The United Kingdom experienced a similar subprime bubble leading to serious difficulties in certain financial institutions, of which Northern Rock is the most prominent. Several German

---

<sup>8</sup> SIVs are like banks in respect of maturity transformation between long-term assets and short-term liabilities, but unlike banks they are not regulated; nor do they have access to lender-of-last-resort financing. They are thus exposed to liquidity risk. Their solvency can also be threatened if the value of their assets falls below that of their liabilities as a result of short-term interest rate hikes or default on their assets, as is now happening with mortgage-backed securities.

<sup>9</sup> The underlying assumption that the spread between short and long rates would remain stable or widen failed to materialize as the yield curve flattened with increases in policy rates after 2004, slowing the demand for mortgage-based securities and squeezing SIVs.

and Swiss banks have also seen their solvency threatened because of large losses on subprime operations. Losses from the crisis are now generally recognized to be at least \$1 trillion.

The mortgage-based securities have been marketed globally, in both mature and emerging economies, acquired by hedge funds, insurance companies, pension funds, foundations, non-financial firms and individuals so that the impact is felt more generally, across several sectors and even in countries which were not among the originators of such lending.<sup>10</sup> An important part of them was guaranteed by bond insurers, the so-called monolines, which joined the spree to benefit from the housing boom – something that is particularly revealing about the opaque nature of the operations, since bond insurers are expected to be in a better position to assess the risks involved. These insurers lack necessary capital to cover the losses on defaulted securities and they have now started losing their credit ratings, with attendant consequences for bond ratings and values in other segments of the market.<sup>11</sup>

#### **b. The policy response and prospects**

The subprime bubble has left the United States economy with excessive residential investment which cannot be put into full use without significant declines in house prices. The household sector has ended up with debt in excess of equity represented by such investment. An important part of portfolios of banks and their affiliates is not performing. Bond insurers are faced with massive obligations they can no longer fulfil. And many investors across the world have found themselves holding worthless mortgage-based securities and commercial paper.

---

<sup>10</sup> The Bank of China is reported to have lost some \$2 billion on its holdings of collateralized securities, including those backed by United States mortgages (Pearlstein 2008). Standard Chartered, in which Singapore's sovereign wealth fund, Temasek, owns a 19 per cent stake, is reported to have been walking away from its \$7.5 billion SIVs sold in Asia and the Middle East (Bowring 2008b).

<sup>11</sup> Monolines are bond insurers which guarantee repayment of principal and interest in case of default of the issuer. They are so named because originally they were engaged in a single line of business – namely, insuring municipal bonds. The triple-A credit rating they enjoy is passed on to any bond they insure so that downgrading will affect the ratings and values of all the bonds insured by monolines. Banks are now reported to own some \$850 billion of securities guaranteed by bond insurers, and the failure of monolines to pay out the principals and interest on insured bonds would require additional funds for banks, estimated in the order of some \$150 billion.

There is considerable uncertainty over whether the United States economy will succumb to this debt crisis brought on by years of profligate lending or be able to restore growth after a brief interruption. The evolution of economic activity will no doubt depend on the impact of the crisis on private spending. This will, in turn, depend on the ability and willingness of banks to provide adequate financing on appropriate terms and conditions, and of households and firms to expand consumption and investment.

In recognition of these two aspects of the problem, policy makers in the United States have responded to mitigate the difficulties in the financial system by large cuts in interest rates and provision of ample liquidity, and to support aggregate spending and incomes through a fiscal package.<sup>12</sup> Monetary easing is certainly helpful, but cannot fully resolve the difficulties the United States financial system is currently facing since this is, in essence, a solvency crisis. Lower policy rates and ample liquidity can help banks to gradually build up capital by riding the yield curve, but they cannot address the immediate problem of depleted capital. Beyond the arbitrage between the Fed and the Treasury, banks' ability to build up capital rapidly by investing in higher-yielding private securities is limited because, on current regulatory practices, this would necessitate spare capital in the first place.

The bailout provided by the Big Bank is thus incomplete even though the Fed has now gone further, accepting mortgage-based securities as collateral and lending directly to major investment banks. A more effective solution would be outright nationalization of non-performing private debt.<sup>13</sup> This is what many governments in emerging markets hit by financial crises in recent years were forced to do, including

---

<sup>12</sup> This is very much in line with what Minsky (1986) proposed to resolve such crises and prevent deep and prolonged recessions – that is, a Big Bank as a lender of last resort, and a Big Government as a spender of last resort – even though their effectiveness at the present juncture is contentious.

<sup>13</sup> A recent proposal by a former chairman of the Council of Economic Advisers, Feldstein (2008), comes close – that is, the federal government should lend each mortgage holder 20 per cent of the value of the mortgage with a 15-year payback period at the rates on two-year Treasury debt.

in Asia where such operations added considerably to public debt.<sup>14</sup> However, such a solution would not only create moral hazard, but also sustain misalignments in asset prices, postponing the problems, possibly to come back with greater force.<sup>15</sup>

An alternative solution would be fire-sale foreign direct investment (FDI), as practised during the Asian crisis when collapse of currencies and asset prices created ample opportunities for foreigners to grab assets at drastically reduced prices (Krugman 1998). Many of the troubled banks have indeed been seeking injection of new capital from abroad, mostly from sovereign wealth funds (SWFs) in emerging markets, including China, Singapore and fuel exporters in the Gulf. So far the amount raised seems to be in the order of \$40 billion, well below the capital losses (Gieve 2008). Misgivings about investment by SWFs from emerging markets, often considered as cross-border nationalization, have been put aside for the time being, but there are reasons for SWFs to become more cautious not only because the shares acquired do not always allow control and voting rights, but also because of large losses on their investments.<sup>16</sup>

The ability of the United States to continue lowering policy interest rates is circumscribed by the willingness of the rest of the world to absorb the excess liquidity since the dollar is an international currency. Continued depreciation of the dollar vis-à-vis the euro would hurt fragile growth in Europe while sharp declines against Asian currencies can generate strong inflationary pressures in the United States, creating serious dilemmas for monetary policy. A rise in long-term rates on expectations of higher inflation would not help growth even if it could support banks by steepening

---

<sup>14</sup> The assumption of private sector liabilities through recapitalization of insolvent banks in financial crises has made a significant contribution to growth of public debt in emerging markets. In Indonesia, these raised public debt by more than 50 per cent of GDP (IMF 2003: 28n), creating problems of fiscal sustainability despite a good track record. For Thailand and Korea corresponding figures are 42 per cent and 34 per cent respectively (Hoggard and Saporta 2001: 162).

<sup>15</sup> It is notable that warnings are coming from some financial market participants that bailouts would prevent the much-needed correction in asset prices and compound the problems – Roach (2007).

<sup>16</sup> See Weisman (2007). Several commentators including Summers (2007b) and Truman (2007a) call for greater transparency and accountability – something visibly missing in the case of western institutional investors and hedge funds. Others such as Wade (2007) see SWFs as “a partial redress to the unlevel playing field built into ‘global system’ through a panoply of international rules ... which confer structural advantages on western companies.”

the yield curve. A “goldilocks” scenario wherein the United States could raise its net exports to Asia without importing inflation is unrealistic. For the first time in the post-war era the United States may be seriously challenged in its ability to conduct independent monetary policy to the neglect of its external ramifications.

While loss of bank capital is likely to sustain tight credit conditions, even availability of credit at drastically reduced rates might not give a sufficient boost to household spending to reignite the economy, given the excessive levels of debt inherited from the two successive bubbles since the early 1990s. The debt accumulation has gone hand in hand with the expansion of private consumption ahead of disposable income, resulting in a drastic decline in household savings. While household savings reached 7.7 per cent of disposable income in the early 1990s, they dropped to some 2 per cent at the end of the decade and continued to fall in the new millennium during the housing bubble, disappearing altogether in the past two years. The household debt/income ratio now stands at around 140 per cent compared to less than 90 per cent in the early 1990s. There has been a rapid growth in mortgage debt since the beginning of the 2000s, which now exceeds disposable income (Table 1).

There is strong evidence that asset bubbles have played a major role in the decline of household savings and increased indebtedness. The dot-com bubble of the 1990s generated a strong wealth effect on private consumption because of increased household stock holding and greater access to credit. During the past two decades there has been a rapid increase in the share of households in stocks owned directly or through mutual funds, which has now reached 50 per cent. On the other hand, financial deregulation has improved the access of households to credit, loosening the traditional budget (liquidity) constraint on consumption spending.<sup>17</sup> These account for the finding that the acceleration in the decline in the personal savings rate in the United States after 1994 was due to an increase in the propensity to consume of families whose portfolios benefited most from exceptional capital gains from the dot-com bubble (Maki and Palumbo 2001). This process was sustained by capital gains from rising house prices in the 2000s, as households increasingly extracted equity from the value of their houses to finance consumption. The mark-to-market practice

---

<sup>17</sup> See Debelle (2004) who also mentions low interest rates among the reasons for increased household indebtedness.

greatly facilitated this process as rising market values provided the collateral needed for credit expansion.

With the decline in house prices many households now face negative equity and banks inadequate collateral for their outstanding claims. While household debt was around 18 per cent of household net worth in the early 1990s, this went up to 24 per cent in 2006. It is expected to increase further as household net worth falls as a result of continued declines in house prices as well as in stocks, which appear to be strongly correlated with the housing market.<sup>18</sup> According to the flow-of-funds figures released by the Fed in March 2008, the net worth of American households dropped during the last quarter of 2007 for the first time since 2002.

The decline in savings and increased indebtedness of households is mirrored by growing external deficits of the United States. While the current account was almost balanced in the early 1990s, it is now in deficit by over 6 per cent of GDP, reflecting a greater savings gap. Since about 70 per cent of the GDP is due to consumer spending, the deterioration in the current account is almost fully accounted for by the decline in personal savings.<sup>19</sup> In other words, asset bubbles have made a significant contribution to the widening of the national savings gap and the external deficit in the United States since the early 1990s. Consequently, any adjustment in household savings and indebtedness necessitated by the current process of asset deflation will have significant implications for the United States' external balances.

A sizeable decline in consumer spending now appears inevitable, leading to a sharp drop in growth. The fiscal package of some \$170 billion introduced looks too small compared to the scale of the problem. Two-thirds of this stimulus is in tax rebates to consumers. It is difficult to predict how much of these would be translated into consumer spending rather than used for debt payments, but the amount to be

---

<sup>18</sup> Van Eeden (2006) shows that the S&P 500 stock index closely follows a forward-looking Housing Market Index with a one-year lag.

<sup>19</sup> A decline in the personal savings rate by 7 percentage points of disposable income corresponds to a 5 per cent decline in terms of GDP. The much-publicized fiscal deficits have had very little to do with this deterioration – before the dot-com bubble fiscal deficits were in the order of 5 per cent of GDP compared to some 3 per cent in recent years.



spent is unlikely to exceed half of the total package. This would not make up for the decline in consumer spending that would result from the drop in house prices, which could lead to a loss of wealth as much as \$6 trillion. Even on conservative estimates relating wealth to consumption, this could reduce consumer spending by \$200-\$400 billion (Roubini 2008; Weisbrot 2008).

Not only would the crisis produce a large cut in household consumption, but any subsequent recovery may also see a reduced propensity to consume since balance-sheet restructuring is a protracted process. In fact, United States recessions and recoveries following asset-bubble-driven expansions in the early 1990s and 2000s were generally associated with very weak spending in sectors with debt overhang. This was particularly the case during the recovery from the recession triggered by the dot-com bubble. Not only did non-residential private investment drop considerably during the brief recession in 2001, but the recovery that followed was the weakest in terms of investment since 1949. The corporations which had over-borrowed during the dot-com bubble were highly exposed to asset price declines during the recession. Efforts were directed in the subsequent recovery towards restoring the health of balance sheets. Thus, increased incomes were used for reducing debt rather than expansion of production capacity and employment. Industries that attracted too much investment during the boom were “paying it back” by reducing their workforce and structurally declining (Groshen and Potter 2003).

Certainly it is not possible to extrapolate linearly from corporate behaviour to households in adjustment to over-indebtedness. But it would not be unreasonable to expect that this crisis could well produce the much-awaited retrenchment in private consumption, a sustained upward shift in the household savings rate and a durable adjustment in the United States external deficits beyond what may be expected from a slowing economy. This adjustment could be a protracted process, resulting in erratic and slow growth, as in Japan during the 1990s. The corollary is that the rest of the world would need to rely less on the United States’ market for growth. Thus, the crisis is likely to bring a fundamental adjustment to global imbalances, but the key question is how orderly and rapid that would be.

#### **4. CAPITAL FLOWS AND VULNERABILITY IN ASIA**

##### **a. Lessons from the 1997 crisis**

There can be little doubt that vulnerability of Asian developing countries to the current financial turmoil depends crucially on their prevailing macroeconomic and financial conditions. Experience from recurrent crises in emerging markets shows that these conditions are strongly influenced by international capital flows. Accordingly, the likelihood of contagion is closely related to how well the recent surge in capital inflows has been managed in the region. In this respect it is possible to draw on the lessons from the 1997 Asian crisis, focussing on four main areas of vulnerability associated with surges in capital inflows:<sup>20</sup>

- Currency and maturity mismatches in private balance sheets and exposure to exchange rate risks.
- Rapid credit expansion, asset bubbles and excessive investment in property and other sectors.
- Unsustainable currency appreciations and external deficits.
- Lack of self-insurance against a sudden stop and reversal of capital flows, and excessive reliance on help and policy advice from the International Monetary Fund (IMF).

These lessons should generally be incontrovertible, at least among the policy makers in the region, but opinions may differ considerably about the ways and means of putting them into practice. In what follows, an assessment will be made as to whether the Asian developing countries have appropriately drawn on these in managing the recent surge in capital flows. The conclusion reached is that while most Asian countries have successfully avoided unsustainable currency appreciations and payments positions, and accumulated more than adequate international reserves to counter any potential current and capital account shocks without recourse to multilateral financial institutions, they have not always been able to prevent capital

---

<sup>20</sup> Not all Asian countries hit by the crisis manifested vulnerability in all these areas – see UNCTAD *TDR* (1998) and Akyüz (2000).

inflows from generating asset, credit and investment bubbles or maturity and currency mismatches in private balance sheets. This is in large part because they have been unwilling to impose sufficiently tight controls over capital inflows, even when they posed dilemmas in macroeconomic policy and generated fragility. These now expose them to certain risks, but not of the kind that devastated the region in the 1990s.

## **b. Capital flows**

The search for yield triggered by ample liquidity and low interest rates has also played a central role in the recovery of capital flows to emerging markets, creating pressures on exchange rates and generating credit and asset bubbles. After falling to some \$100 billion at the beginning of the millennium, private flows picked up rapidly, reaching an estimated level of \$620 billion in 2007 (Table 2).<sup>21</sup> This has been accompanied by a rapid narrowing of spreads on emerging-market debt. The average spread, which had reached 1400 basis points after the Russian crisis and fluctuated between 600 and 1000 basis points during the early years of the millennium, fell constantly from mid-2002 onwards, reaching 200 basis points in the first half of 2007 before starting to edge up with the deepening of the subprime crisis (World Bank 2007; IMF 2007a). That improvements in underlying economic fundamentals in the recipient countries are not always the main reason for this unprecedented decline in spreads is also recognized by the IMF:

“Very recent empirical work, including some undertaken by IMF staff for this report, appears to reinforce the widespread market view that liquidity and an increase in risk appetite have become relatively more significant influences on spreads than fundamentals in the emerging market debt rally that began in late 2002. Models based purely on fundamentals have found that recent emerging market bond spreads are generally tighter than can be justified by the models” (IMF 2004: 66).

---

<sup>21</sup> The underlying figures in Table 2 are on net-net basis for equity flows and gross basis for debt flows; that is, net outflows of FDI and portfolio equity by residents are deducted from net inflows by non-residents. Thus, the current account balance plus private capital flows minus net lending by residents (and errors and omissions) would give changes in reserves – see IIF (October 2007: Box 3). The countries included are China, India, Indonesia, Malaysia, Philippines, South Korea and Thailand in Asia; Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay and Venezuela in Latin America; Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovakia, Turkey and Ukraine in Europe; and Algeria, Egypt, Morocco, South Africa and Tunisia in Africa/Middle East.

Because of strong and favourable global push factors concerning liquidity and risk, recovery in capital flows has been broad-based, widely shared by all regions. But country-specific conditions (the pull factors) explain why inflows have been stronger in certain parts of the developing world than in others.<sup>22</sup> The pull factors have not always been linked to economic fundamentals such as growth and price stability, and external payments, debt or reserve positions. In fact international financial markets have made little differentiation among countries with respect to many of these factors, focussing, instead, on opportunities for short-term capital gains and arbitrage profits.

There have been considerable amounts of footloose capital motivated by speculative gains in all parts of the developing world, although the exact form it has taken has varied among countries depending on their individual circumstances. Such flows fall basically into three categories. First, capital attracted by carry trade profits due to large interest rate differentials with industrial countries, notably Japan, of which highly leveraged hedge funds have been among the main beneficiaries.<sup>23</sup> Second, capital inflows seeking gains from prospective currency appreciations in countries with undervalued exchange rates and large current account surpluses, notably China. Third, investment in asset markets, which have been a common feature of capital flows to emerging markets in different regions.

It is notable that during 2004-07 emerging markets in Central and Eastern Europe received as much foreign private capital as those in Asia even though their total income is one-fifth of the total income of Asia, and their average growth has been much lower. The combination of high interest rates with independent floating has resulted in growing current account deficits which reached, on average, 7 per cent of GDP in 2007.<sup>24</sup> High interest rates in some larger economies in Europe and Latin

---

<sup>22</sup> That the push factor is generally more important in boom-bust cycles in international capital flows is also noted by the World Bank (2003: 26): the “dynamics of net capital inflows and the changes of official reserves over the cycle do indeed indicate that the push factor is more important for middle-income countries, while the pull factor dominates in high-income countries.”

<sup>23</sup> On different forms of carry trade and interest differentials, see BIS (2007a: 83-88); UNCTAD *TDR* (2007: Chap. I) and IIF (October 2007).

<sup>24</sup> For current account and growth figures in Central and Eastern Europe (excluding the Russian Federation), see IMF (2007c: Tables A4 and A12).

America (e.g. Turkey and Brazil) attracted large amounts of capital linked to carry trade. There have also been considerable intra-regional carry trade activities in these regions where funds borrowed in low-interest currencies have been invested in the same region in higher-interest currencies, thereby providing some protection against intra-regional contagion. High local interest rates have also attracted international investors to domestically-issued local-currency debt, as these investors have become more willing to assume the exchange rate risk in return for much higher yields.<sup>25</sup>

In gross terms capital inflows to Asia, as a proportion of GDP, have been close to historical highs, but in net terms they have been around the long-term average because of increased resident outflows (IMF 2007b; IIF October 2007). Since 2003, about 60 per cent of private capital inflows to the Asian countries in Table 2 have been in equity investment, compared to less than 40 per cent in other emerging markets. Of these, two-thirds have been in direct equity and one-third in portfolio equity.<sup>26</sup> Equity flows have been particularly strong in China and, more recently, India. But in the latter country much of these are in portfolio equity rather than FDI. Hedge funds from the United States and the United Kingdom have been very active in equity markets, with assets managed by them being estimated to have grown sevenfold between 2001 and 2007.

Following the cutback in bank lending after the 1997 crisis, international bank inflows to Asia started to exceed repayments in the early years of the decade. The share of net international bank lending has been slightly over one-quarter of the total private inflows to Asia, and the remainder is other types of debt flows including bonds and carry-trade-related inflows, including those involving arbitrage among regional currencies. Sovereign bond issues have been relatively small in Asia because of

---

<sup>25</sup> The proportion of domestic-currency sovereign debt held by non-residents in emerging markets is estimated to have reached 12 per cent – Mehl and Reynaud (2005) and De Alessi Gracio, Hoggarth and Yang (2005). The expansion appears to be particularly rapid in Latin America due to high levels of sovereign debt. Available data shows that foreign investment in local-currency government securities went from less than \$15 billion at the beginning of 2003 to \$200 billion by the end of 2006 – see Tovar and Quispe-Agnoli (2008). Moreover, some Latin American countries have been able to issue local-currency-denominated global bonds at rates below those in domestic markets because of lower jurisdiction spreads (Tovar 2005; IMF 2005).

<sup>26</sup> For further discussion of components of capital flows to Asian emerging markets, see BIS (2007a), IMF (2007d and 2007e) and McCauley (2008).

strong fiscal and public debt positions. However, there has been a visible growth in syndicated loans privately placed by corporations in several countries. In many cases bank inflows have been encouraged by prospects of gains from currency appreciations. However, private financial and non-financial corporations have also engaged in “carry-trade-style” short-term external borrowing in India, Korea and the Philippines, particularly through low-interest yen-linked loans. Highly leveraged hedge funds are also known to be very active in carry trades in Asia. A relatively high volume of carry trade appears to be a reason why the category “other investment” accounts for a high share of total capital inflows to the region. While restrictions on foreign participation in domestic bond markets have generally been maintained, in Malaysia and Indonesia there have been marked increases in foreign holding of local-currency debt instruments. In the region as a whole local claims of foreign banks, including local bond holdings, as a percentage of all foreign banks’ claims, more than doubled since the beginning of the decade, suggesting a growing preference for international banks to lend in local currencies at higher rates.

**c. Credit, asset and investment bubbles**

The composition of capital inflows to Asian emerging markets is generally considered to be more favourable than other emerging markets because of a high share of equity flows. Foreign investment in equity and local-currency debt is not considered as a serious potential threat to stability because the exchange rate risk is assumed by investors. Vulnerability to a sudden stop and reversal of capital flows is often assessed on the basis of short-term external liabilities in relation to reserves. Indeed, according to the so-called Greenspan-Guidotti rule formulated after the Asian crisis, in order to avoid a liquidity crisis international reserves in emerging markets should meet short-term external liabilities, defined as debt with a remaining maturity of up to one year.<sup>27</sup>

However, what matters for vulnerability to instability in capital flows is not simply currency denomination and maturity but also liquidity of liabilities. A run by

---

<sup>27</sup> For a discussion of adequate level of reserves, see UNCTAD *TDR* (1999: Chap. V). For an attempt to empirically determine the optimum level of reserves based on welfare criteria, see Jeanne and Ranci re (2006).

non-residents away from domestic equity and bond markets could create significant turbulence in currency and asset markets with broader macroeconomic consequences, even though declines in asset prices could mitigate the pressure on the exchange rate, and losses from asset price declines and currency collapses fall on foreign investors. This potential source of instability naturally depends on the relative importance of foreign participation in local financial markets. Extensive foreign participation not only increases market volatility, but also raises exposure to adverse spillovers and contagion from financial instability abroad. That such exposure has been on the rise is suggested by increased correlation between global and emerging-market equity returns since 2004.<sup>28</sup>

Recent capital inflows have resulted in a rapid increase in foreign presence in Asian equity markets. Figures for net equity inflows understate this because, as noted, there has also been a rapid increase in resident outflows. Available evidence shows that non-resident holding of Korean equities reached almost one half of market capitalization (McCauley 2008). According to a recent study on foreign net purchases and net sales of equities in Asian markets, the share of foreigner transactions in 2005 in average daily turnover was around 20 per cent in Korea, 30 per cent in Thailand and 75 per cent in Taiwan (China) while in total holdings by foreigners accounted for between 20 and 30 per cent in India, Korea and Thailand and as high as 70 per cent in Taiwan (China). There is also strong evidence that the entry and exit of foreigners to Asian equity markets are subject to a bandwagon effect – that is, foreign investors tend to move in and out of several Asian markets simultaneously – suggesting strong contagious influences across the region. Although equity inflows into this group of countries appear to have been driven not so much by gains from anticipated currency appreciations as by local market returns, they have put a strong upward pressure on exchange rates.<sup>29</sup>

---

<sup>28</sup> See BIS (2007a: 51) which points out that this correlation has been higher during the most recent periods of global market volatility.

<sup>29</sup> For the evidence cited in this section, see Chai-Anant and Ho (2008). The evidence is from six emerging Asian markets – India, Indonesia, Korea, the Philippines, Taiwan (China) and Thailand.

A relatively large proportion of financial inflows to China appears to have been motivated by expectations of appreciation of the yuan (Setser 2008; Yu 2008). These have gone partly in equity and property markets, benefiting also from local price booms. Part of these is reported to have entered the country as investment or through trade, including over-invoicing of exports. According to some market participants, the so-called “hot money” amounted to \$5 to \$10 billion a month during 2007. The Chinese foreign exchange regulators felt obliged to take action against ten international banks for breaching capital account regulations by “assisting speculative foreign capital to enter the country disguised as trade and investment” (Anderlini 2007).

Large capital inflows to equity markets – together with the consequent expansion of liquidity – have both been the cause and effect of sharp increases in stock prices in several Asian markets. There is in fact a strong correlation between changes in net portfolio equity flows and stock prices in Asia – much stronger than that observed in Latin America.<sup>30</sup> For the region as a whole the equity market index tripled between 2002 and mid-2007, with increases exceeding 400 per cent in China and India. The price/earnings ratios have also risen rapidly, resulting in a sharp drop in equity costs.<sup>31</sup> That such increases more likely reflect asset-price bubbles than improvements in underlying fundamentals was actually cautioned a couple of years ago by the Institute of International Finance (IIF March 2005: 4): “there is a risk that the pickup in flows into some emerging market assets has pushed valuations to levels that are not commensurate with underlying fundamentals.” It is notable that since then until mid-2007 the Asian markets rose by another 50 per cent. China increased the stamp duty on stock market transactions in order to restrain the bubble, only to reverse it after the recent decline due to the fallout from the subprime crisis.

The two largest countries, China and India, which have seen the strongest surge in capital inflows and largest increases in stock markets, and, to a lesser extent,

---

<sup>30</sup> See IIF (October 2007: Chart 13). IMF (2007e), however, finds that institutional investors appear to have little impact on equity prices in emerging markets, but introduce considerable volatility because of herd behaviour.

<sup>31</sup> Data on equity prices and price/earnings ratios are from IMF (2007e).



Korea, have also experienced a boom in property markets. During 2002-06 in real terms residential property prices rose by over 8 per cent per annum in China and 10 per cent in India.<sup>32</sup> In these countries the price-to-rent ratio rose by more than 20 per cent during the same period while Korea saw an increase of more than 15 per cent. The last couple of years have also seen acceleration of property price increases in Singapore and Vietnam. While these have not been as dramatic as increases in the United States – where the price-to-rent ratio rose by 30 per cent over the same period – there are large pockets in China, India, Korea and the Philippines where increases have been comparable and even greater.<sup>33</sup> Concerned by the growing speculative spree, China has adopted a number of measures to stem increases in property prices, including higher interest rates and larger downpayments on both residential and commercial property loans (ESCAP 2007: 10).

In some cases house prices have also outstripped strong growth in incomes. Housing loans have expanded faster than other types of lending and have been a major factor in sharp increases in household indebtedness. In Korea, for instance, bank lending to households has been growing rapidly since 2005, and household debt has reached 140 per cent of disposable income – above the level of household indebtedness in the United States (ADB 2007a). While detailed data are limited, there are indications that speculative purchases motivated by strong prices as well as foreign demand for commercial space have made an important contribution to the boom in property markets in India and China.

Recent booms in housing and equity markets in Asia are a source of concern because of their potential adverse macroeconomic consequences. There is evidence, not only from industrial countries, but also from a number of Asian emerging markets, including Hong Kong (China), Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore and Thailand, that such booms (defined as periods in which asset prices exceed their trend by more than 10 per cent) significantly raise the probability of

---

<sup>32</sup> For an analysis of developments in Asian housing markets, see IMF (2007b) which somewhat underplays the extent of the bubble and the risks involved, but nevertheless points out that speculative dynamics cannot be ruled out, notably in China, India and Korea.

<sup>33</sup> Korean and the United States data from OECD (2007: annex table 60). For the others, see BIS (2007a: 50), and IMF (2007b).

output being eventually pushed below its potential level and the price level above its trend (Gochoco-Bautista 2008). This implies that monetary and capital account policies should not neglect developments in asset markets since their longer-term consequences may undermine price stability and growth.

Rapid domestic credit expansion and low interest rates have played an important role in bubbles in equity and property markets in Asia. As in some mature economies, monetary policy has been highly expansionary and real interest rates have been considerably lower than those in other regions. However, the surge in capital flows is part of the reason for rapid expansion of liquidity since interventions in foreign exchange markets (discussed below) could not be fully sterilized. After 2003 private credit growth in real terms reached nearly 9 per cent per annum in China and 5 per cent in other countries.<sup>34</sup> Ample liquidity, low equity costs and loan rates together have made a strong impact on investment spending, occasionally pushing it to levels that may not be sustained over the longer term.

This is particularly the case in China and, to a lesser extent, India – investment rates in most other Asian countries did not fully regain their pre-crisis levels.<sup>35</sup> In China gross fixed capital formation has been growing 4-5 percentage points faster than real income, with the share of investment in GDP now reaching 46 per cent. This increase appears to have been associated with considerable excess capacity and wastage of capital. Although 40 per cent of China's state-owned industrial enterprises are reported to have been running losses and facing declining rates of return on capital, easy access to credit has been encouraging overinvestment (BIS 2007a: 56). In the event of a sharp upward adjustment in the exchange rate and a slowdown in exports, the capacity built in some industries may become unviable.<sup>36</sup> Similarly in India growth in investment has been faster than GDP by more than 5 percentage points per annum, with the investment ratio rising to over 30 per cent of GDP from less than 24 per cent in the early years of the decade. This has been greatly

---

<sup>34</sup> For credit conditions and interest rates in Asia, see BIS (2007a: 39-41), Mohanty and Turner (2006: 43), and IMF (2007c: 5).

<sup>35</sup> For a discussion of why boom-bust-recovery cycles harm investment, see Akyüz (2008).

<sup>36</sup> See Goldstein and Lardy (2004), Nagaraj (2005) and Branstetter and Lardy (2006) on excess capacity, waste and sustainability of the investment boom in China.

facilitated by capital inflows, credit and asset bubbles, and may not be sustained with the return of normal financial conditions.

**d. Current account balances, exchange rates and reserves**

While major Asian emerging markets have not been able to prevent capital inflows from leading to asset and investment bubbles, they have been more successful in managing their impact on exchange rates and the current account. Developing countries of the region taken together had a current account surplus of more than 7 per cent of GDP in 2007, up from 1.5 per cent in 2001. This is largely due to China's strong export performance, but a number of other countries have also been enjoying surpluses, including Malaysia and, to a lesser extent, Indonesia, Thailand and the Philippines. Among the newly industrialized economies (NIEs) Singapore continues to run a massive current account surplus while in Korea the current account has been broadly in balance. Current account deficits have been increasing in India, Pakistan and Vietnam in the past few years, but only in Pakistan has it been approaching the danger zone, expected to reach some 5 per cent of GDP at the end of 2007. However, these trends reflect not so much the effects of currency appreciations as acceleration of growth from the first half of the decade.

Since the Asian crisis, several countries in the region have moved towards more flexible exchange rate arrangements. But they have followed various shades of managed floating rather than leaving their currencies entirely to the whims of international capital flows. Most countries have strived to absorb excess supply of foreign exchange generated by strong capital inflows and/or current account surpluses in reserves through interventions in foreign exchange markets, rather than allowing them to push up currencies to unsustainable levels and undermine their trade performance. To keep liquidity expansion and inflation under control, attempts have been made to sterilize such interventions, mainly by issuing government and/or central bank debt and by raising reserve requirements in the banking system.

Currency market interventions are generally believed to be ineffective in mature economies. The IMF has also drawn a similar conclusion from its research on developing countries; that is, sterilized intervention in emerging markets is likely to

be ineffective when the influx of capital is persistent, and tends to be associated with higher inflation (IMF 2007c: 122-24). By contrast, recent work in the BIS (2005) shows that sterilized interventions in Asia have been reasonably effective in influencing the exchange rate without leading to loss of control over inflation.<sup>37</sup> There have been relatively sizeable appreciations in some countries, but these are moderate in comparison with those in other emerging markets where independent floating is practised. Moreover, appreciations in Asia have occurred under much more favourable current account positions and faster economic growth.<sup>38</sup>

The monetary impact of interventions has not been fully offset particularly in China where large trade surpluses added to the glut of foreign exchange generated by the surge in capital flows. However, despite rapid expansion of liquidity generated by interventions and loose monetary conditions, inflation has been kept under control, though only in product markets, not in asset markets.

In China, government control over the financial system has allowed it to keep the fiscal cost of intervention down.<sup>39</sup> Reserve requirements of banks were constantly raised from 7 per cent in 2003 to 15 per cent in 2008, and banks have come to hold over 80 per cent of central bank securities issued for that purpose, with their share in total bank assets exceeding 20 per cent (Yu 2008). In India the cash reserve ratio was also increased in several steps, from 4.75 per cent in 2003 to 7.5 per cent in 2008, but

---

<sup>37</sup> See, notably, Disyatat and Galati (2005), Mihaljek (2005) and Mohanty and Turner (2006); and for a general survey of the issues involved, see Sarno and Taylor (2001).

<sup>38</sup> Most Latin American and European emerging markets have experienced sizeable appreciations in real effective exchange rates – see UNCTAD *TDR* (2007) and IIF (October 2007). According to UNCTAD figures, real effective exchange rates were relatively stable in India and China during 2002-06 while Indonesia saw an appreciation of over 20 per cent and Malaysia close to 10 per cent. Appreciations in Korea and Thailand were in the order of 10 per cent – see also BIS (2007a: 41, 81). India, the Philippines and Thailand saw relatively strong appreciations in 2007.

<sup>39</sup> The fiscal (or quasi-fiscal) cost of each dollar of reserves acquired through intervention can be written as:  $i_g - i_r = (i_g - i_x) + (i_x - i_r)$  where  $i_g$ ,  $i_r$  and  $i_x$  are the rates, in common currency, on government domestic debt, reserve holdings and external borrowing, and typically  $i_g > i_x > i_r$ . The margin between  $i_x$  and  $i_r$  is determined mainly by the credit risk and between  $i_g$  and  $i_x$  by the exchange rate risk. When non-resident claims are only in foreign currencies, the first term on the right-hand side of the equation is captured by the holders of public debt at home and the second term is the net transfer abroad – what Rodrik (2006) calls the social cost of foreign exchange reserves. For the distinction between the two types of transfers and costs, see UNCTAD *TDR* (1999: Chap. V). Mohanty and Turner (2006) provide some estimates of fiscal cost of intervention in emerging markets.

because of higher interest rates, the cost of intervention reached 2 per cent of GDP in 2007 – more than half of the central government deficits.<sup>40</sup>

As of end-2007, total reserves in developing Asia (excluding NIEs) exceeded \$2 trillion and over 80 per cent of these were generated after 2001 (Table 3). Asian reserves now account for more than half of total reserves of the developing world. The twin surpluses that the region as a whole has been running on its balance of payments (that is, on both current and capital accounts) have been fully converted into reserves.<sup>41</sup> Of the \$1.7 trillion reserves accumulated after 2001, almost two-thirds are earned and one-third “borrowed”.<sup>42</sup> Unlike other regions, therefore, reserve increases in Asia have come mainly from current account surpluses rather than capital inflows (Table 2).<sup>43</sup> Moreover, these reserves are earned in the context of rapid growth, rather than by sacrificing growth.<sup>44</sup> However, excluding China, two-thirds of Asian reserves in recent years are also from capital inflows. In India and other Asian countries with current account deficits, reserves are one hundred per cent “borrowed”.

On the Greenspan-Guidotti rule noted above, Asian reserves are excessive. They are several times the total short-term external debt of the region, which stood at less than \$300 billion at the end of 2007, and more than twice the total external debt of some \$950 billion.<sup>45</sup> They now cover close to nine months of imports, much

---

<sup>40</sup> Fiscal cost from ESCAP (2007: 21) and central government deficits from IMF (2007d: 20).

<sup>41</sup> Here capital account surplus is used in the conventional sense; that is, surplus on non-reserve financial account.

<sup>42</sup> “Borrowed” in the sense that they accompany increased claims by non-residents in one form or another, including direct and portfolio equity investment, which entail outward income transfers.

<sup>43</sup> In most emerging markets in Table 2 reserves are fully borrowed since the current account is broadly balanced. In some, notably in Europe, however, net capital inflows are used partly to finance current account deficits and partly to add to reserves.

<sup>44</sup> For instance Brazil also earns reserves by running a current account surplus, but this is accompanied by sluggish growth. Because of a high degree of vulnerability to deterioration in the market sentiment, monetary and fiscal policies have been kept tight, restraining growth and imports. With the recent acceleration of growth towards 6 per cent, the Brazilian current account has indeed started to run deficits.

<sup>45</sup> On external debt, see IMF (2007c). According to BIS (2007a: 94), at the end of 2006 reserves in China were 13 times the short-term debt, defined as bank debt with a maturity up to and including one year plus international debt securities with a maturity of up to one year.

higher than the three months of imports traditionally considered as adequate for addressing the liquidity problems arising from time lags between payments for imports and receipts from exports.

A policy of accumulating reserves at times of strong capital inflows and using them during sudden stops and reversals appears to be a sensible counter-cyclical response to instability in international capital flows. By intervening in the foreign exchange market and accumulating reserves, a country facing a surge in capital flows can both reduce its external vulnerability by preventing appreciations and trade deficits, and secure self-insurance against possible speculative attacks. In other words, if inflows are believed to be temporary, it would be rational to resist an inward transfer by allowing the domestic consumption and/or investment to increase and the current account to run into deficits through faster growth and appreciations.<sup>46</sup>

However, such a strategy lacks a strong rationale because it implies that a country would borrow even if the funds thus acquired are not used to finance investment and imports, but held in short-term foreign assets. This is all the more so because reserves accumulated out of capital inflows are highly costly – that is, the return earned on reserves is less than the cost of foreign capital, including the cost of foreign borrowing and the foregone return on assets sold. In fact it is more so for portfolio equity and particularly FDI flows for acquisition of ownership rights of existing assets where rates earned by transnational companies exceed the cost of international borrowing by a very large margin (UNCTAD *TDR* 1999: Chap. V).

In previous decades the current account in Asia was generally in deficit so that a very large proportion of reserves held at the beginning of this decade was “borrowed” rather than earned reserves. If this is added to reserves accumulated from capital inflows since 2001, about half of the total stock of reserves in Asia now would be “borrowed” reserves. This is approximately equal to the existing stock of external debt of the region. Assuming a moderate 500-basis-point margin between the interest cost on debt and the return on reserves, this would give an annual carry cost of \$50

---

<sup>46</sup> See Williamson (1995) on the rationality of reserve accumulation under such conditions. Polak and Clark (2006: 555) refer to fear of floating in explaining reserve holding in China, Korea and Singapore.

billion for the region as a whole.<sup>47</sup> This is how much the region as a whole could save per year by paying up its external debt by drawing on reserves.<sup>48</sup> The carry cost of reserves accumulated from debt-creating and portfolio equity inflows since the beginning of the decade alone can be estimated to be as much as half of this amount. It would be much higher if FDI inflows for acquisitions are included. Furthermore, in view of the ongoing downward pressure on the dollar, countries with a large stock of dollar reserves stand to incur considerable losses.

The high carry cost of reserves in excess of possible liquidity needs, together with the risk of exchange-rate-related losses, raise the question of alternative investments in higher-yielding foreign securities, primarily through SWFs, as done by several fuel exporters. Like China, fuel exporters as a group also generate large current account surpluses, but unlike China, they run deficits in their capital accounts. About one-third of oil surpluses generated since 2002 have been used for investment abroad and two-thirds for reserve accumulation. In several of them investment is undertaken mainly by SWFs. According to some estimates, total assets of SWFs in fuel exporters exceed \$1.5 trillion (IMF 2007e: Annex 1.2; Truman 2007b). These funds come out of government earnings from oil exports rather than from reserves purchased from the private sector. In Asia, with the notable exception of Singapore, SWFs are relatively small. At some \$200 billion, the assets of the recently established China Investment Cooperation (CIC) are only a fraction of the total reserves of the country, and only a small part of these appear to have been used for investment abroad.

As noted above, SWFs have recently been acquiring high-risk equity in western banks hit by the subprime crisis, thereby acting as a global force for stability while suffering losses. However, given the deep suspicion and misgivings about SWFs in some advanced countries, massive amounts of Asian reserves cannot be

---

<sup>47</sup> This figure appears quite modest if one takes the average spread over the full boom-bust cycles in capital flows to emerging markets. For instance the average spread of emerging-market bonds exceeded 700 basis points during the 1990s and never fell below 400 basis points.

<sup>48</sup> Since “borrowed” reserves of some countries fall short of their total external debt, realization of this aggregate benefit would require lending by countries with excess reserves to those with deficits at rates earned on reserves.

expected to be quickly translated into investment in more lucrative, less risky assets in these countries. An alternative would be to recycle them in the region for, *inter alia*, infrastructure projects in low-income countries in need of development finance. This may best be achieved through a genuinely regional development bank, established among the developing countries of the region along the lines of the recent *Banco del Sur* in Latin America.

**e. Capital account measures**

Many Asian emerging markets are incurring high reserve costs and facing macroeconomic policy dilemmas mainly because they have chosen to keep their economies open to the surge in capital inflows, rather than imposing tighter counter-cyclical measures of control.<sup>49</sup> Indeed, capital accounts in the region are more open today than they were during the Asian crisis.<sup>50</sup> In China, for instance, one of the countries with the tightest restrictions, calculations based on an IMF formula are said to show that 80 per cent of the capital account has been liberalized (Yu 2008).

In several cases the opening to inflows has been selective, such as raising the limits on the QFII (qualified foreign institutional investors) in China. Countries such as India have liberalized sectoral caps on FDI. Foreign banks have generally been allowed greater freedom to operate, with many domestic borrowers receiving funding from such banks directly from abroad or through their local offices. However, there have been some efforts to bring greater transparency to capital inflows. For instance, in 2007 India adopted a proposal by the Securities and Exchange Board to restrict the foreign buying of shares through offshore derivatives despite an adverse initial reaction from the stock market – a move that was designed not so much to relieve the upward pressure on the rupee as to bring greater transparency by restricting the activities of hedge funds.

---

<sup>49</sup> These include direct restrictions over foreign borrowing by residents and access of non-residents to domestic securities markets, supplemented by market-based or administrative restrictions over maturity and currency mismatches in banks' balance sheets and restrictions designed to limit exchange-rate-related credit risks – for a discussion, see Akyüz (2008).

<sup>50</sup> For recent measures in Asia, see BIS (2007a); IMF (2007b and 2007e); and McCauley (2008).



Efforts have no doubt been made to curb excessive inflows in order to ease the upward pressure on their currencies. In 2006 China extended to foreign banks the restriction over borrowing abroad to fund domestic dollar assets. At the end of 2006 Korea raised banks' reserve requirements from 5 per cent to 7 per cent in order to support the dollar vis-à-vis the won. Around the same time Thailand imposed a 30 per cent reserve requirement on capital inflows held less than one year, including portfolio equity flows, in order to check continued appreciation of the currency. This provoked a strong reaction from the stock market, forcing the government to exempt investment in stocks from reserve requirements. The remaining restrictions were removed in March 2008. With continued surge in capital inflows India reversed the liberalization of the limits on external commercial borrowing, tightening them in 2007. Similarly, Korea restricted external funding of domestic lending by foreign banks and reintroduced limits on lending in foreign currency to domestic firms.

However, the main response to the surge in capital inflows has been to liberalize outward investment by residents. This is partly motivated by a desire to allow national firms to expand abroad and become important players in world markets. This has particularly been the case in China and India. However, while in China assets acquired abroad are financed from trade surpluses, in India these are funded by capital inflows, in much the same way as Korean chaebols did in the run-up to the 1997 crisis.<sup>51</sup> As remarked by an observer, "the global flood of money (and attendant hubris) has enabled Indian companies like Tata to buy themselves a place on the world stage rather than earning it through export success or technological advance" (Bowring 2008a).

There has also been considerable liberalization of portfolio outflows. For instance China took a decision to permit investment by its residents in approved overseas markets and raised the limits on corporate and individual purchases of foreign currency for mitigating the pressure for appreciation through the so-called QDII (qualified domestic institutional investor) scheme. The share of portfolio investment in the total international assets of China in 2006 was three times that of FDI abroad; the former increased from under 10 per cent in 2004 to about 15 per cent

---

<sup>51</sup> For a discussion of inward and outward FDI in India, see Chandrasekhar (2008).

in 2006 while the share of FDI fell, to about 5 per cent in the latter year (Hang Seng Bank 2008).

Korea has also liberalized rules limiting individual or institutional investment abroad, and even provided incentives for residents to invest in foreign securities and real estate assets. Thailand raised the limits on and extended the duration of deposits that could be held abroad by resident corporations, removed restrictions over foreign currency accounts in local banks by residents, allowed investment by local funds abroad, and abolished the surrender requirement for Thai exporters. The Philippines allowed residents to invest abroad without approval and raised the limits over such investment. India liberalized resident outflows, giving greater freedom for portfolio investment abroad, and Malaysia increased the limit on foreign assets held by some institutional investors and investment trusts.

Capital account opening for residents as a response to a surge in inflows is clearly an alternative to sterilized intervention and has the advantage of avoiding carry costs for reserves. But, like interventions, it does effectively nothing to prevent currency and maturity mismatches in balance sheets, or instability and vulnerability to shocks associated with greater presence of foreigners in domestic asset markets. Its rationale as a longer-term strategy for closer integration with global financial markets is highly contentious. As a counter-cyclical measure, it can be even more problematic – once introduced for cyclical reasons, it may not be easily rolled back when conditions change. Besides, in countries such as China where property rights are not clearly defined, liberalization of resident outflows could encourage asset stripping and money laundering (Yu 2008).

## **5. EXTERNAL SHOCKS AND POLICY OPTIONS IN ASIA**

### **a. Growth prospects: projections and beyond**

Asia is now facing external shocks triggered by the subprime crisis, coming on top of stagflationary pressures exerted by the upward trend in oil prices. However, there is a certain degree of compensation among the effects of these shocks. Unlike in

the 1970s when oil price hikes resulted from supply shocks, the recent trend has been driven by growing demand in the face of a slow and limited supply response, declines in production in maturing fields and bottlenecks in refinery capacity.<sup>52</sup> The weakness of the dollar has been a contributing factor since it means lower prices in currencies strengthening against the dollar and greater demand. There is also a strong speculative element, resulting in sharp increases in relatively short periods of time, as declines in property and equity prices tend to divert excess liquidity to commodity markets. However, to the extent that global growth slows down due to the subprime crisis, the demand pressure on oil prices could ease considerably even though a sharp reversal of the ongoing trend is quite unlikely. Furthermore, an upward adjustment in Asian currencies would relieve inflationary effects of higher international prices of food and oil.

Earlier projections for growth in 2008 in Asia and elsewhere of some of the more influential international and regional institutions made in the second half of 2007 appeared to assume that the subprime crisis would only cause a hiccup in global economic activity, just as it was initially believed to be the case during the Asian crisis in 1997. But even the most recent projections do not show a sharp deviation from the trend of rapid and broad-based growth that has been under way since the early years of the decade (Table 4).<sup>53</sup> For global growth, the drop projected in 2008 from 2007 lies between 0.3 and 0.8 percentage points. For the United States, the IMF and the Asian Development Bank (ADB) project a 0.7-percentage-point fall between 2007 and 2008, but the Institute of International Finance (IIF) sees no change. In these projections developing Asia is not expected to lose much momentum, with growth slowing down by no more than one percentage point.

Perhaps more important are the revisions made to growth projections for 2008 after the financial difficulties became more visible in the course of last autumn. Compared to projections made in July 2007, current projections for 2008 by the IMF

---

<sup>52</sup> For comparison with the 1970s and the factors driving the recent hikes in oil prices, see UNCTAD *TDR* (2005), and for current market conditions and prospects, see IMF (2007c: Chap. 1).

<sup>53</sup> Large differences between growth rates for world output given by the IMF and other institutions in Table 4 are due to the use of purchasing power parity by the IMF.

show a 1.1-percentage-point loss of growth for the world economy as a whole; 1.3 points for the United States; and 0.5 points for Asian developing countries.<sup>54</sup> Similarly, in March 2008 the ADB reduced its outlook for growth in the United States to 1.5 per cent and in Asia to 7.6 per cent from the earlier (September 2007) figures of 2.6 per cent and 8.2 per cent, respectively (ADB 2007b).

These projections are subject to usual caveats and generally accompanied by warnings that risks are downside. Nevertheless, only the UN (2008) projections explore, under a “pessimistic scenario”, what might happen if such risks were to materialize. The United States would go into a recession and growth in Asia and the world economy as a whole would both be more than halved. This scenario assumes a sharp decline in house prices in the United States and a hard landing of the dollar, leading to increases in dollar interest rates. Nevertheless, the United States recession would be quite mild compared to those in 1982 and 1991 when output contracted by 3 per cent and 1 per cent respectively. It is very much like the brief contraction in 2001, presumably reflecting counteracting influences from declines in house prices and sharp devaluation of the dollar on aggregate demand. Recession and the decline of the dollar would result in sharp cuts in imports in the United States, affecting major exporters. The dollar decline would also result in losses on dollar assets in countries with large holdings. This appears to be the main financial impact: no explicit reference is made to possible consequences of the crisis for asset prices and investment in emerging markets, or the policy response.<sup>55</sup>

#### **b. Financial contagion and shocks**

Asian economies do not appear to have large direct exposure to securitized assets linked to subprime lending, even though some losses have been reported in the

---

<sup>54</sup> Just as this paper was being finalized the IMF cut its outlook for global growth for 2008 for the second time this year, to 3.7 per cent, and argued that a global recession – defined as a global growth rate below 3 per cent – was a possibility. The projection for developing Asia is also cut from 8.6 per cent to 8.2 per cent, and the United States is expected to slip into a mild recession in 2008; see IMF *World Economic Outlook*, April 2008.

<sup>55</sup> The World Bank (2007: Table 1.3) simulates the impact of what it calls a prolonged recession in the United States on the world economy, triggered by a sharp fall in residential investment wherein growth in the United States would fall to 1 per cent. This would cause a deceleration of growth in developing countries by no more than 0.6 percentage points.

region. The impact of the financial turmoil is likely to be transmitted through changes in the risk appetite and capital flows, in conditions of bubbles in domestic credit and asset markets in the larger economies of the region. The question of sustainability of these bubbles had been raised before the subprime turmoil, and they have now become even more fragile.

There is considerable uncertainty about the impact of the crisis on asset markets and capital flows in emerging markets as financial markets have shown signs of both decoupling and recoupling in recent months (BIS 2007b). However, large drops in western equity markets caused by occasional bad news about financial losses have often been mirrored by similar changes in Asian markets. Should such difficulties continue unabated, the likelihood of a sharp and durable correction in Asian markets is quite high. By itself this may not lower growth by more than a couple of percentage points in China and India, and should not pose a serious problem since the recent pace of growth in these countries is generally viewed as unsustainable.<sup>56</sup> However, if combined with a sudden stop and reversal of capital flows and/or contraction of export markets, the impact on growth can be much more serious.

It is generally expected that bank-related flows would decline in view of the losses many international banks are now incurring. According to most recent projections by the IIF (2008), total private flows to emerging markets would be broadly the same in 2008 as in 2007; there would be a decline of some \$25 billion in bank lending, compensated by increases in equity flows. It is also argued that capital flows to emerging markets may even accelerate if Europe joins the United States in easy monetary policy. That this possibility cannot be ruled out is suggested by the most recent estimates for private capital flows for 2007 which have now put them above the earlier estimates by some \$60 billion because of a stronger growth of equity flows and limited impact of the financial turmoil on investment in fixed income funds and international bank lending (IIF 2008: 19). The largest upward revision has been made for India, particularly for bank-related capital flows. If continued, this could

---

<sup>56</sup> On some accounts it might reduce the Chinese growth to 8 per cent – see Chancellor (2008).

also imply decoupling of Asian equity markets from the United States and Europe and the persistence of credit and asset bubbles in China and India.

It is quite likely that investors will now start differentiating among countries to a much greater extent than has been the case in recent years. Countries with large current account deficits, high stocks of external debt, inadequate reserves and appreciated currencies in Central and Eastern Europe and elsewhere may face a sudden stop and even reversal of capital flows and sharp increases in spreads, resulting in exchange rate and balance-of-payments crises.<sup>57</sup> Given large stocks of reserves, even a generalized exit from emerging markets would not create serious payments difficulties for most Asian countries, and the impact would be felt primarily in domestic credit and asset markets. Such an exit could be triggered by a widespread flight toward quality, with investors taking refuge in the safety of government bonds in advanced countries, or a need to liquidate their holdings in emerging markets in order to cover mounting losses and margin calls.<sup>58</sup>

The likelihood of a rapid exit of capital is difficult to assess, but it cannot be excluded. A number of countries in Asia experienced a withdrawal of foreigners from stock markets during the May-June 2006 global selloff. The amount of money taken out was small, in the order of some \$15 billion, but it was the first reversal of capital flows after the Asian crisis and synchronized across all the countries studied.<sup>59</sup> Again there was a rapid liquidation by investors from advanced countries in several markets in Asia in summer 2007 as subprime losses started to surface. Thus the region may be susceptible to common adverse external financial shocks, quite independent of specific circumstances prevailing in individual countries.

---

<sup>57</sup> According to a World Bank (2007: Table 1.2) simulation, a once-and-for-all increase of 200 basis points in emerging-market spreads could bring down growth in developing (low- and middle-income) countries by 1.7 percentage points in 2008 and 0.9 per cent in 2009.

<sup>58</sup> McCauley (2008: 1) argues that a systematic withdrawal of funds from Asia in the latter sense requires a new image whereby “Asian markets *provide* liquidity under stressed conditions to portfolios managed in the major markets.”

<sup>59</sup> See Chai-Anant and Ho (2008). The countries concerned are India, Indonesia, Korea, the Philippines, Taiwan (China) and Thailand.

**c. Trade linkages and growth in Asia**

The decoupling debate is often carried out in terms of linkages between trade and growth; that is, how the trade between Asia and the United States would be affected and what impact this would have on growth in Asia. These are contentious issues, but the weight of arguments leans towards the view that trade linkages would not result in a major adverse impact on growth in Asia, even allowing for a high degree of dependence on the United States market. Exports to the United States amount to some 8 per cent of GDP in China and 6 per cent in other Asian countries.<sup>60</sup> In value-added terms these ratios are lower, particularly in China and a few other assembly platforms such as Malaysia where exports still have high import contents even though domestic value-added contents have been rising in recent years as a result of upgrading.<sup>61</sup> Consequently, even if exports to the United States stop growing and even start declining in absolute terms as a result of a recession and weakening of the dollar, the Asian countries can still sustain rapid, albeit somewhat reduced, growth provided that other components of aggregate demand continue growing at their recent pace.

This line of thinking clearly focuses on the impact of exports on aggregate demand, rather than on the foreign exchange constraint. It is implicitly assumed that the countries affected can continue to maintain growth of imports despite reduced export earnings. This would pose no major problem for those running large current account surpluses such as China, Malaysia and Singapore. Others with deficits, such as India, however, would need to rely increasingly on capital inflows and/or draw on their reserves in order to finance the widening gap between imports and exports.

This simple arithmetic is complicated by a number of factors. First, the impact of a slowdown in the United States also depends on how Asian export markets

---

<sup>60</sup> As of end-2006 China's exports were just under 40 per cent of its GDP, with slightly over 20 per cent of total exports going to the United States. For the remainder of the region the average export-GDP ratio is somewhat higher, above 40 per cent, but the share of the United States in total exports is much lower.

<sup>61</sup> Increases in the domestic content of exports render China more vulnerable to external trade shocks. On upgrading and delinking of China's exports from imports, see Cui and Syed (2007) and Cui (2007).

elsewhere are affected. The effect on growth in Europe can be significant because of its direct exposure to the subprime crisis. Indeed, growth in the European Union is already falling below the levels of earlier projections. Since exports to the European Union are about 7 per cent of GDP in China and even more in other Asian emerging markets, a sharp slowdown in Europe could have a relatively large impact. The Asian trade balance with the European Union could deteriorate even further if currencies in the region start rising against the euro.

Second, for some countries indirect exposure to a decline in growth of exports to the United States can be just as important because of relatively strong intra-regional, intra-industry trade linkages.<sup>62</sup> More than two-thirds of Chinese imports consist of intermediate goods, and about a third of these are provided within the region, notably by Korea and Taiwan which individually account for around 10 per cent of total imports by China. This means that a decline in Chinese exports to the United States would bring about a corresponding decline in imports of intermediate goods from the region. Thus countries exporting these goods to China would be affected by cuts not only in their direct exports to the United States, but also in their indirect exports through China. In these countries cuts in exports of intermediate goods to China would not entail an important offsetting decline in imports. Consequently, they could be affected even more than China by import cuts in the United States even when their direct exports to the United States are relatively small. For instance it has been estimated that a 10 per cent slowdown in United States imports would reduce China's exports by 2.1 percent and Korea's exports by 1.5 per cent. The consequent drop in China's imports from Korea would lower exports of that country by another 1.3 per cent (BIS 2007a). Thus, Korea might be more vulnerable to a United States slowdown not only because its exports have higher value added, but also because it is indirectly exposed through exports to China. This is likely to be true for Taiwan as well.

Finally, domestic components of aggregate demand are not independent of exports. This is particularly true for investment. A deceleration in exports can lead to

---

<sup>62</sup> That is, imports and exports within the same product categories – see UNCTAD *TDR* (2005), ADB (2007a) and IMF (2007d) for trade patterns and intra-regional trade in Asia.



a sharp drop in investment designed to cater for foreign markets, which can, in turn, aggravate the impact of contraction in exports on aggregate demand. This effect can be particularly strong in China where investment is a large component of aggregate demand and an important part of investment is linked to exports. This includes greenfield FDI which has been channelled to export sectors through various restrictions and incentives, including tax rebates and foreign-exchange balancing requirements as part of an aggressive export strategy (Yu 2007). The likelihood of a large drop in investment would be greater if contraction in export markets is accompanied by currency appreciations and asset price declines.

#### **d. Policy challenges**

A combination of severe external trade and financial shocks from the subprime crisis with domestic fragilities associated with credit, asset and investment bubbles could pose serious policy challenges in Asia, but above all in China and India. Whatever the nature and extent of contagion and shocks from the crisis, it is important to avoid destabilizing feedbacks between the real and financial sectors. A sharp drop in exports together with a rapid correction in asset prices could bring down growth considerably, which can, in turn, threaten the solvency of the banking system given the high degree of leverage of some firms, particularly in China.<sup>63</sup> The appropriate policy response would be to expand domestic demand through fiscal stimulus, taking into account that a small dose of deceleration of growth towards more sustainable levels could be desirable. If difficulties emerge in the financial sector, it would also be necessary to provide lender-of-last-resort financing. Nevertheless, it is important that policy interventions aim not at preventing but smoothing correction in asset prices and facilitating restructuring in sectors which have been over-stretched thanks to easy financing conditions in recent years.

However, China would need not just a counter-cyclical macroeconomic expansion, but a more durable shift in the composition of aggregate demand from exports towards domestic consumption because, as noted above, the crisis is likely to

---

<sup>63</sup> BIS (2007a: 56) notes that in China the bulk of recorded profits are earned by relatively few enterprises while the rest has high leverage so that if growth slows significantly a substantial proportion of bank loans can become non-performing.

bring a sizeable external adjustment in the United States.<sup>64</sup> Current economic conditions in China, including the twin balance-of-payments surpluses, growing reserves carried at high costs and risks, an undervalued currency, and an unprecedented growth in production capacity heavily dependent on external markets, cannot be defended on grounds of economic efficiency or expediency. This combination is sometimes linked to China's development strategy. On this view, a rapid reduction in unemployment through export-led growth calls for trade surpluses, undervalued exchange rates and capital controls. It is also argued that the viability of this strategy also depends on China's willingness to provide the external financing needed to the United States by translating its current and capital account surpluses into dollar reserves (Dooley, Folkerts-Landau and Garber 2004; Aizenman 2007).

However, as the experience of late industrializers, including first-tier NIEs and Japan, demonstrates, a development strategy emphasizing exports does not require generation of large and persistent current account surpluses through undervalued exchange rates. An undervalued currency often leads to terms-of-trade losses, and this seems to be the case in China (Yu 2007). It can also discourage technological upgrading and productivity growth. For these reasons many of the early industrializers in East Asia, including Japan, rarely resorted to cheap money for industrial development – by contrast they occasionally tolerated moderate appreciations in order to provide incentives for productivity growth.

A combination of current and capital account surpluses lacks a strong rationale. If capital inflows continue at their recent pace or accelerate, a policy of controlled appreciation of the yuan combined with much tighter control over inflows and a long-term strategy of expansion of Chinese investment abroad, including in developing countries, would appear to be a desirable response on several grounds. It would help achieve a soft landing by easing the upward pressures on asset prices, reducing the rate of liquidity expansion and enhancing monetary policy autonomy,

---

<sup>64</sup> For a simulation of the trade impact of a sizeable adjustment in the United States deficits on countries in the Americas, see Weisbrot, Schmitt and Sandoval (2008). In a high adjustment scenario where the United States' trade deficit falls to 1.0 per cent of GDP by 2010, declines in exports of some of the countries heavily dependent on the United States such as Canada and Mexico are quite high, reaching 4 per cent of GDP. However, these countries' exports to the United States as a proportion of GDP are more than twice the level of China.

and bringing down investment to sustainable levels. It would also ease inflationary pressures in product markets, particularly those linked to oil and food imports, and reduce the pace of reserve hoarding and associated costs and risks.

But perhaps a greater challenge would be to secure expansion of the internal market based on a much more rapid growth of consumption than has hitherto been the case. Since the early years of the decade, growth in consumption in China has constantly lagged behind income and investment. During 2002-07, the average growth rate of consumer spending was around 8 per cent per annum while gross fixed capital formation grew at a rate of 15 per cent and exports 25 per cent. Consequently, the share of consumption fell below 40 per cent of GDP – almost half of the figure in the United States, and considerably less than the share of investment.<sup>65</sup> The imbalance between the two key components of domestic demand has meant increasing dependence of Chinese industry on foreign markets. Indeed, China appears to be trading a lot more than would be expected on the basis of observed historical patterns linking trade to population size, income levels and resource endowments.

The disparity between consumption and investment and the consequent dependence on foreign markets is largely a reflection of the imbalance between profits and wages. It is true that success in industrialization crucially depends on the pace of capital accumulation, which, in turn, depends very much on the volume of profits and the extent to which they are used for investment rather than consumption. High corporate retentions and a dynamic profit-investment nexus, rather than high household savings, were indeed the key distinguishing components of successful industrialization in East Asia (Akyüz and Gore 1996). China is not an exception in this respect where corporate retentions exceed 20 per cent of GDP due to a high share of profits in value-added, the practice of non-payment of dividends to the government by state-owned enterprises, and tax incentives for retentions and investment.<sup>66</sup>

---

<sup>65</sup> Figures on growth in the components of aggregate demand are from World Bank Beijing Office (various issues). See also Aziz and Dunaway (2007) on the evolution of the shares of private consumption and investment in GDP.

<sup>66</sup> See World Bank Beijing Office (August 2005), Kuijs (2005), Yu (2007) and Aziz and Dunaway (2007).

In most late industrializers, particularly Japan and Korea, wages and household consumption grew in tandem with productivity and underpinned the expansion of productive capacity by providing a growing internal market. In China, by contrast, despite registering impressive increases, wages have lagged behind productivity growth and their share in value-added has declined, and this is almost perfectly mirrored by the downward trend in the share of private consumption in GDP.<sup>67</sup> Since the early years of the decade labour productivity in manufacturing industry has grown by some 20 per cent per annum while nominal wage increases have been under 15 per cent and real wage increases even lower. Profits rose faster than sales and the share of labour cost in total gross output in mining, manufacturing and utilities fell from 11.5 per cent in 2002 to 7.1 per cent in 2006; for the economy as a whole, the share of wages in GDP fell to about 40 per cent after fluctuating between 50-55 per cent in the 1990s. Furthermore, there are large precautionary savings out of wage incomes because of absence of adequate public health, education and social security services. These savings are now increasingly held in stock trading accounts as the real return on bank deposits has been barely positive.

All these imbalances are presumably among the problems that Premier Wen Jiabao was referring to when he pointed out at the National People's Congress in March 2007 that "the biggest problem with China's economy is that the growth is unstable, unbalanced, uncoordinated and unsustainable." They need to be addressed independent of the shocks from the subprime crisis if China is to avoid the kind of difficulties that Japan faced during much of the 1990s following the asset and credit bubbles and excessive investment in the late 1980s.<sup>68</sup> Expansion of public spending in areas such as health, education and social security, as well as transfers to poorer households financed, at least partly, by greater dividend payments by state-owned enterprises, can play an important role in lifting consumption spending. If needed, this expenditure policy can also be combined with tighter credit policy in order to

---

<sup>67</sup> On recent behaviour of labour productivity, profits and wages and consumption, see Kim and Kuijs (2007), and World Bank Beijing Office (August 2006; and February 2007).

<sup>68</sup> On parallels between China today and Japan in the late 1980s, see Summers (2007a) and BIS (2007a: 150), which argues that "given the recent rates of credit expansion, asset price increases and massive investment in heavy industry, the Chinese economy also seems to be demonstrating very similar, disquieting symptoms." On the role of sluggish wage growth in Japan, see UNCTAD *TDR* (2002 and 2003).

check the rapid growth in investment. Any incentive that higher interest rates may generate for arbitrage flows may be offset by tighter capital controls including implicit and explicit taxes and administrative restrictions.

The shift towards a balance between domestic consumption and exports would necessitate a gradual restructuring of the industry so as to alter the product composition of supply to suit domestic tastes and preferences. China's export products are often designed for foreign markets and the existing capacity in some sectors cannot be fully utilized on the basis of expansion of domestic demand. On the other hand, since skills and equipment are often industry-specific, they cannot be easily shifted between industries. This means that adjustment in the production structure would be realized primarily by a reallocation of new investment and skills in favour of areas with domestic demand potentials. However, this should not cause a major difficulty given the state guidance of investment.

In East and South East Asian economies closely linked through production networks based on vertical integration, domestic stimulus would be needed to offset reduction in exports to advanced countries and China. Given too many burdens already placed on monetary policy, including control over inflation and management of capital flows and exchange rates, the task falls again on fiscal policy. Most countries in the region have considerable scope to respond by fiscal expansion, in very much the same way as they were able to do during the weakness of global demand after 2000 (Akyüz 2006). The scope is somewhat limited in countries like India, Malaysia and Pakistan with relatively sizeable fiscal deficits. For these countries it is particularly important to design fiscal stimuli in such ways that they do not add to structural deficits. This is particularly important for India where budget deficits have been growing despite acceleration of growth, suggesting pro-cyclical fiscal policy.

On the external side, Asian developing countries appear to have sustainable current account positions as well as relatively large stocks of reserves to weather any potential worsening of their trade balances as a result of a slowdown in exports. Countries such as India, Pakistan and Vietnam which have recently been running current account deficits between 3 and 5 per cent of GDP could see their deficits rise

further as exports slow down and growth of income and imports is sustained. Given the relatively high levels of reserves, this should cause no serious problems. However, if slowdown in markets abroad is accompanied by a sudden stop or reversal of capital flows, the ability of these countries to give a positive response to external shocks could be greatly compromised. In the case of India, the adverse impact on the economy could be aggravated by the bursting of the asset market bubble. The twin structural deficits in fiscal and external accounts thus need greater attention for reducing vulnerability to shocks.

Low-income countries dependent on official financing are no doubt highly vulnerable to a sharp deterioration in global economic conditions, and many of them could see rapid increases in their current account deficits with a slowdown in trade in goods and services. Indeed, in several of them, including small island economies, current account deficits as a proportion of GDP are already in double-digit figures. The external financing needs of these countries may well exceed the amounts available under normal access limits in the IMF, and they should be able to have access to additional financing through augmentation of resources made available under Poverty Reduction and Growth Facility (PRGF) arrangements and the Exogenous Shocks Facility.

Finally, a reasonable degree of consistency would need to be ensured in the region among policy responses of individual countries to external financial and trade shocks from the subprime crisis. A coordinated macroeconomic expansion would certainly be desirable, but it would be even more important to secure cooperation and consistency in exchange rate policies. Despite a clear division of labour and complementarity of trade based on vertical integration, trade patterns in East and South East Asian emerging markets are becoming increasingly competitive as followers in industrial development are rapidly closing the gap with the more advanced economies through upgrading and building production capacity to substitute imported components and parts with domestic production. Under these conditions divergent movements in exchange rates can become highly disruptive and conflictual. Experience shows that such movements can become particularly intensive at times of severe external shocks and instability of trade and capital flows. If shocks are severe,

some countries may even be tempted to respond by beggar-my-neighbour exchange rate policies.

It is, therefore, important to engage in regional consultations in exchange rate policies and explore durable currency arrangements. The experience of the European Union in exchange rate cooperation starting with the demise of the Bretton Woods system and culminating in the European Monetary Union holds valuable lessons, even though it may not be fully replicated since the region is not yet ready to float collectively vis-à-vis the G3 currencies (viz., the dollar, euro and yen). There are other, more flexible, options available, including common pegs or a system of managed floating vis-à-vis G3 currencies with intra-regional parity grids, which deserve attention.<sup>69</sup> Complementary arrangements should also be considered, including common sets of measures to curb excessive capital inflows, formal arrangements for macroeconomic policy coordination, surveillance of financial markets and capital flows and effective short-term intra-regional credit facilities based on an extension of the Chiang Mai initiative.

## **6. CONCLUSIONS**

The world economy is going through difficult times. With financial turmoil rapidly deepening, it has now become quite likely that the United States will face economic contraction in the period ahead and, on some accounts, it may even experience the most serious recession since the Great Depression despite expansionary monetary and fiscal measures. There is no coordinated expansion by the G7 major industrial economies in sight. Spillovers from this crisis to developing countries will certainly surpass the adverse international repercussions of crises in emerging markets in the 1990s. However, for the first time in modern history, hopes seem to be largely pinned on developing countries, particularly in Asia, for sustaining stability and growth in the world economy. On the one hand, the SWFs from

---

<sup>69</sup> Such a regime was proposed in a paper jointly prepared by staff of the French and Japanese Ministries of Finance: "A possible solution for many emerging market economies could be a managed floating exchange-rate regime whereby the currency moves within a given implicit or explicit band with its centre targeted to a basket of currencies. ...managed free-floating exchange rate regimes may be accompanied for some time, in certain circumstances, by market-based regulatory measures to curb excessive capital inflows" (Ministry of Finance, Japan 2001: 3-4).

emerging markets are increasingly looked at as stabilizing forces in financial markets by providing capital to support troubled banks in the United States and Europe. On the other hand, economic prospects in the world economy seem to hinge, more than ever, on the ability of Asian developing countries to decouple their growth and continue surging ahead despite adverse spillovers from advanced countries.

In Asia the impact of these spillovers will be felt at a time when the region is facing fragility and imbalances resulting from trade and financial policies and strategies pursued in recent years, including credit, asset and investment bubbles and excessive reliance on foreign markets. However, economic fundamentals in the region are generally strong enough to allow a positive response to trade shocks from contraction of markets abroad and swings in exchange rates. Countries with weak fiscal and current account positions look somewhat vulnerable to a sudden stop and reversal of capital flows, but this is not seen as likely to occur. On balance, therefore, Asian developing countries can be expected to continue with rapid, albeit somewhat reduced, growth provided that they undertake counter-cyclical and structural measures needed to address domestic fragility and imbalances and counter the adverse effects of external shocks from the subprime crisis.

Current conditions demonstrate once again that when policies falter in regulating financial institutions and markets, there is no limit to the damage that they can inflict on an economy. Furthermore, in a world of closely integrated markets, every major financial crisis has global repercussions. This means that shortcomings in national systems of financial rules and regulations are of international concern – more so for those in major advanced economies than in emerging markets because of their greater global repercussions. So far piecemeal initiatives and efforts in international fora such as the IMF, the Bank for International Settlements (BIS) and the Financial Stability Forum have not been able to prevent recurrence of virulent global financial crises. A fundamental collective rethinking with full participation of developing countries is thus needed for harnessing financial markets and reducing systemic and global instability.



## References

- ADB (Asian Development Bank) (2007a). *Asian Development Outlook*. Hong Kong China.
- ADB (2007b). *Asian Development Outlook 2007 Update*. Available at [www.adb.org](http://www.adb.org).
- ADB (2008). *Asian Development Outlook 2008*. Available at [www.adb.org](http://www.adb.org).
- Aizenman, J. (2007). "Large Hoarding of International Reserves and the Emerging Global Economic Architecture." NBER Working Paper 13277.
- Akyüz, Y. (2000). "Causes and Sources of the Asian Financial Crisis." Paper presented at the Host Country Event: Symposium on Economic and Financial Recovery in Asia. UNCTAD X, Bangkok. Reprinted in TWN Global Economy Series, No. 1.
- Akyüz, Y. (2006). "From Liberalization to Investment and Jobs: Lost in Translation." ILO Working Paper 74. Geneva.
- Akyüz, Y. (2008). "Managing Financial Instability in Emerging Markets: A Keynesian Perspective." *METU Studies in Development* (forthcoming). Available at [www.twinside.org.sg](http://www.twinside.org.sg).
- Akyüz, Y. and C. Gore (1996). "The Investment-Profits Nexus in East Asian Industrialization". *World Development*, 24(3).
- Anderlini, J. (2007). "China hits out over 'hot money'." *Financial Times*, 27 June.
- Aziz, J. and S. Dunaway (2007). "China's Rebalancing Act." *Finance and Development*, 44(3).
- BIS (Bank for International Settlements) (2005). "Foreign exchange market intervention in emerging markets: motives, techniques and implications." *BIS Papers*, 24. Basle.
- BIS (2007a). *Annual Report*. Basle.
- BIS (2007b). *Quarterly Review*. December. Basle.
- Bowring, P. (2008a). "Asia Won't Get Away Clean." *Asia Sentinel*, 25 January.
- Bowring, P. (2008b). "StanChart Leaves Investors Out in the Cold." *Asia Sentinel*, 12 February.
- Branstetter, L. and N. Lardy (2006). "China's Embrace of Globalization." NBER Working Paper 12373.
- Chai-Anant, C. and C. Ho (2008). "Understanding Asian Equity Flows, Market Returns and Exchange Rates." BIS Working Paper 245.
- Chancellor, E. (2008). "Bursting Chinese Bubble Could Hurt." *Independent Investor*, 18 January.

- Chandrasekhar, C.P. (2008). "India and the World Economy." Available at [www.networkideas.org](http://www.networkideas.org).
- Cui, L. (2007). "China's Growing External Dependence." *Finance and Development*, 44(3).
- Cui, L. and M. Syed (2007). "The Shifting Structure of China's Trade and Production." IMF Working Paper 07/214.
- De Alessi Gracio, C., G. Hoggarth and J. Yang (2005). "Capital Flows to Emerging Markets: Recent Trends and Potential Financial Stability Implications." *Bank of England Financial Stability Review*, December: 94-102.
- Debelle, G. (2004). "Macroeconomic Implications of Rising Household Debt." BIS Working Paper 153. Basle.
- Disyatat, P. and G. Galati (2005). "The effectiveness of foreign exchange intervention in emerging market countries." *BIS Papers*, 24, May: 97-113.
- Dooley, M., D. Folkerts-Landau and P. Garber (2004). "The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management on Interest Rates and Exchange Rates in Center Countries." NBER Working Paper 10332.
- Edwards, F.R. and F.S. Mishkin (1995). "The Decline of Traditional Banking: Implications for Financial Stability and Regulatory Policy." FRBNY *Economic Policy Review*, July: 27-45.
- ESCAP (Economic and Social Commission for Asia and the Pacific) (2007). *Key Economic Developments in the Asia-Pacific Region 2008*. Bangkok: United Nations.
- Feldstein, M. (2008). "How to Stop the Mortgage Crisis." *Wall Street Journal*, 7 March.
- Gieve, J. (2008). "Sovereign Wealth Funds and Global Imbalances." *BIS Review*, 31.
- Gochoco-Bautista, M.S. (2008). "Asset Prices and Monetary Policy: Booms and Fat Tails in East Asia." BIS Working Paper 243.
- Goldstein, M. and N. R. Lardy (2004). "What Kind of Landing for the Chinese Economy?" Policy Brief 04-7. Institute for International Economics. Washington, D.C.
- Groshen, E.L. and S. Potter (2003). "Has Structural Change Contributed to a Jobless Recovery?" Federal Reserve Bank of New York. *Current Issues in Economics and Finance*, 9(8): 1-7.
- Hang Seng Bank (2008). "Mainland China's Overseas Investment Escalating." *Economic Focus*, 5 February.
- Hoggard, G. and V. Saporta (2001). "Costs of Banking System Instability: Some Empirical Evidence." *Bank of England Financial Stability Review*, June: 148-165.
- IIF (Institute of International Finance) (various issues). *Capital Flows to Emerging Markets*. Available at [www.iif.com](http://www.iif.com).

- IIF (2008). *Global Economic & Capital Markets Forecasts 2008*. 10 January. Available at [www.iif.com](http://www.iif.com).
- IMF (International Monetary Fund) (2003). "Sustainability Assessments – Review of Application and Methodological Refinements." Discussion Paper. June.
- IMF (2004). *Global Financial Stability Report*. April. Washington, D.C.
- IMF (2005). *Global Financial Stability Report*. April. Washington, D.C.
- IMF (2007a). *World Economic Outlook*. April. Washington, D.C.
- IMF (2007b). *Regional Economic Outlook. Asia and Pacific*. April. Washington, D.C.
- IMF (2007c). *World Economic Outlook*. October. Washington, D.C.
- IMF (2007d). *Regional Economic Outlook. Asia and Pacific*. October. Washington, D.C.
- IMF (2007e). *Global Financial Stability Report*. October. Washington, D.C.
- IMF (2008). *World Economic Outlook Update*. January. Washington, D.C.
- Jeanne, O. and R. Rancière (2006). "The Optimal Level of International Reserves for Emerging Market Countries: Formulas and Applications." IMF Working Paper 06/229.
- Kaufman, G.G. and L.R. Mote (1994). "Is Banking a Declining Industry? A Historical Perspective." *Federal Reserve Bank of Chicago Economic Perspectives*, May-June: 2-21.
- Kim, S.Y. and L. Kuijs (2007). "Raw Material Prices, Wages and Profitability in China's Industry – How Was Profitability Maintained When Input Prices and Wages Increased So Fast?" World Bank China Research Paper 8. Beijing.
- Kregel, J.A. (2007). "The Natural Instability of Financial Markets." Working Paper 523. The Levy Economics Institute of Bard College.
- Krugman, P. (1998). "Fire-Sale FDI." <http://web.mit.edu/krugman/www/FIRESALE.htm>.
- Kuijs, L. (2005). "Investment and Saving in China." World Bank Policy Research Working Paper 3622.
- Kuttner, R. (2007). "1929 Redux: Heading for a Crash?" [www.alternet.org](http://www.alternet.org). 8 October.
- Maki, D.M. and M. Palumbo (2001). "Disentangling the Wealth Effect: A Cohort Analysis of Household Saving in the 1990s." FEDS Working Paper 2001-21. Washington, D.C.
- McCauley, R. (2008). "Managing Recent Hot Money Flows in Asia." ADBI Discussion Paper 99. Tokyo.
- Mehl, A. and J. Reynaud (2005). "The Determinants of 'Domestic' Original Sin in Emerging Market Economies." Working Paper 560. European Central Bank.

- Mihaljek, D. (2005). "Survey of central bank views on effectiveness of intervention." *BIS Papers*, 24, May: 82-96.
- Ministry of Finance, Japan (2001). "Exchange Rate Regimes for Emerging Market Economies." Discussion Paper prepared by staff of the French and Japanese Ministries of Finance. Tokyo, 16 January. Available at [www.mof.go.jp/english/asem](http://www.mof.go.jp/english/asem).
- Minsky, H.P. (1978). "The financial instability hypothesis: a restatement." *Thames Papers in Political Economy*, North East London Polytechnic. Reprinted in H.P. Minsky, *Can "It" Happen Again? Essays on Instability and Finance*. Armonk, New York: M.E. Sharpe, 1984.
- Minsky, H.P. (1986). *Stabilizing an Unstable Economy*. New Haven and London: Yale University Press.
- Mohanty, M.S. and P. Turner (2006). "Foreign exchange reserve accumulation in emerging markets: what are the domestic implications?" *BIS Quarterly Review*, September: 39-52.
- Nagaraj, R. (2005). "Industrial Growth in China and India: A Preliminary Comparison." *Economic and Political Weekly*, 21 May.
- OECD (Organization for Economic Cooperation and Development) (2007). *Economic Outlook 82*. Paris.
- Pearlstein, S. (2007). "'No Money Down' Falls Flat." *Washington Post*, 14 March.
- Pearlstein, S. (2008). "More Room to Fall." *Washington Post*, 22 January.
- Polak, J.J. and P.B. Clark (2006). "Reducing the Costs of Holding Reserves. A New Perspective on Special Drawing Rights." In I. Kaul and P. Conceição (eds.), *The New Public Finance. Responding to Global Challenges*. Oxford University Press.
- Roach, S. (2007). "America's Inflated Asset Prices Must Fall." *Financial Times*, 7 January.
- Rodrik, D. (2006). "The Social Cost of Foreign Exchange Reserves." NBER Working Paper 11952.
- Roubini, N. (2008). "The Rising Risk of a Systemic Financial Meltdown: The Twelve Steps to Financial Disaster." Available at [www.rgemonitor.com/blog](http://www.rgemonitor.com/blog).
- Sarno, L. and M.P. Taylor (2001). "Official Intervention in the Foreign Exchange Market: Is It Effective and, If So, How Does It Work?" *Journal of Economic Literature*, 39(3): 839-868.
- Setser, B. (2008). "The debate over the pace of hot money flows into China." Available at <http://rs.rgemonitor.com/blog/sletser>. 20 February.
- Summers, L.H. (2007a). "History holds lessons for China and its partners." *Financial Times*, 25 February.
- Summers, L.H. (2007b). "Funds that shake capitalistic logic." *Financial Times*, 29 July.

- Tovar, C.E. (2005). "International Government Debt Denominated in Local Currency: Recent Developments in Latin America." *BIS Quarterly Review*, December: 109-118.
- Tovar, C.E. and M. Quispe-Agnoli (2008). "New financing trends in Latin America." *BIS Papers*, 36.
- Truman, E.M. (2007a). "Sovereign Wealth Funds: The Need for Greater Transparency and Accountability." Peterson Institute of International Economics. Washington, D.C.
- Truman, E.M. (2007b). "The Management of China's International Reserves: China and a SWF Scoreboard." Peterson Institute of International Economics. Washington, D.C.
- UN (United Nations) (2008). *World Economic Situation and Prospects 2008*. New York.
- UNCTAD *TDR* (various issues). *Trade and Development Report*. Geneva: United Nations.
- Van Eeden, P. (2006). "Consumer spending, real estate and the economy." Available at [www.paulvaneeden.com](http://www.paulvaneeden.com).
- Wade, R.H. (2007). "Sovereign funds a useful weapon for poorer nations." Letter to the Editor. *Financial Times*, 10 August.
- Weisbrot, M. (2008). "Proposed Stimulus Package Not Enough." Center for Economic and Policy Research. Available at [www.alternet.org/module](http://www.alternet.org/module). 19 February.
- Weisbrot, M., J. Schmitt and L. Sandoval (2008). "The Economic Impact of a U.S. Slowdown on the Americas." Issue Brief. Center for Economic and Policy Research.
- Weisman, S. (2007). "U.S. fears overseas funds could 'buy up America'." *International Herald Tribune*, 21 August.
- Williamson, J. (1995). "The Management of Capital Flows." *Pensamiento Iberoamericano*, January-June.
- Wolf, M. (2007). "The brave new world of state capitalism." *Financial Times*, 26 October.
- World Bank (2003). *Global Economic Prospects*. Washington, D.C.
- World Bank (2007). *Global Development Finance*. Washington, D.C.
- World Bank (2008). *Prospects for the Global Economy*. 9 January. Washington, D.C.
- World Bank Office, Beijing (various issues). *Quarterly Update*. Beijing, China.
- Yu, Y.D. (2007). "Global Imbalances and China." *The Australian Economic Review*, 40(1): 3-23.
- Yu, Y.D. (2008). "Managing Capital Flows: The Case of the People's Republic of China." ADBI Discussion Paper 96. Tokyo.

Table 1: United States household savings and indebtedness  
(Per cent of disposable income)

	1992	1996	1998	2000	2002	2003	2004	2005	2006	2007
Savings	7.7	4.0	4.3	2.3	2.4	2.1	2.1	0.5	0.4	0.7
Liabilities	87.2	95.0	97.1	102.7	112.1	120.2	126.8	134.4	138.1	...
Mortgages	62.3	63.8	64.9	68.5	78.4	85.7	92.2	100.2	103.1	...
Debt as per cent of net worth	18.1	17.9	16.7	17.9	22.6	22.3	22.9	23.6	23.9	...
Memo item: CA <sup>a</sup>	-0.8	-1.6	-2.5	-4.3	-4.4	-4.8	-5.5	-6.1	-6.2	-5.6

Source: OECD *Economic Outlook* (various issues)

a: Current account balance as per cent of GDP

Table 2: Private capital flows, current account balances and changes in reserves in emerging markets  
(Billions of US dollars)

	Private Capital Flows				Current Account Balance				Reserve Increases			
	2004	2005	2006	2007 <sup>e</sup>	2004	2005	2006	2007 <sup>e</sup>	2004	2005	2006	2007 <sup>e</sup>
<b>Emerging markets</b>	<b>348.8</b>	<b>519.6</b>	<b>572.8</b>	<b>620.3</b>	<b>150.2</b>	<b>274.1</b>	<b>380.2</b>	<b>419.5</b>	<b>398.2</b>	<b>442.2</b>	<b>554.0</b>	<b>756.2</b>
Asia	165.6	220.5	260.5	208.3	115.2	181.0	290.1	423.2	296.1	270.6	34.1	487.9
Latin America	41.8	70.0	52.6	106.0	22.3	41.1	51.6	26.5	22.5	29.7	50.3	95.2
Europe	131.1	204.1	234.0	276.1	5.7	35.8	23.7	-45.6	60.8	116.5	128.9	137.7
Africa/Middle East	10.4	25.0	25.8	29.8	6.9	4.0	5.5	6.4	18.7	25.5	33.7	35.3

Source: IIF (various issues)

e = estimate

Table 3: Current account and reserves  
(Billions of US dollars)

	Asia	China
<b>Reserves</b>		
2007	2068.0	1559.5
2001	379.5	216.3
Increase	1688.5	1343.2
<b>Current account<sup>a</sup></b>		
2002-07	1067.8	939.9
<b>Borrowed reserves<sup>b</sup></b>		
2002-07	620.7	403.3
<b>Import coverage<sup>c</sup></b>		
2001	4.9	6.6
2007	8.8	12.8

Source: IMF (2007b)

- a. Cumulative current account balance over 2002-07.
- b. Difference between increases in reserves and cumulative current account balance over 2002-07.
- c. Months of imports covered by reserves.

Table 4: Growth estimates for 2007 and projections for 2008  
(Annual percentage change)

	2007			2008		
	World	US	Asia	World	US	Asia
IMF (01.08)	4.9	2.2	9.6	4.1	1.5	8.6
WORLD BANK (01.08)	3.6	2.2	10.0	3.3	1.9	9.7
ADB (03.08)	--	2.2	8.7	--	1.5	7.6
UN WESP (01.08) (pessimistic)	3.7	2.2	8.1	3.4 (1.6)	2.0 (-0.1)	7.5 (4.8)
IIF (01.08)	3.5	2.3	9.1	3.1	2.3	8.6

Source: IMF (2008), World Bank (2008), ADB (2008), UN (2008) and IIF (2008).