

# *Kiel* Policy Brief

## Global Imbalances after the Financial Crisis

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No. 7 | September 2009



## Introduction

The ongoing global financial crisis has been preceded by a steady rise in global current account imbalances. Recently, in the course of the global recession, global imbalances have declined, albeit without having disappeared completely. As the outlook for global growth gets brighter, it is important to be aware of the possibility of again arising global imbalances in the future as it is unlikely that the structural reasons that have led to the imbalances in the past have vanished thoroughly. In this contribution we discuss the nature of the global imbalances of the past, describe structural factors that caused them and ask to what extent these factors have changed, and propose policy options that may contribute to improving the situation in the future.

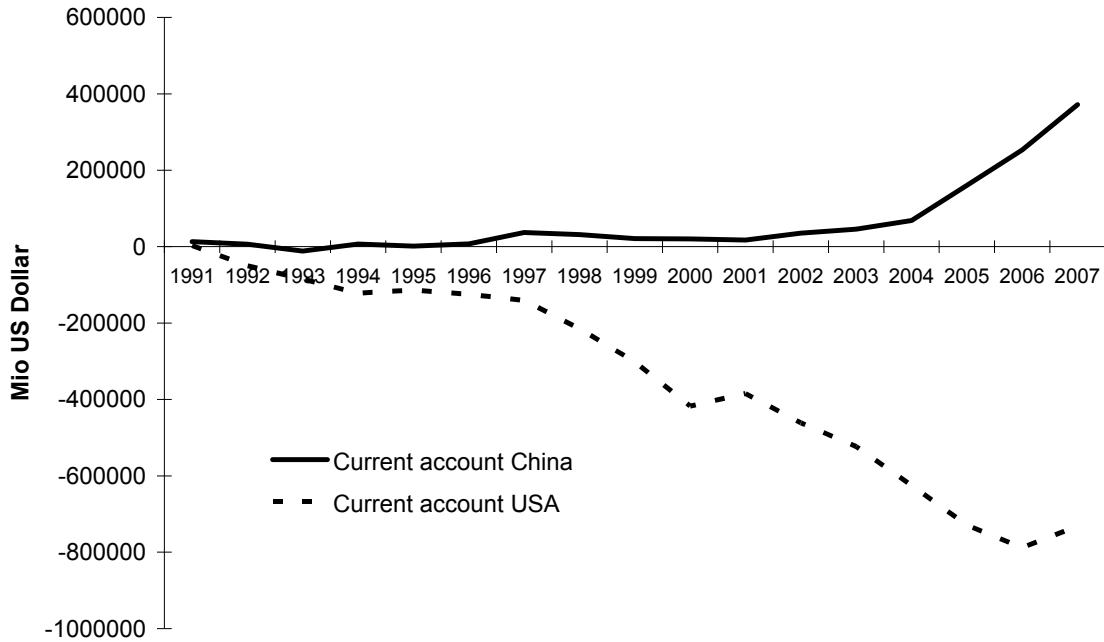
Generally, current account imbalances are nothing to worry about. Indeed imbalances can be desirable, if they reflect cross border capital flows that help employing capital where it is most productive and smoothing consumption in individual countries over time. However, in the case of high and prolonged current account deficits the question of sustainability might arise. Unsustainable large current account deficits can potentially lead to sudden stops of capital inflows and consequently to severe recessions (see e.g. Edwards, 2004). In recent years, the duration, the level and the structure of global imbalances have raised concerns that the situation may have become unsustainable as deficit countries including highly developed countries like the US, Australia or Spain accumulated external liabilities at a high rate while many emerging economies, which according to traditional theory should receive net capital inflows to accelerate economic growth, ran large current account surpluses. The case of the US is of particular importance, because a slump of import demand in an economy representing almost 25 percent of global demand could potentially trigger a world recession. Furthermore, there seems to be a close connection between the financial crisis and the preceding global imbalances, as it had been anticipated among others by BIS (2006). It has, however, also been argued that the pattern of global imbalances with the US in substantial deficit and Japan, continental European countries (esp. Germany) and China in surplus was largely in line with economic fundamentals, especially secular demographic trends, and therefore no major correction was to be expected in the near future (e.g. Cooper 2006).

## Circumstances and causes of recent global imbalances

While the current account deficit of the US grew from 1.7 percent relative to GDP in 1997 to 5–6 percent in 2005–2007, China's surplus after a period of relative stability exploded in recent years to reach a value of 11.5 percent relative to GDP in 2007 (Figure 1). At the same time, current account imbalances increased all over the world. The United Kingdom, Spain and Australia posted rising deficits while current account surpluses grew in Japan, Germany, Asian tiger countries and in a number of raw material (particularly oil) exporting countries.

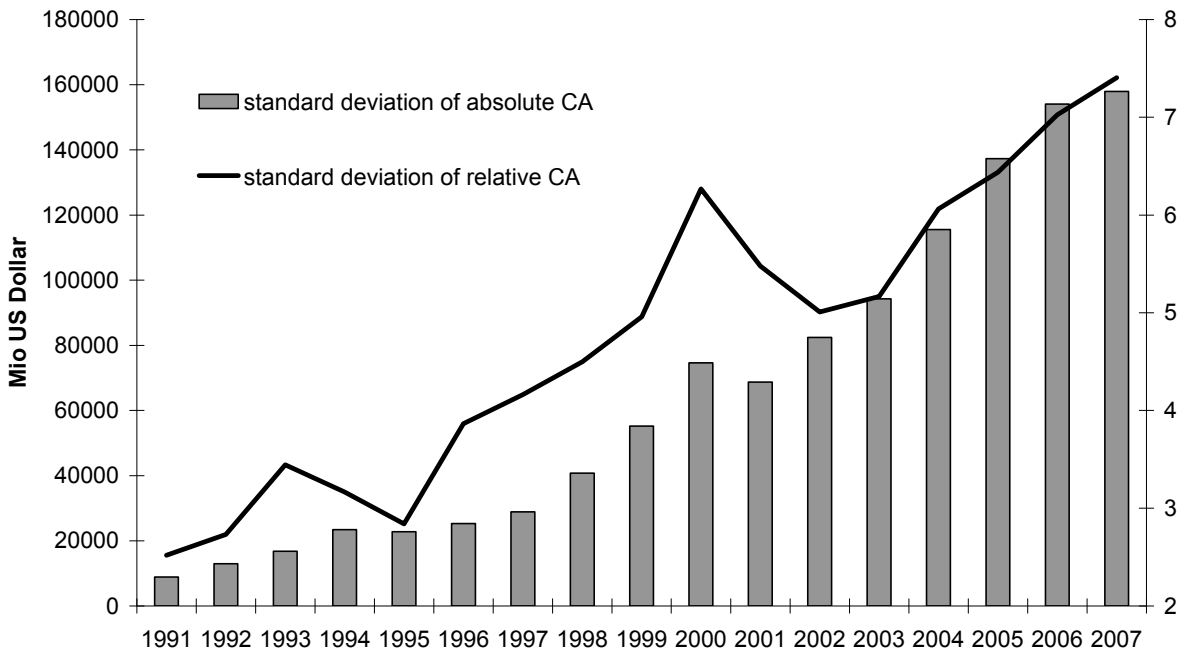
Correspondingly, the world wide dispersion of current account levels increased steadily in absolute as well as in relative terms (Figure 2).

Figure 1: Current Account of China and the US



Source: IFS database (IMF).

Figure 2: Current account imbalances



Source: IFS database (IMF); own calculations.

Note: Calculations are based on current account (CA) figures from 32 major economies.

Several explanations for the increase of global imbalances have been broad up by the literature.<sup>1</sup> First, expected high productivity growth in the US relative to other countries may have attracted capital from abroad.<sup>2</sup> Moreover, measurement errors in foreign capital positions (“dark matter”) may have contributed to overstate imbalances.<sup>3</sup> Most frequently in the literature a global “savings glut” in combination with loose monetary policy and developments in financial markets have been discussed. A global “savings glut” has been seen as the main driver for the rise of global imbalances in several analyses (see e.g. Bernanke 2005). Several countries contributed to the “savings glut” for different reasons. The Asian tigers suffered a collapse of their high investment ratios during the Asian crisis 1997/8 which never fully recovered (see Chinn and Ito 2007, 2008), while savings remained at a high level. The excess savings allowed monetary authorities to build up large foreign currency reserves aiming to prevent future currency crises. In addition, private savers sought investments in industrialized countries, mainly the US, as they were regarded as “save haven” especially in contrast to the crisis-ridden emerging market economies. The turnaround of the Asian tiger countries' current accounts was facilitated by a large devaluation of their currencies during the crisis which made their exports more competitive and depressed imports. China experienced moderate current account surpluses for many years but with a rising trend from 2002 onwards and an enormous acceleration between 2005 and 2007. China had kept a fixed exchange rate to the US Dollar since 1995 and switched to a policy of gradual appreciation in 2005, and the consequences of the Asian crisis were less severe compared to other East Asian countries due to the system of capital controls. Thus, the huge accumulation of foreign currency reserves that has taken place in recent years as a consequence of current account surpluses was not a deliberate policy in response to devaluation risks but rather by-product of an export orientated growth policy.<sup>4</sup> In the Chinese case, the strong improvement of the current account was not result of a fall in the investment ratio of the economy but, to the contrary, went along with an extremely high steadily increasing share of investment in GDP which eventually became widely regarded as being excessive rather than insufficient. Thus, extraordinarily high savings of the private sector seem to be at the root of the rise in Chinese current account surpluses. The high savings rate in China might be explained by the underdeveloped financial markets and an inadequate social security system. Within the last ten years social security, like public health care, has even been reduced and a bond market offering reasonable low risk assets to private investors de facto does not exist.

Generally, in light of traditional economic thinking, the high current account surpluses in many of these Asian countries are puzzling as one would expect capital productivity to be higher in these emerging economies compared to developed countries due to the relative

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<sup>1</sup> For an overview, see Dovern et al. (2006) or EEAG (2006).

<sup>2</sup> See, Engel and Rogers (2006).

<sup>3</sup> Compare Hausmann and Sturzenegger (2006) for introducing the argument and Buiter (2006) for a critical discussion.

<sup>4</sup> Compare Dooley et al. (2004).

abundance of labour. This should lead to net capital flows into these countries which, as the flip side of the coin, should be running current account deficits. However, in the real world additional factors affecting investor decisions and the level of savings such as economic uncertainty, the struggle for credibility, the prevalence of export oriented growth models or deficiencies in the national financial and social security systems; compare Caballero et al. (2008).

Another group of countries with high current account surpluses in recent years are the oil exporters (esp. OPEC countries and Russia). The rise in their external balances can be regarded as to a large part being transitory, although probably enduring for several years. As the huge increase in oil revenues came unexpectedly, imports have not grown correspondingly, but should be gradually adjusted as a higher level of oil prices gets embedded in expectations. To some extent it is economically reasonable to save (and invest abroad) some of the extra money induced by price fluctuations as an insurance against falling prices in the future.

Not only emerging economies and raw material exporting countries built up large current account surpluses in the past years, but also some industrialized countries like Japan and a number of continental European countries, including Germany, the Netherlands, Switzerland and most Scandinavian countries. Most of these countries are confronted with demographic trends characterized by declining birth rates and shrinking population of young adults. In this environment, investment opportunities seem to be relatively unfavourable while at the same time the propensity of private households to save remained high and public deficits were reduced. In Germany this development was accompanied by a steady gain of competitiveness and the rise in trade surpluses was particularly pronounced.

The rising surpluses in some countries were matched by growing current account deficits in a group of other countries, mainly industrialized economies but also a number of emerging economies such as India, South Africa, Turkey and most Central European countries<sup>5</sup> The main exponent of the deficit countries, however, are the US, where the current account balance turned negative again in 1992 and the deficit widened almost continuously to reach a level of 6 percent of GDP in 2006. Two main arguments for rising current account deficits in the US have been put forward, that should be regarded as complementary: the “savings glut” has led to a steady capital inflow into the United States and rather loose monetary as well as expansive fiscal policies in the years following the 2001 recession (Taylor, 2008; Chinn and Ito, 2008). In sum, interest rates were relatively low and a housing price bubble emerged, which provided “seemingly” profitable investment opportunities and supported consumption

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<sup>5</sup> The low level of savings in these industrialized countries seemed to offset the rather high savings in the group of surplus countries. Overall, in recent years world savings were rather low compared to former times; see Chinn (2009) or Desroches and Francis (2007), p. 2. Thus, the term “savings glut” does not just reflect an increased savings tendency but rather the result of a mismatch between savings and (lower) investments in some parts of the world that drove down world interest rates.

which was accompanied by high import growth and a decreasing savings rate.<sup>6</sup> The emergence of the housing boom and the associated house price inflation was supported by aggressive behaviour of financial institutions which financed acquisition of property at extremely favourable terms, e.g. making extensive use of the now infamous sub-prime mortgages partly endowed with “teaser rates”.

Low real interest rates are one reason for high and increasing current account deficits in some European countries, too. Since there is only a single monetary policy of the European Central Bank (ECB) designed for the aggregate of the Euro area, countries with inflation significantly above average on a persistent basis like Spain, Ireland or Greece were persistently facing significantly lower real interest rates. This triggered a credit boom as well as a housing boom in these countries. In Spain low real interest rates and a steady inflow of migrants caused a house price bubble even though the country had the most prudent banking regulation within Europe. The construction sector in Spain prospered, unemployment shrank and wages rose. The loss of competitiveness and the growth of domestic demand resulted in increasing trade and current account deficits. Spain registered the second largest current account deficits in absolute terms worldwide.

A number of other industrialized countries, like the UK or Australia, and some emerging countries in Central and Eastern Europe also faced asset or housing price booms and rising current account deficits during the past decade. For some of these countries carry trades played an important role during the emergence of deficits. They used lower interest rates abroad, like in Switzerland or in Japan, to finance the accumulation of large debts in the private sector.

### **Global imbalances and the financial crisis**

The former section pointed out the savings glut in East Asia as one potential driver of excessive global imbalances in the past years. Furthermore loose monetary policy and financial innovations may have contributed to build up the large current account deficits in United States. There is some reason to believe that these factors played a considerable role in causing the financial crisis, too.

High private saving rates in combination with underdeveloped financial markets and the high demand for US Dollars of East Asian Central Banks either to stabilize the exchange rate or to prepare against speculative attacks led to a steady capital inflow in the United States. Since a considerable share of the demand for US dollars was directed at purchases of long-term bonds, long-term interest rates were driven down to unsustainable low levels. Consequently the demand for alternative long-term investment increased. This development has con-

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<sup>6</sup> The link between housing price bubble and current account deficits is analyzed in Fratzscher et al. (2007) or Punzi (2007).

tributed to an oversupply of mortgages because they seemed to be a reasonable alternative low-risk investment but more profitable; see Gros (2009).

Also loose monetary policy in the United States may have contributed to the financial crisis and global imbalances. Low credit cost supported an unsustainable path of credit financed private consumption. At the same time it boosted the risk appetite of financial institutions and the demand for alternative investments like asset-backed securities, further increasing consumption opportunities. Thereby domestic demand and consequently the trade deficit increased.

Ultimately, the highly developed financial markets in the United States and financial innovations reinforced the impact of the savings glut and loose monetary policy on global imbalances and the financial crisis. Financial innovations supported the translation of low interest rates and increased asset prices into private consumption. In particular the unsustainable housing boom in the United States that triggered the global financial crisis was boosted by financial innovations that on the one hand increased the supply of credit and on the other hand stimulated credit-financed domestic demand; see Brender and Pisani (2009).

### **Recent developments**

In the course of the current world wide recession the current account balances have been gradually shrinking (Table 1). The bursting of the asset price bubbles increased the propensity to save in US households as negative wealth effects diminish the value of collaterals, and weak domestic demand reduced imports. Helped by drastically lower oil prices the US current account deficit decreased substantially to 2.9 percent of GDP in the first quarter of 2009, a level has is often been regarded as being sustainable in the longer term. At the same time, the gap in the current account of surplus countries such as Germany or Japan narrowed as exports crashed. Indicators suggest that the Chinese surplus has also been reduced, as a huge fiscal stimulus package has kept domestic demand in China running while Chinese exports have also suffered. However, it seems unlikely that the US current account deficit will shrink much further as the government has massively stimulated domestic absorption and increased the public deficit to unprecedented levels. Furthermore, export orientated economies like China, Germany, Japan or Korea will not change their economic structures rapidly and these countries will particularly benefit from a recovery of the world economy. Therefore, even though some of the recent reduction of global imbalances is probably structural, for example as a result of a persistently higher personal savings rate in the US, overall global imbalances are likely to increase again as the economic recovery proceeds.



Table 1: Current Account relative to GDP

	2007	2008	Q4 2008	Q1 2009
USA	-5,30	-4,95	-4,36	-2,88
Spain	-10,03	-9,54	-8,55	-7,63
Japan	4,86	3,24	1,69	1,41
Germany	7,88	6,63	4,83	3,08

Source: National Statistical offices.

### Managing global imbalances after the financial crisis

Although global imbalances have diminished to some extent during the ongoing financial crisis, the phenomenon of high and persistent current account imbalances will stay with us since the structural reasons behind them have mostly not been resolved. In East-Asian countries like China financial markets will remain underdeveloped and precautionary saving will continue to play an important role in the medium term and may reinforce the 'saving glut'. Oil exporting countries are likely to be net savers in the foreseeable future as well. Conversely, in countries that have run large current account deficits so far, structural reasons such as relatively favourable demographic trends or a particularly flexible and dynamic economy may remain relevant. In addition, unsustainably high levels of domestic absorption in some countries may be supported to some extent by governments running large fiscal deficits for an extended period of time.

In general, government policy should probably not try to focus on the external balance of a country or on global imbalances in general as net exports and associated changes in net foreign assets can be seen as the natural outcome of individual agents' economic decisions governments should only carefully interfere with. However, high and persistent current account imbalances may indicate structural problems in an economy which should be approached in the interest of the economy. For example, in the case of China the extremely high level of the household savings ratio which is behind the high current account surplus suggests that there may be policy options available which increase the welfare in the Chinese economy and at the same time work in the direction of more balanced external accounts. In particular, an improvement of social security systems could decrease the need for private savings and provide a rather quick alignment of current accounts. However generally, emerging market economies need investments to build up a suitable capital stock. Thus, a more important step is the improvement of financial institutions in emerging markets. The inability of financial systems in emerging markets to provide suitable assets and thereby to intermediate savings and investments on a national level increased the demand for assets denominated in Dollars contributing to the phenomenon that we became used to call



“savings glut”. Building a more developed and integrated financial system in emerging economies could change the situation (Prasad, 2009).<sup>7</sup>

Probably even more importantly, the regulation of financial markets on a global scale and in particular in countries with highly developed financial markets is necessary to reduce the probability of re-occurrence of asset price bubbles. Apparently financial institutions took on too much risk. Some of the underlying faults that led to financial crises also supported global imbalances to rise. One example may be the excessive mortgage supply for non-creditworthy homebuyers in the United States that were financed via structured securities internationally. Therefore an institutional framework that stabilizes financial markets at a global level could be one cornerstone in preventing unsustainable global imbalances as well as global financial crises in the future. Reasonable steps towards a better regulation of financial markets are a ban of off-balance-sheet liabilities, implementation of a new structure in the field of rating agencies in order to prevent moral hazard, or introduction of a compensation scheme for bank managers orientated at sustainable developments, among others (Tabellini, 2009; see also GES, 2009).

Better regulation of financial markets and institutional changes on a global scale are necessary, but it seems unrealistic that economic policy is able to prevent future unsustainable global imbalances definitely all the more that reforms are hard to enforce as coordination of all big economies in the world is very ambitious, if even impossible. Therefore, to strengthen the role of the IMF in monitoring global capital markets could be a more practical approach (Dunaway, 2009). It is questionable that its' political power will be increased, but a well equipped and (more) independent IMF could provide profound policy advice and urge even large countries to unilateral or bilateral action.

Recently it has been argued that a world currency would prevent the rise of imbalances to some extent. Emerging economies would not have the need for building up large reserves to prevent a currency crisis. In this regard a corresponding reform of the world financial system is postulated. However, one has to keep in mind, that there are several possible reasons for rising imbalances. Export orientated policies like in China<sup>8</sup> as well as the windfall profits of oil

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<sup>7</sup> Chinn and Ito (2007) argue that marginal improvements of the financial sector itself in East Asian economies have no impact on current account surpluses. They identify additional circumstances like the legal system and the international financial integration as important determinants of the link between current account and financial development. Thus in lines of their argumentation an alleviation of the intermediation between savings and investments in emerging market economies has to take measures that aim on broader reforms than just the improvement of the domestic financial sector.

<sup>8</sup> The Chinese surpluses in connection with its currency peg are often regarded as an argument in favour of flexible exchange rates, as the assumed undervaluation of the Chinese currency - in this line of thought a main driver of global imbalances - would have been prevented by freely floating currencies. However, this argument is contradicted by McKinnon and Schnabl (2009). These authors favour domestic economic policies for China as a contribution to the solution to the problem of global imbalances. Furthermore, it seems rather unrealistic that a fully free floating currency system will prevail (Calvo and Reinhart, 2002).

exporters would have not been prevented by a world currency. Furthermore, experiences in the Euro area show that a single currency does not dampen or even prevent imbalances. Persistent differences in inflation occurred and triggered over investments and current account deficits in some countries, like Spain or Ireland, where too low real interest rates prevailed.

The imbalances within the Euro area rather seem to offer an argument for the opposite opinion, namely, for fully flexible exchange rates. However, on the one hand the argument with respect to the dependency of emerging economies on international capital markets and their struggle for reputation stays valid, where the anticipation or the fear of exchange rate volatility increased national savings. On the other hand the phenomenon of carry trades and the experiences of some Middle and East European countries prove that flexible exchange rates cannot prevent rising imbalances. Thus, flexible exchange rates are not a tool to guarantee a sustainable development of international capital flows as well.

Overall, the role of exchange rates with respect to global imbalances is ambiguous. While exchange rate risks can be a trigger for “savings gluts” in emerging market economies, a fixed exchange rate system or a world currency does not provide a guarantee that “unhealthy” global imbalances will vanish.

## Conclusion

In the past years global imbalances increasingly became a major concern for the future economic development. Recently, in the course of the global financial crisis, global imbalances declined considerably, albeit without disappearing completely. There is some reason to believe that structural reasons like globally deregulated financial markets and underdeveloped financial markets in emerging market economies are an important force behind the build-up of external imbalances. As these factors remain largely in place, there is the danger of a reoccurrence of excessive global imbalances in the future. Important steps to stabilize the global economy can be seen in a tighter regulation of financial markets and the strengthening the role of the IMF to monitor global capital markets. Furthermore an improvement of social security systems and financial markets in emerging economies could dampen steady capital inflows into the United States. In contrast the role of exchange rate schemes is ambiguous.

## References

- Bernanke, B.S. (2005). The Global Saving Glut and the U.S. Current Account Deficit. Speech (April 14) < <http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/>>.
- BIS (Bank of International Settlements) (2006). 76<sup>th</sup> Annual Report 2006.
- Brender, A. and F. Pisani (2009). Globalised finance and its collapse. Dexia, Belgium.

- Buiter, W. (2006). Dark Matter or Cold Fusion? Global Economics Paper 136. Goldman Sachs, London.
- Caballero, R.J., Farhi, E. and Gourinchas, P.-O. (2008). An Equilibrium Model of “Global Imbalances” and Low Interest Rates. *American Economic Review* 98: 1, 358–393.
- Calvo, G.A. and Reinhart, C.M. (2002). Fear of Floating. *Quarterly Journal of Economics* 117(2): 379–408.
- Chinn, M.D. (2009). The Global Saving Glut: Rest in Peace? Mirage? Bete noir? Econbrowser, June 22 <[http://www.econbrowser.com/archives/2009/06/the\\_global\\_savi.html](http://www.econbrowser.com/archives/2009/06/the_global_savi.html)>.
- Chinn, M.D. and Ito, H. (2007). Current account balances, financial development and institutions: Assaying the world “saving glut”. *Journal of International Money and Finance* 26: 546–569.
- Chinn, M.D. and Ito, H. (2008). Global Current Account Imbalances: American Fiscal Policy versus East Asian Savings. *Review of International Economics* 16(3): 479–498.
- Cooper, R.N. (2006). Understanding Global Imbalances. Mimeo <<http://www.economics.harvard.edu/faculty/cooper/files/frbb.rev.pdf>>.
- Desroches, B. and Francis, M. (2007). World Real Interest Rates: A Global Savings and Investment Perspective. Bank of Canada, Working Paper, 2007–16.
- Dooley, Michael P., David Folkerts-Landau and Peter M. 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 No. 10332.
- Dovern, J., Meier, C.-P. and Scheide, J. (2006). Das hohe Leistungsbilanzdefizit der Vereinigten Staaten: Ein Risiko für die Weltwirtschaft und für die wirtschaftliche Entwicklung in Deutschland? *Kieler Diskussionsbeiträge* 432/433.
- Dunaway, S. (2009). Global Imbalances and the financial crisis. Council of foreign relations. Council Special Report No. 44, March.
- Edwards, S. (2004). Financial Openness, Sudden Stops and Current Account Reversals. *American Economic Review* 94(2): 59–64.
- European Economic Advisory Group (EEAG) (2006). Report on the European Economy 2006.
- Engel, C. and J.H. Rogers (2006) The U.S. Current account deficit and the Expected Share of World Output. *Journal of Monetary Economics* 53 (5): 1063–1093.
- Fratzcher, M., Juvenal, L. und L. Sarno (2007). Asset prices, exchange rates and the current account. ECB Working Paper Series No. 790.
- GES (Global Economic Symposium) (2009). Global Economic Solutions – Proposals from the Global Economic Symposium 2008. < <http://www.global-economic-symposium.org/ges-2008/the-global-economic-solutions/gesolutions.pdf>>.
- Gros, D. (2009). Global imbalances and the accumulation of risk. VOXEU, June 11 <<http://www.voxeu.org/index.php?q=node/3655>>.
- Hausmann, R. and F. Sturzenegger (2006). Global Imbalances or Bad Accounting? The Missing Dark Matter in the Wealth of Nations. Center of International Development at Harvard University Working Paper No. 137.
- McKinnon, R.I. and Schnabl, G. (2009). The Case for Stabilizing China's Exchange Rate: Setting the Stage for Fiscal Expansion. *China and World Economy* 17(1): 1–32.
- Prasad, E.S. (2009). Rebalancing growth in Asia. NBER Working Paper No. 15169.
- Punzi, M. T. (2008). Housing Market and Current Account Imbalances in the International Economy. Mimeo.
- Tabellini, G. (2009). Lessons for the future: Ideas and rules for the world in the aftermath of the storm, Part I. VOXEU, July 16 <<http://www.voxeu.org/index.php?q=node/3773>>.
- Taylor, J.B. (2009). The Financial Crisis and the Policy Responses: An Empirical Analysis of What Went Wrong. NBER Working Paper No. 14631.