A critique of the International Monetary Fund's Decision on Bilateral Surveillance

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Abstract

The *Decision on Bilateral Surveillance* is the first major change to the Fund's exchange rate surveillance framework in thirty years.[1] Its stated objective is to promote international monetary and financial stability. However, US officials also argued for the decision as means to pressure China over its trade surplus and exchange rate.[2] Not surprisingly China has "expressed reservations" about the decision.[3]

This paper examines the decision's conceptual framework, which is based on the notion of external stability. This is defined, in national economic terms, as a stable demand and supply for foreign exchange and a limited risk of capital flow reversals, positions that are given by equilibrium current account and exchange rates. Although the Fund's framework recognises the difficulty of calculating equilibrium current account and exchange rate positions it fails to account for the deeper conceptual problems with these categories.

The attempt to benchmark cross-border trade in goods and services to normatively derived "equilibrium" current account levels fails to take into account the rise of globally integrated production, capital and financial flows. For the same reason, the view that real exchange rate values should gravitate towards equilibrium and fundamental value based on national economic aggregates is also flawed.

Given these two deficiencies, the Fund's new surveillance framework is unlikely to provide constructive country assessments or sound policy prescriptions on the issues it seeks to address.

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[1] Adopted by the Fund's Executive Board on June 15, 2007, see IMF (2007a).
[2] See Adams (2005), Paulson (2007), Sobel (2007).
[3] PBOC (2007).

1. INTRODUCTION

The economic and political context of the Fund's *Decision on Bilateral Surveillance* is familiar enough. Recent economic policy debate has centred on the growth of global current account imbalances. Economists do not agree about the causes of these imbalances or their implications. However the standard analysis, which is shared by the Fund, is that these imbalances are unsustainable and it is a matter of not if, but when, they will unwind.[4] It is a view that has been embraced by US policy makers who want action to reduce the US bilateral trade deficit with China, despite it being a minor part of the overall US trade deficit. US treasury secretary Hank Paulson and his colleagues have argued that the Fund's decision meets this need by providing a multilateral complement to the US's bilateral diplomacy with China.[5] For similar reasons, the decision was embraced by European Union and other G7 members, leaving only China to express its "reservations" along with Iran.[6]

This paper examines the decision's external stability framework and its core claims that external stability is a product of equilibrium current account and exchange rate positions. It is widely acknowledged that there is no agreed or objective method to calculate "equilibrium" current account or exchange rate positions, only multiple approaches based on different normative assumptions.[7] This paper goes further and suggests that these approaches share a more profound conceptual problem because they assume that current accounts and exchange rates should conform to normative equilibrium positions or fundamental value levels in the first place.

The main problem with these assumptions is that they are predicated on a world of closed national economies, where the international economy is nothing more than the interaction between discrete national economic entities and where aggregate savings and investment decisions are national policy outcomes. But such a framework does not account for the impact of globally integrated investment, trade and finance on either conventional balance of payments constraints or on the ability of states to significantly alter economic outcomes. As such, the Fund's new decision represents an analytical framework that is unlikely to provide constructive country assessments or policy prescriptions on the key issues it seeks to address. Furthermore, given the

[4] IMF (2005).
[5] Paulson (2007), Adams (2005) and Goldstein and Mussa (2005).
[6] See, prior to the decision Hu (2007), and after PBOC (2007).
[7] The Fund claims three different methods, IMF (2006).

integration of trade, investment and finance between China and major centers of the world economy, a more tactical approach by IMF and G7 and policy makers is needed to generate financial cooperation. In this respect, this paper can help serve as a reference for policy makers.

This paper is structured as follows. It reviews the origins of the Fund's exchange rate surveillance role and gives a brief exposition of its external stability framework. It considers key limitations of this framework measured against recent empirical developments in international economics. And it discusses the conceptual implications of these changes for the Fund's surveillance framework as well as its overall policy line.

2. EXCHANGE RATE SURVIELLANCE

The *Decision on Bilateral Surveillance* was motivated by the US Treasury and others as a return to the Fund's core mission of exchange rate surveillance.[8] But this is a particular reading of the Fund's history. Article IV of the Fund's 1944 Articles of Agreement established the legal obligation of member states to collaborate with the Fund over exchange rates. Although the Fund's objective was to promote international monetary stability, this was to be achieved by a legal obligation on members to maintain a system of adjustable currency pegs based on the par value of the US dollar to gold. In practice, the Fund was rarely consulted before major exchange rate movements and the pegged rate system was broken up without its involvement.

Surveillance was a specific US-led response to the break up of that exchange rate system and the move to floating rates in the 1970s. President Nixon's decision to end the US dollar's par value with gold was accompanied by major sell-offs of US dollar holdings and expanding US payments deficits. US officials responded with an argument for international balance of payments adjustment, especially by surplus countries.[9] They also argued for a new IMF agreement on exchange rates which would allow domestic authorities to set their exchange rate arrangements while expanding "the mandate of the IMF to exercise "surveillance" over the adjustment process".[10]

[8] Paulson (2007), Adams (2005), Goldstein and Mussa (2005)
[9] Pauly (2006, p.13)
[10] Pauly (2006, p.13).

The outcome was the Fund's 1977 *Decision on Exchange Rate Policy Surveillance*. This decision legalised floating rates and introduced surveillance as a legal obligation on the Fund and its members. Consequently, surveillance became an institutionalised process of IMF analysis and advice, "broadly defined to include any IMF advice on exchange rate-related issues, especially regime choice and management, competitiveness and currency misalignment, and measures directed at resolving external imbalances."[11] It is an ongoing process which includes the Fund's Article IV consultations with members as well as Multilateral Consultations.

However, there has been significant dissatisfaction with the Fund's surveillance process. The Fund's own Independent Evaluation Office's report, *An IEO Evaluation of IMF Exchange Rate Policy Advice, 1999-2005* found: that the "rules of the game" were unclear for the Fund's staff and members, that the Fund's analysis and advice lacked a consistent methodology, that priority was often given to establishing a policy line and that the surveillance process was seen to lack even-handedness.[12] However, a more prominent criticism from the Fund's former economic director Michael Mussa was that the Fund was "asleep at the wheel" and had not exercised exchange rate surveillance firmly enough.[13]

Ostensibly, the decision seeks to address these criticisms by providing greater guidance to members and staff. The decision revises the 1977 version by introducing the concept of external stability as the framework for the Fund's analysis and advice. Article IV Section (iii) now includes the principle that: "A member should avoid exchange rate policies that result in external instability".[14] The surveillance indicators were also amended to include "(v) fundamental exchange rate misalignment" and "(vi) large and prolonged current account deficits or surpluses"[15] And the decision attempts to define what constitutes "exchange rate manipulation in order to gain unfair competitive advantage".[16]

Although there is much to be said about the political process behind the decision this paper focuses on the decision's conceptual framework, its concept of external stability and its notions of an equilibrium current account and fundamental exchange rate misalignment.

[11] IMF IEO (2007, p.12).
[12] ibid.
[13] See Goldstein and Mussa (2005) and Adams (2005).
[14] IMF (2007a).
[15] ibid.
[16] See the Annex to the decision, ibid.

3. THE DECISION ON BILATERAL SURVEILLANCE

a. The Concept of External Stability

A stable system of exchange rates is central to the Fund's view of international economic stability. The new decision defines the scope of its surveillance in terms of the Fund's original Article IV, Section 1 that says a principle objective of the Fund and its members is, "to assure orderly exchange rate arrangements and to promote a stable system of exchange rates (hereinafter "systemic stability")."[17] Here, systemic stability is considered a function of the external stability of national aggregates. External stability is thus defined as a "balance of payments position that does not, and is not likely to give rise to disruptive exchange rate movements."[18]

This meaning of external stability forms the overarching organising framework guiding the Fund's surveillance.[19] It is derived from a country's balance of payments components, its national current account, and its capital and financial accounts, as well as its exchange rate, where:

> "(i) the underlying current account is broadly in line with its equilibrium (which ... is equivalent to there being no fundamental exchange rate misalignment), and (ii) the capital and financial account does not create risks of abrupt shifts in capital flows."[20]

Although the capital and financial account is acknowledged in this framework, it plays a subordinate role to the underlying current account and exchange rate as is discussed below.

b. An Equilibrium Current Account

The notion of an equilibrium current account is central to the external stability framework. It is defined as an evolutionary path of long-term stability, not zero change, in a country's Net Economic Asset Position (NEAP) in line with its national aggregate fundamentals and economic structure.[21] This broad definition is acknowledged to be a matter of considerable judgement. It could be added that it is

[17] IMF (2007a).
[18] ibid.
[19] IMF, (2007c).
[20] See the IMF companion paper to the new decision (2007b).
[21] IMF (2007b).

also a normative judgement by Fund staff based on a not very rigorous notion of macroeconomic balance.

According to the Fund's macroeconomic balance approach, an equilibrium current account norm is constructed as the current account level that would stabilise the evolution of a members' NEAP. This constructed current account norm then becomes the benchmark to which a country's underlying current account position should then conform. This current account norm is the external account equivalent of a countries internal savings-investment schedule or savings-investment norm consistent with a zero output gap. And this savings-investment norm is further derived from the "commonly made judgement whether aggregate demand is consistent with the economy's "absorptive capacity".[22] Even where a member builds up a positive NEAP over a long period, it may increase the risk of external stability because it implies the unsustainable evolution of its economic partners NEAP.[23] Therefore current accounts should be benchmarked and adjusted to some NEAP-stabilising level. Note the effect of the reform, which is based on a national *accounting* identity, is to shift an international outcome to a purely domestic one of national imbalances.

c. Fundamental exchange rate misalignment

Fundamental exchange rate alignment is also central to the Fund's framework. An equilibrium exchange rate clears the foreign exchange rate market with no risk of disruptive exchange rate changes. Whereas, "fundamental exchange rate misalignment" creates the risk of a sudden change in the demand and supply for foreign exchange. Although the Fund acknowledges that there is no precise measure of an equilibrium exchange rate, it gives two methods: the macroeconomic balance approach outlined before and a direct estimate equilibrium exchange rate approach.[24]

The macroeconomic balance approach calculates an equilibrium exchange rate that, in theory, would close the gap between the underlying current account and its normatively constructed equilibrium position. By definition, "When the underlying current account differs from the equilibrium current account, the exchange rate is 'fundamentally misaligned'".[25] Thus the macroeconomic balance approach is not just

[22] IMF (2007b, p.3).
[23] IMF (2007b, par. 9).
[24] See IMF (2007a) and IMF (2006).
[25] IMF (2007b, par.4).

normative, but circular because balance of payments and exchange rate alignment are defined in terms of each other.

The second method directly estimates an equilibrium real exchange rate as a function of medium-term "fundamentals" such as a country's NEAP, productivity differentials and the terms of trade. The core of this model is the Balassa-Samuelson hypothesis that currencies of rapidly growing economies tend to appreciate against their partners.[26]

These approaches will be assessed in more detail below, for now it is worth noting that the concept of "fundamental exchange rate misalignment" features heavily in the decision. For instance, the decision includes an Annex that attempts to define "currency manipulation for the purposes of securing unfair competitive advantage." Manipulation is defined as any "exchange rate policies that are targeted at—and actually affect—the level of an exchange rate."[27] However, manipulation is only inconsistent with Article IV, Section 1(iii) if the Fund determines both that,

> (A) the member is engaged in these policies for the purpose of securing *fundamental exchange rate misalignment* in the form of an undervalued exchange rate and (B) the purpose of securing such *misalignments* is to increase net exports.[28]

This raises a deeper conceptual question: how sound is the notion of "fundamental exchange rate misalignment"? Fundamental misalignment only has meaning if we can define fundamental alignment, and if we have difficulty defining a fundamental alignment we cannot define its negation. But before turning to this problem in more detail I want to consider a more basic limitation with the Fund's framework.

4. A CRITIQUE OF THE EXTERNAL STABILITY FRAMEWORK

a. Circular Reasoning

A key problem with the framework is its circular reasoning. External stability is defined as the absence of disruptive changes in exchange rates and the absence of abrupt capital flow reversals. It has two components. An equilibrium current account, defined as an evolutionary path of long-term stability, but not zero change, of a

[26] See IMF (2006) and Golley and Tyers (2007).
[27] See the Annex to the decision IMF (2007a).
[28] Emphasis added, ibid.

members NEAP and an equilibrium exchange rate, defined as a level that clears the market for foreign exchange as well as the level that should, in theory, be given by an equilibrium current account. This is a circular chain of reasoning because it does not call for any "external" evaluation of imputed fundamental value or equilibrium exchange rate positions. Nor does it say at what level, or why, a certain current account deficit is unsustainable.

In addition each of the links in its chain of reasoning is questionable. Take the definition of an equilibrium current account as an evolutionary path of long-term stability, not zero change, in a countries' NEAP. What evidence is there that recent patterns of financial accumulation by, for example, East Asian authorities' is unstable? Very little, but the external stability framework puts the onus on East Asian authorities for their partners' NEAP, such as the US net liability position. But despite perceptions the US's net liability has *stabilised* in recent years via the valuation effect of modest dollar depreciation. More importantly even if these current *accounting* surpluses and deficits continue to widen (see figures 1-4), there is no consensus within international economics that this pattern is unsustainable.[29] Moreover if the recent pattern of current account deficits and surpluses has been in equilibrium, then by definition it has been consistent with external stability.

Then again, if we accept that there is no single equilibrium position and that a recent equilibrium position may be in the process of becoming another, perhaps recent current account positions and currency prices will gravitate to their fundamental value in the long-run.

b. The problem with Fundamental value

> "[T]here is no reliable or precise method for estimating the proper value of an economy's foreign exchange rate or measuring accurately a currency's undervaluation."
>
> Testimony of US Treasury Deputy Assistant Secretary Mark Sobel [30]

The failure of real exchange rates to conform to calculations of fundamental value based on nationally derived economic aggregates is met with one response by the Fund's external stability framework: the problem is with reality. When real exchange

[29] There is an extensive literature questioning the standard analysis, see the critique by Dooley, Folkerts-Landau and Garber (2007).
[30] Sobel (2007).

rates don't move towards their imputed values they are said to be fundamentally misaligned. This is rationalised as a distortion caused by domestic policy, such as China's de facto currency peg, or by markets operating on incorrect information: such as foreign investors overoptimistic views of expected returns on US investments or about expected trends in exchange rates themselves.[31] This "irrational" interpretation of market information is also the subject of behavioural finance.

Accepting this view for the moment, it is worth looking more closely at China's imputed currency undervaluation. Most economists would claim that direct estimate equilibrium exchange rate approaches are more rigorous than macroeconomic balance approaches. Yet even these studies find no consensus on what China's equilibrium exchange rate is or which approach to use, though most studies find China's currency is undervalued.[32] However, the common assumption of these models, including the Fund's CGER equilibrium exchange rate approach, is that rapid economic growth in China should generate faster currency appreciation. This prediction is based on the Balassa-Samuelson hypothesis.

However, as Tyers and others argue, the Balassa-Samuelson hypothesis makes a range of assumptions which don't always hold.[33] In the case of China, these include the mistaken assumptions that: real wages are keeping up with productivity growth in the traded sector, that there is low productivity growth in the non-traded sector, that the law of one price holds, and that there is a closed capital account.[34] Instead they find that key drivers of economic growth may have a depreciating impact on the real exchange rate including; rising productivity in the services sector due to greater skill acquisition, a reduced cost of capital due to FDI inflows, the failure of real wages to keep up with productivity growth in the traded sector, the WTO accession trade reforms, and the offsetting role of China's high savings rate.[35]

More nuanced models will be built, but there remains a deep-rooted problem with the notion that currency prices should gravitate towards their imputed fundamental values. Major industrial countries have maintained floating exchange rates for about thirty years, and yet there is no sign that international currencies, including the US dollar, reflect fundamentals, any more than other asset prices do.[36] This is because leading international currencies are not simply exchanged to facilitate

[31] See IMF (2007a).
[32] See the survey of empirical literature on China's real equilibrium exchange rate by Dunaway and Li (2005).
[33] See Golley and Tyers (2007) and Tyers and Bain (2007).
[34] ibid.
[35] ibid.
[36] Bryan and Rafferty (2006).

goods and services trade, they are also vehicle currencies.[37] That is, they are held as assets or as part of a portfolio of assets on the expectation of future gains. Moreover, the majority of these leading international currencies circulate outside their country of origin. Clearly expectations based on perceptions of national aggregates, play a role in determining asset prices and these expectations can become self-fulfilling. But the point remains: there is little long-run evidence of prices gravitating towards fundamental value. If we adopt the circularity of the Fund's framework we could add that, therefore, there is no propensity towards current account balance.

c. A Mercantile Framework

> Nothing...can be more absurd that this whole doctrine of the balance of trade ...When two places trade with one another, this doctrine supposed that, if the balance be even, neither of them loses or gains; but if it leans in any degree to one side, that one of them loses, and the other gains in proportion to its declension from the exact equilibrium. Both suppositions are false...that trade which, without force or constraint, is naturally carried on between any two places, is always advantageous...to both.
>
> Adam Smith [38]

Is the Fund is plagued by a mercantile framework? The idea that current accounts should return to external balance or that currencies should gravitate towards fundamental value presupposes that national aggregates should be the primary unit of analysis. But what balance of payments *accounting* measures is the cross-border flow of goods, services, and financial and capital flows between territorially, that is, politically defined spaces. The issue here is that traditional balance of payments accounts are *nationally* constituted categories which may not be the best way to categorise actual existing economic processes.[39] In contrast, the primary units of analysis in microeconomics are individual companies, firms and households. And it could be argued that in the current era, it is company accounts, not national accounts, which drive exchange rates. As such balance of payments entries are increasingly incidental to an understanding of investment, trade and finance.[40] Former US federal reserve chair Alan Greenspan makes a similar point,

[37] See Hartman (1999).
[38] Smith quoted in Makin (2000, p.44).
[39] Bryan (1995).
[40] Bryan (1995) and Dluhosch et.al. (1996).

> From my perspective, many policy makers have been focusing too narrowly on foreign claims on US residents rather than on all claims, both foreign and domestic, that influence economic behaviour and cause system concern. Current account balances refer only to transactions that cross sovereign borders. Our tabulations are loosely in the obsessions of the mercantilists of the early eighteenth century to achieve surplus in their balance of payments…[41]

Moreover if the capital accumulation occurs at the level of individual firms, households and governments there is no reason why these processes should conform to normative current account positions. Take the depth of global economic integration in China for instance. Given unprecedented levels of foreign direct investment, a vast army of low cost labour, and an exported oriented manufacturing platform, sustained current account surpluses should not be surprising.

There is a wider point here. Traditional balance of payments conventions are in a sense arbitrary accounting measures, which can yield very different results depending on what is being measured. Analysis by the US Bureau of Economic Analysis (BEA) considers alternative frameworks for US international transactions.[42] The standard residency-based measure of the balance of trade in goods and services between residents and non-residents of the US is actually only a measure of cross-border trade. It recorded a deficit of $28 billion in 1991. But if the standard residency-based measure is combined with a measure of the sales and purchases of US-owned companies and their affiliates' worldwide then 1991 would show a net surplus of $24 billion.[43] Another proposal, from the US National Academy of Sciences, is based wholly on ownership rather than residency, it is arguably a more accurate reflection of the way companies view their global sales. This measure records a US net surplus of $164 billion in 1991.[44]

This is not just an interesting accounting exercise. It indicates the failure of the conventional balance of payments accounting framework to constructively measure the internationalisation of investment, trade and finance (See figure 4). As the BEA notes,

> In recognition of the current public interest in the activities of U.S. and foreign multinational companies and the need for more timely information about these activities, BEA has provided accelerated data releases and special presentations and analyses.[45]

[41] Greenspan (2007).
[42] Landefeld et.al. (1993).
[43] Landefeld et.al. (1993).
[44] ibid.
[45] BEA (2007).

But if the aggregate measures of cross-border transactions on which the Fund's external stability framework is based do not measure the positions and stresses faced by individual economic units then its framework is a poor guide to sustainability and therefore to stability as well.[46]

Further, if global economic integration can help us to understand the sustainability of large scale current account surpluses, it can also help us to understand why they have not been undermined by financial deficits elsewhere. For instance, a recent staff report for the Fund's Article IV consultation with US officials found that there is a "significant structural element to capital inflows" into the US.[47] Most of these inflows are not into equity but into fixed income investments such as government and corporate bonds and securitised assets. Indeed companies in the US issue over half the global market for private bonds and its financial markets have dominated the issuance of securitised assets.[48]

However, the real structure of these global capital flows is absent from the Fund's equilibrium models. A good example is the Fund's 2006 Article IV Consultation with US officials that had this interesting exchange:

> According to [Fund] staff analysis by the Consultative Group on Exchange Rates (CGER), further real effective dollar depreciation would be required to eliminate the misalignment relative to medium-term macroeconomic fundamentals…
>
> Officials were sceptical about the notion of overvaluation for a market-determined currency such as the dollar. While they understood the basis for staff's calculations, they stressed that the underlying CGER models failed adequately to factor in non-trade fundamentals such as capital flows.[49]

Although the preamble to the Fund's new decision mentions the massive changes of financial globalisation, independent capital flows do not figure in the Fund's external stability framework or its underlying exchange rate models.

[46] ibid.
[47] IMF (2007d, p.11).
[48] ibid.
[49] IMF (2007d, p.13).

5. CONCLUSION

This paper has focused on the conceptual framework of the Fund's *Decision on Bilateral Surveillance*. Although the decision claims to update the analytical basis of the surveillance framework it fails to move beyond a traditional balance of payments approach. It seems little different to that developed in the post-war period of closed capital accounts, where exchange rates where supposed to regulate national trade balances. This view remains predicated on nationally constructed aggregates as the central units of analysis. It therefore fails to account for the impact of global economic integration of investment, trade and financial flows on historical balance of payments concerns, including currency prices.

As such, it is one thing to accept the legal obligation that member states should consult with the Fund about exchange rate policies but another to accept that the Fund's *Decision on Bilateral Surveillance* in based on sound economics. Such a framework seems more in keeping with a mercantile policy line of prescribing exchange rate induced adjustment to policy makers in emerging economies like China. A better economic framework, and a more tactical approach among IMF and G7 policy makers, is required to facilitate global financial cooperation.

6. REFERENCES

Adams, T. (2005), 'The US view on IMF reform', US Department of Treasury, Speech at conference IMF reform, September 23, (Washington DC: Peterson Institute for International Economics).

Bureau of Economic Analysis (2007), 'Operations of U.S. and Foreign Multinational Companies', (Washington, D.C: BEA).

Bryan, D. and M. Rafferty (2006), 'Financial Derivatives: The new Gold?', *Competition and Change*, vol.10, pp. 265-282.

Bryan, D. (1995), *The Chase Across the Globe, International Accumulation and the Contradictions for Nation States*, (Westview Press, Boulder, CO).

Golley, Jane and R. Tyers (2007), 'China's real exchange rate policy', in Garnaut, Ross and Ligang Song (eds), (2007), *China Linking Markets for Growth*, (Canberra, Asia Pacific Press ANU).

Dluhosch, B., A. Freytag and M. Krüger, (1996), *International competitiveness and the balance of payments: do current account deficits and surpluses matter?* (Edward Elgar Publishing, Cheltnam UK).

Dooley, M., Garber, P. and D. Folkerts-Landau (2007), 'The Two Crises of International Economics', NBER Working Paper No. 13197 (Cambridge, MA)

Dunaway, S. and X. Li (2005), "Estimating China's Equilibrium Real Exchange Rate", *Working Paper*, WP/05/202 (Washington DC: IMF)

Goldstein, M. and M. Mussa (2005), 'The Fund appears to be sleeping at the wheel', *The Financial Times*, October 2.

Greenspan, A. (2007), *The Age of Turbulence: Adventures in a New World*, Chapter 18, (Penguin, UK).

Hartmann, P. (1998), *Currency competition and foreign exchange markets: the dollar, the yen and the euro*, (Cambridge University Press, New York,).

Hu, X. (2007), *Statement by Madam Hu Xiaolian, Deputy Governor, People's Bank of China*, International Monetary and Financial Committee, Fifteenth Meeting, April 14, (Washington, D.C: IMF).

International Monetary Fund (2007a), *Decision on Bilateral Surveillance*, June 15, (Washington, D.C: IMF).

_____ (2007b), *Review of the 1977 Decision — Proposal for a New Decision: Companion Paper,* May 22, (Washington, D.C: IMF).

_____ (2007c), 'IMF Executive Board Adopts New Decision on Bilateral Surveillance Over Members Policies', *Public Information Notice,* June 21, (Washington, D.C: IMF).

_____ (2007d), 'United States: Selected Issues', *IMF Country Report* No. 07/265, August, (Washington, D.C: IMF).

_____ (2007e), Staff Report on the Multilateral Consultation on Global Imbalances with China, the Euro Area, Japan, Saudi Arabia, and the United States, June 29, 2007, (Washington, D.C: IMF).

_____ (2006), *Methodology for CGER Exchange Rate Assessments*, Research Department, (Washington, D.C: IMF).

_____ (2005), World Economic Outlook: Globalization and External Imbalances, April, (Washington, D.C: IMF).

_____ (1977), S*urveillance over Exchange Rate Policies*, (Washington, D.C: IMF).

_____ (1944), 'Article IV - Obligations Regarding Exchange Arrangements', *Articles of Agreement of the International Monetary Fund*, (Washington, D.C: IMF).

Landefeld, S.J., O.G. Wichard and J.H. Lowe (1993), 'Alternative Frameworks for US International Transactions', *Survey of Current Business*, December, (Washington, D.C: BEA).

Makin, Anthony, J. (2000), *Global Finance and the Macroeconomy*, (Palgrave Macmillan, New York).

Pauly, Louis, W. (2006), "IMF Surveillance and the Legacy of Bretton Woods" Centre of International Studies, (University of Toronto, Toronto).

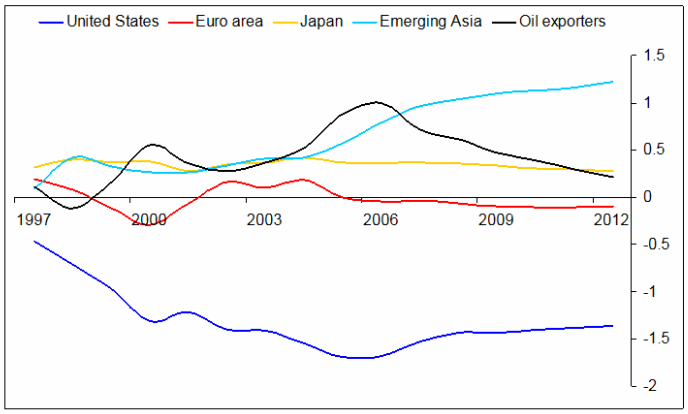
Paulson, H. (2007), Statement by US Treasury Secretary Henry M. Paulson at the International Monetary and Financial Committee Meeting on behalf of United States, April 14, (Washington, D.C: IMF).

Sobel, M. (2007), Testimony of Treasury Deputy Assistant Secretary Mark Sobel Before the Committee on Ways & Means, Subcommittee on Trade, *Hearing on Legislation Related to Trade with China* August 2, (Washington, D.C: US Treasury).

Tyers, R. and I. Bain (2007) "*Appreciating the Renminbi," ANUCBE School of Economics Working Papers,* 2007-483, (Canberra, Australian National University, College of Business and Economics, School of Economics).

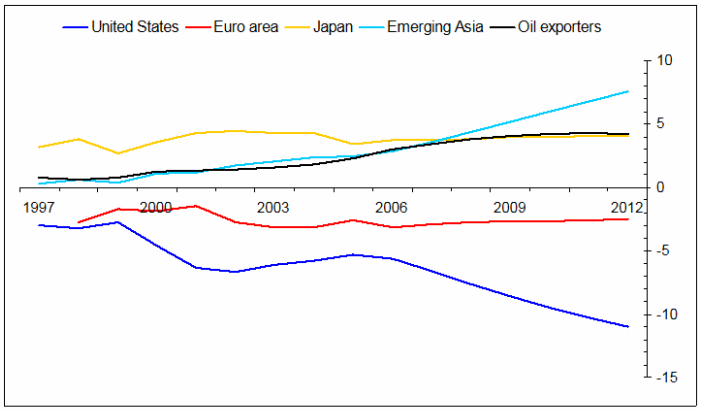
The People's Bank of China, (2007) *The Executive Director for China at the IMF answers questions of a reporter of the Xinhua News Agency on the IMF's adoption of the Decision on Bilateral Surveillance over Members' Policies*, (Beijing, PBOC)

Figure 1: Current Account balances per cent of GDP



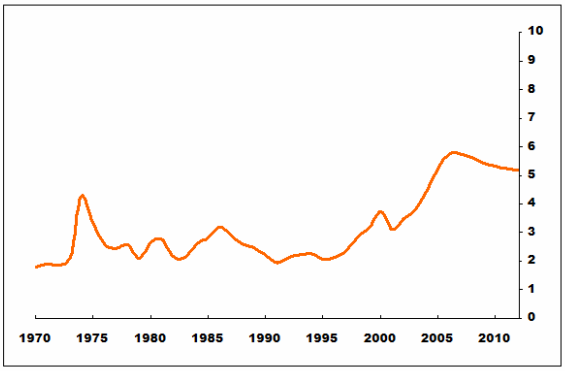
Source: IMF WEO (2007)

Figure 2: Net Foreign Assets - US billion



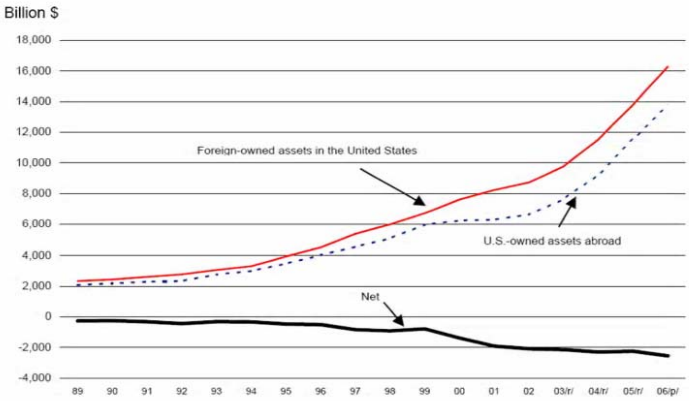
Source: IMF WEO (2007)

Figure 3: Absolute sum of current account balances per cent of GDP



Source: IMF WEO (2007)

Figure 4: Net international liability position of the United States at yearend, 1989-2006



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Source: Bureau of Economic Analysis (2007)