A joint initiative of Ludwig-Maximilians-Universität and the Ifo Institute for Economic Research

CESifo Forum

Winter 2007

Volume 8, No. 4

CESifo Forum ISSN 1615-245X
A quarterly journal on European economic issues
Publisher and distributor: Ifo Institute for Economic Research e.V.
Poschingerstr. 5, D-81679 Munich, Germany
Telephone ++49 89 9224-0, Telefax ++49 89 9224-1461, e-mail ifo@ifo.de
Annual subscription rate: €50.00
Editor: Chang Woon Nam, e-mail nam@ifo.de

www.cesifo.de

CESifo Forum

Volume 8, Number 4 Winter 2007

Focus

THE US CURRENT ACCOUNT DEFICIT

Specials

Spotlight

Trends

The US Current Account Deficit

The dollar and the global imbalances

C. Fred Bergsten*

From 1995 to early 2002, the dollar rose by a trade-weighted average of about 40 percent. Largely as a result, the US current account deficit grew by an average of about $75 billion annually for ten years. It exceeded $800 billion and 6 percent of GDP in 2006. There were two major consequences for the world economy.

The first is the risk of *international financial instability and economic turndown.* To finance both its current account deficit and its own large foreign investments, the United States must attract about $7 billion of foreign capital every working day. Any significant shortfall from that level of foreign demand for dollars would drive the exchange rate down and US inflation and interest rates up. A drying up of that demand, and especially any net disinvestment from the $20 trillion or so of existing dollar assets held around the world, would trigger even larger changes in these critical prices (and thus in the equity and housing markets as well). With the US economy near full employment, but also having slowed, and with housing already under intense pressure, the result would be stagflation at best and perhaps a nasty recession. Other countries would be affected severely as well, as their currencies rose and they experienced significant reductions in the trade surpluses on which their growth now depends.

Second is the domestic political risk of trade restrictions in the United States and thus *disruption of the global trading system.* Dollar overvaluation and the resulting external deficits are historically the most accurate leading indicators of US protectionism because they drastically alter the domestic politics of the issue, adding to the pressures for new distortions and weakening pro-trade forces. These traditional factors are particularly toxic in the current context of strong anti-globalization sentiments. The spate of administrative actions against China over the past several years, and the numerous anti-China bills now under active consideration by the Congress, demonstrate the point graphically since China is by far the largest surplus country and its currency is so dramatically undervalued.

The US current account deficit does not have to be eliminated. It needs to be cut roughly in half, however, to stabilize the ratio of US foreign debt to GDP. When the deficit peaked in 2006, the ratio was on an explosive path that would exceed 50 percent within the next few years and an unprecedented 80 percent or so in ten years. Avoiding such outcomes requires improvement of about $400 billion from those levels.

I and colleagues at our Peterson Institute for International Economics have been pointing to these dangers, and calling for corrective action since the end of the 1990s. The adjustment process began in early 2002. The dollar has declined, in a gradual and orderly manner, by 20 to 25 percent since that time as the needed capital inflows have been obtained only through additional price inducements from a cheaper exchange rate and higher interest rates (and, until recently, higher equity and housing prices due to strong US growth). The budget deficit has also fallen over the past three years, limiting the saving shortfall that forces the United States to borrow so heavily abroad. US growth has slowed while expansions have accelerated in Europe, Japan and (even further) in China and most of the oil producers.

The adjustment to date, however, has been inadequate and unbalanced. It has halted the deterioration of the US deficit, which is no mean feat since imports came to exceed exports by more than 50 percent, but has not yet convincingly reversed the trend. The surpluses of the largest creditor countries, Japan and especially China, continue to soar to record levels.

An important reason for the inadequate size of the adjustment is its skewed geographical compo-

* Peterson Institute for International Economics.

sition. The floating currencies of Europe (euro, sterling, Swiss franc), Canada, Australia, Korea and a couple of other Asians have risen by 30 to 50 percent against the dollar. However, the heavily managed currencies in much of emerging Asia and the yen, due mainly to Japan's extremely low interest rates, have appreciated by modest amounts if at all. The same is true for most of the large oil exporters. Hence the improvement of the US imbalance against Europe has been offset by continued deterioration against the Asians, much of which shows up as occurring with China due to its central role as the final assembly point for Asia-wide production networks, and the energy producers.

Unless all economic history is repealed, further adjustment of these global imbalances is inevitable. The key question is whether it will occur wholly through market forces, including the "political market" for trade protection, or at least partly through preemptive policy actions by the major countries. The impact on global growth, international financial stability and the world trading system could turn importantly on which path is followed.

Either path will have to include a further decline of ten percent or so in the trade-weighted average of the dollar. There are two main risks in relying solely on the market for this outcome. One is the possibility of a hard landing if the dollar falls abruptly rather than in an orderly manner, especially as it can easily overshoot its needed correction (perhaps by a substantial amount). This risk is considerably greater than five years ago: the US external financing requirement is much larger, US net foreign debt is headed into uncharted territory, US full employment means that a dollar plunge would now lead to much more inflation and much higher interest rates, and the maturation of the euro offers a real alternative to the dollar so there is now "some place else to put the money". There are any number of potential triggers for a precipitous decline in the dollar including a sharp fall in US interest rates in response to the present liquidity difficulties, a US recession while the rest of the world keeps growing, diversification out of the dollar by one or more large sovereign wealth funds (or even rumors thereof), a drop in the rapid US productivity growth of the past decade, protectionist legislation and the 2008 elections as well as a generalized collapse of confidence due to the spillover from the subprime lending crisis.

The other risk of relying solely on the market is that the floating currencies (once more excluding the yen?), which have already largely adjusted, will once again experience most of the counterpart appreciations against the dollar decline because the countries that aggressively manage their exchange rates continue to block their essential contribution to the adjustment. This especially means China, because its surplus is so large and its exchange rate is so key to others in its region, but also a number of other East Asians and oil producers including Hong Kong, Malaysia, Norway, Russia, Singapore, Taiwan and several Gulf exporters.

The next big currency move, which could exacerbate rather than correct the global imbalances, could in fact be an even more dramatic rise in the euro. European growth has accelerated relative to US growth. Euroland interest rates have been rising while US rates are falling. The euro is moving up alongside the dollar as a global currency and portfolios around the world, both private and official, are likely to adjust considerably as a result. Diversification from dollars into euros by a number of emerging economies that have accumulated large reserves, including via their sovereign wealth funds, intensifies this prospect. The euro (and the Canadian dollar and a few other floating currencies) could become substantially overvalued, especially against the Asians, weakening their economies and creating protectionist spillovers that add to the threat to the global trading system.

An alternative strategy for completing the global adjustment through constructive policy actions by the key countries was recently developed at a conference of thirty top international economists hosted by our Peterson Institute for International Economics and co-sponsored by leading think tanks from Asia and Europe, the Korea Institute for International Economic Policy and BRUEGEL. It would have four key components:

- attainment of modest budget surpluses in the United States, as needed for purely domestic reasons and as actually achieved during 1998-2001, to make room for the needed improvement in the external balance without generating higher inflation and interest rates;
- aggressive expansion of domestic demand in East Asia, especially in China and Japan, to offset the essential large cutbacks in their trade surpluses;

- continued rapid growth of domestic demand in key oil exporting countries; and
- a series of substantial exchange rate changes, especially by countries that have not yet participated in the adjustment package.

The Chinese renminbi needs to rise by about 30 percent against the dollar, over a period of three to four years, with a "down payment" of at least 10 percent each in the near term. This will require China to sharply scale back its intervention to block the renminbi appreciation. The yen needs to rise by 10 to 20 percent against the dollar, which may require Japan to signal (perhaps through intervention) a desire to strengthen its currency. The other surplus countries cited above must also limit their market intervention and allow their currencies to appreciate substantially. It will be much easier for the other Asians to do so once China and Japan take the lead, and all these currencies will rise much less on a trade-weighted average than against the dollar if they move together. Euroland, Korea and a few other floaters must accept further rises in their exchange rates against the dollar but, because of the much larger increases in the surplus country currencies, without appreciation of their trade-weighted averages.

In the 1980s, the US Government and the G-5 abandoned their benign neglect of problems very similar to those we now face in the nick of time to head off major disruption of the international monetary system, world trade and the global economy. Similar statesmanship is sorely needed again today to enhance the odds that the inevitable correction will take place constructively and to avoid the enormous risks to all involved from letting nature take its course.

Why a large US deficit is likely to persist

Richard N. Cooper*

It has been three years since I last wrote on the US current account deficit for CESifo Forum, based on data through 2003, when the US current account deficit (balance of payments basis) was $522 billion. I argued then that, contrary to frequent claims of unsustainability, the US deficit was likely to endure for many years. After 2003, the deficit grew annually, reaching $811 billion in 2006 before dropping below $800 billion in 2007, a response both to slower growth in the United States and to some cumulative depreciation of the dollar against other major currencies – although prices of US oil imports were significantly higher in 2007 than in 2003. The dollar depreciated in 2003 and 2004, but actually appreciated in 2005 before resuming depreciation in 2006/07. In the meantime there have been numerous articles and at least one book (Cline 2005) on the precarious state of the US deficit and the risk of major financial turmoil, although claims of literal unsustainability seem to have receded somewhat in face of growing deficits.

This article will review some arguments why the US deficit, far from being unsustainable, is likely to last for a decade or longer. They rest on globalization of world financial markets combined with significant demographic change in Europe and East Asia, the locus (along with oil-exporting countries) of the large current account surpluses of the world.[1] In brief, demographic change results in excess savings in parts of Europe and Asia, this excess saving properly seeks investment abroad, the United States has been and is likely to continue to be a major destination of such investment, and growth in the net foreign indebtedness of the United States falls well short of US current account deficits because of valuation changes in US investments abroad relative to foreign investments in the United States.

A thought experiment

Savings as conventionally defined in the national accounts, relative to output, have been significantly higher in the rest of the world in recent decades than they have been in the United States, and that relationship is likely to continue, at least for some years.[2] If we take full globalization of financial markets to mean the absence of home bias in the allocation of savings, one interpretation is that each country invests its savings (including depreciation allowances) around the world in proportion to GDP (another interpretation would focus instead on available financial assets). If such a condition had existed in 2006, Americans would have invested $1.3 trillion of their savings abroad, and non-Americans around the world would have invested $2.5 trillion of their savings in the United States, which accounted for 27.5 percent of gross world product in that year. The US current account deficit (conceptually equal to net foreign investment) in 2006 would have been $1.2 trillion, significantly higher than $0.8 trillion. It would have risen from $0.5 trillion in 2001, and would continue to rise in subsequent years until some combination of a declining share of the United States in the world economy, a decline in non-US saving rates, and a rise in US saving rates would bring the continuing increases to a halt. A focus on marketable financial assets rather than GDP would have resulted in an even greater US current account deficit, because roughly half of all available marketable financial assets are in the United States.

Of course, world financial markets are not fully globalized in this sense, and perhaps never will be. Moreover, this thought experiment, like gravity models of international trade, ignores the incentives for trade in financial assets, such as yield, liquidity, risk diversification, and so on. But it makes

* Harvard University.

[1] This article draws on my contribution to the final meeting of the Brooking Panel on Economic Activity, to be published in Brookings Papers on Economic Activity (BPEA), 2007, No. 2.

[2] For doubts about the adequacy of conventional measurements of saving for today's knowledge economies, see BPEA, op. cit.

the point that by this standard the United States has not been drawing an unsustainable amount of world savings, and indeed that by this standard the flow of savings into the United States is likely to continue to grow for some years, as further globalization proceeds.

The US deficit has its exact counterpart (apart from measurement errors) in surpluses elsewhere. In 2006 these surpluses were concentrated in oil-exporting countries (including Norway and Russia as well as members of OPEC); China, Japan, and most other East Asian economies; and Germany and its neighbors whose economies are closely integrated with Germany: Switzerland, Netherlands, Sweden, and Austria. The surplus of China, which has received much attention, came to $250 billion; that of Japan and other East Asian countries came to $261 billion. The surpluses of Germany and its close economic neighbors, which have received much less attention, came to $306 billion. The surpluses of oil-exporting countries were $423 billion.

The oil country surpluses will prove transitory, at least in part. Oil revenues in most such countries accrue in the first instance to governments, and take a while to get into the revenue stream, and hence into higher imports. Also, oil prices are likely to decline from the high levels of 2006/07. On both counts, the surpluses of the oil-exporting countries should decline, although that may take several years. Moreover, more countries are emulating Norway and Kuwait in saving a portion of their high oil revenues for future generations, so some part of their surpluses, and of their investments abroad, may persist.

Demography

The surpluses of Germany, Japan, and other East Asian countries are also likely to persist, although for quite a different reason. These countries are aging rapidly, due both to increasing longevity (as in most countries) and to low natality. The aging of rich countries has received much attention, focused on future fiscal strains arising from pension and health care commitments. Such concerns may lead to higher private saving rates during working years, and even into early retirement, not least because with medical advances the timing of death is both postponed and is increasingly uncertain. Eventually, of course, saving rates in aging societies may be expected to decline, as more people move into late retirement and draw on their accumulated assets. But that may take many years.

Much less attention has been focused on the implications of low natality for the savings-investment balance in aging societies. The number of young adults in Germany, Japan, China, and other East Asian and European countries is expected to decline in the coming decades, at roughly one percent a year 2005 to 2025. Young adults are the most highly educated and the most flexible members of the labor force, and they are the people who form new families. A decline in their numbers in rich countries means lower demand for housing and for schools. It also means lower demand for capital to equip new members of the labor force with the average capital stock. Some capital-deepening will occur, but that will drive down the domestic return to capital and make investment abroad correspondingly more attractive.

Among rich countries, the United States stands out as a marked exception. Birth rates have also fallen in the United States, but remain at replacement rates (2.1 children per woman of child-bearing age), much higher than birth rates in other rich countries and East Asian countries. Moreover, the United States (like Australia and Canada) remains a country of significant immigration, overwhelmingly young adults, and second-generation and later immigrants are well integrated into the American labor force. As a result of both sources, the number of young adults in the United States is expected to rise in the coming decades, in sharp contrast to most non-oil countries with large surpluses.

The implications of low natality for the savings-investment balance are rather different for China. While the number of young adults is expected to decline significantly, large numbers of poor people continue to live in rural areas. Rural to urban migration can be expected to continue, and as incomes rise families will upgrade the quantity and quality of their housing. Thus residential investment will continue apace in China for another decade or more, and new members of the urban labor force must be provided with space and equipment. But saving rates have risen with rapidly rising income (as they did in Japan at a corresponding stage of development), even as consumption and investment have risen rapidly.

Low natality, then, leads many countries to have excess savings. In a globalized world, these excess savings will be placed abroad. The United States is a relatively attractive place to invest. Expected returns may not be so high as they are in emerging markets, but they will be higher than in stagnant markets. Moreover, investors, especially prospective pensioners, are concerned about the security of their investments even more than yield. As Argentina, Bolivia, Russia, and Venezuela have reminded everyone in recent years, private investment, especially foreign investment, is not always secure in supposedly developing countries.

Investments in the United States are relatively secure, dispute settlement is impartial and reasonably speedy, financial assets are relatively liquid by virtue of the size of the markets, and, as noted above, US markets account for nearly forty percent of the world's financial assets, and probably over half of the available marketable assets (stocks and bonds) once allowance is made for claims held by governments and other firm owners. Yields in recent years have been higher than in Japan and continental Europe, though not so high as in Australia and Britain, countries with some of the attributes of the United States that have also run substantial current account deficits.

Much has been made of investment in the United States by foreign central banks, whose reserves collectively have grown enormously in the past five years. The United States, it is said, is taking advantage of the international role of the dollar, and foreign central banks are financing both the US Federal budget deficit and the US current account deficit by buying US Treasury securities. It is true that foreign central banks, and particularly central banks of East Asia, have added extensively to their reserves, and that much of this addition has been in US government securities. But the role of official investment in US markets needs to be kept in perspective. During 2005 more than $1.2 trillion in foreign funds flowed into the United States, and in 2006 nearly $1.9 trillion. During the first half of 2007 the inflows exceeded $2.5 trillion at an annual rate. Under one quarter of the total inflows were from foreign central banks in 2005 and 2006, and under one-fifth in 2007, on preliminary figures. It is true that some portion of "private" inflows are beneficially owned by official bodies, and that official inflows into London and other international financial centers get recycled to the United States as private flows. But this is not mandated. The fact that the funds are privately invested in the United States reflects decisions by fund managers where to put their clients' money, and they have chosen massively to put these funds into the United States, inter alia for the reasons indicated above.

Moreover, in some cases foreign central bank intervention can be interpreted as intermediating on behalf of private citizens. Japanese households historically invested heavily in low-interest postal savings deposits, proceeds of which were used to finance politically motivated construction projects with a low social return. Japanese official investment overseas at least acquired assets that would yield positive returns to the nation as society aged, in command over tradable goods and services. Japanese households became more venturesome in the mid-2000s, the Bank of Japan did not intervene extensively in the foreign exchange market after the spring of 2004, but Japan's current account surplus did not decline. Similarly, official Chinese acquisition of foreign assets anticipates in part the day at which Chinese residents are permitted to invest abroad; their demand for foreign assets may be large, given their high saving rates and the limited domestic investments available to households.

Debt Dynamics

But do not the large US current account deficits jeopardize future American incomes, by mortgaging future output to foreigners? Some simple debt dynamics help to make the point. Suppose D equals the net international investment position of the United States (NIIP: total US claims on the rest of the world minus total foreign claims on the United States), and commands a net yield r. D can of course grow indefinitely in a growing world in which US GDP is growing, say at the rate of five percent annually in nominal terms. D/GDP will then stabilize when D is also growing at five percent.

$dD = B + rD$, where B is the balance on goods, services, and unilateral transfers, and $B + rD$ is the current account. Thus stabilizing D/GDP would require $B/D + r$ to equal 0.05. At the end of 2006 D/GDP for the United States was 16 percent and B/D was about 35 percent.[3] These numbers suggest

[3] The NIIP here and below values inward and outward direct investment at market values, as estimated by the US Bureau of Economic Analysis.

little prospect of stabilizing *D/GDP* anytime soon, if ever, even if interest payments to foreigners are low. It looks as though the US deficit may not be sustainable, or that it can be sustained only if *r* is significantly negative.

In fact, to date *r* has been negative, since recorded earnings on US investments abroad have continued to exceed foreign earnings on investments in the United States despite a negative NIIP since the late 1980s. Moreover, total returns on foreign investments substantially exceed recorded earnings, and the gap favoring the United States has been even larger, thanks mainly to increased market values and, to a much lesser extent, depreciation of the dollar. Thus, although the cumulative US current account deficit over 1990 to 2006 was $5.2 trillion, the increase in the net debtor position of the United States, at $2.0 trillion, was less than half that. The average annual total return on US investments abroad since 1990 (including exchange rate effects, on which more below) was 10.0 percent, compared with a total return (in dollars) of 6.2 percent on foreign investments in the United States. The main reason is that equity investments, both direct investment and portfolio equity, make up a substantially larger share of US claims on the rest of the world (61 percent) than of foreign investments in the United States (35 percent). Americans act in effect as risk-taking intermediaries in the world economy, selling fixed-interest claims and investing in equity; they thus earn an equity premium in the world economy.

In addition, changes in exchange rates affect valuations when US claims on foreign assets are converted into dollars, in which the US NIIP is reckoned. Most US assets abroad are denominated in other currencies, whereas most foreign claims in the United States are denominated in dollars. When the dollar depreciates against other currencies, US claims rise in value relative to foreign claims, and vice versa when the dollar appreciates.

The combined valuation effects can be substantial. In 2005 the US current account deficit was $755 billion, but the NIIP actually increased by $200 billion, despite an appreciation of the dollar in that year (reversals of sign also occurred in 1999 and 2003). The deficit of $811 billion in 2006 produced no change in the NIIP, on preliminary figures. Remarkably, the ratio of the NIIP to GDP declined from over 23 percent in 2001 to under 17 percent in 2006, despite large and growing current account deficits during that period. Indeed, *D/GDP* was only four percentage points of GDP higher in 2006 than eight years earlier, despite a cumulative current account deficit of 38 percentage points of GDP. The dollar depreciated on balance over his period, and the NIIP would have equaled 19 percent of GDP at the end of 2006, or 2.6 percentage points higher than it was, if the dollar had not depreciated. Most of the valuation changes, in other words, were not due to exchange rate changes. Of course, US total return may not remain so high in the future, and foreign returns may rise as foreign official funds are moved into longer-term and riskier assets.

The ratio of NIIP to GDP is far below where it would be in a world without home bias, as described above, where foreigners would hold nearly 30 percent of their financial assets in the United States (over twice the ratio they currently hold). On these grounds, then, the NIIP could still rise significantly.

How much of US financial assets do foreigners own? Here it is necessary to look at gross foreign investment in the United States, before netting it against US investment abroad. Total foreign claims on the United States were $13.6 trillion at end 2006 (including only the net position of US banks), roughly equal to US GDP and to the private nonresidential fixed capital stock. The share of foreign ownership has increased steadily for the past two decades. But foreigners do not generally invest in the domestic capital stock, and their share of US assets is not rising so rapidly as one might suppose by looking at dollar magnitudes. A remarkable feature of the US economy is that the total value of financial assets has been rising significantly more rapidly than the underlying economy. The Federal Reserve estimates total financial assets at the end of 2006 to have been $129 trillion (this figure of course is sensitive to the system of classification used in the flow of funds accounts, and does not include derivatives), or 9.7 times GDP. Forty years earlier, in 1965, total financial assets were 4.8 times GDP. Put another way, while nominal GDP grew by 7.4 percent a year over 1965 to 2006, total financial assets grew by 9.2 percent a year.

This phenomenon reflects, among other things, innovation by the financial sector, which has devised a host of new financial instruments to appeal to a wider variety of circumstances and tastes. This articulation of financial assets appeals to

many foreigners as well as to Americans, and foreigners invest in a wide array of these instruments. So, although the stock of gross foreign investment in the United States slightly exceeded GDP in 2006, it amounted to only 12 percent of total financial assets, up from three percent in the mid-1980s, but the rise has been slow.

Evaluation

Viewed in the context of globalization and demographic change in other rich countries, the large US current account deficit is both comprehensible and welfare-enhancing from a global point of view, reflecting inter-temporal trade, so long as Americans invest the funds productively. Prospective retirees around the world are making investments that are profitable and secure. If this is so, strong governmental efforts to reduce the deficit significantly may be deeply misguided at best, and run a serious risk of precipitating the financial crisis and/or economic recession that its proponents hope to forestall.

Not so long ago it was argued that as a rich country the United States should be running a current account surplus, not a deficit. More recently it has been suggested that for sustainability the deficit needs to be reduced to no more than around three percent of GDP. Reduction of the deficit by three percentage points of GDP would require that US expenditure drop, relative to output, by three percentage points of US GDP, roughly one percent of GDP in the rest of the world. Foreign surpluses, taken together, would have to decline by three percent of US GDP, implying a rise in demand relative to output by that amount elsewhere in the world.

It is also usually said that to bring about the required substitutions in product demand, the US dollar must depreciate, probably significantly, perhaps by 30 percent on a trade-weighted basis. So the additional demand in the rest of the world must be domestic demand. For export-oriented economies such as Japan, Germany, and China, currency appreciation is likely to discourage, not encourage, productive investment. So the additional demand must come from domestic consumers or governments. Many governments have been concerned about excessive government deficits in recent years, and are engaged in "fiscal consolidation", i.e. reducing their deficits. This is especially true for Japan and Germany, two countries with large current account surpluses. What will induce aging consumers to spend more? Easier monetary policy, which in Euroland is outside the control of national governments, would in a world of high capital mobility tend to weaken currencies, not strengthen them. The prescription must include more stimulative fiscal policy combined with tighter monetary policy, and currency appreciation. Europe's mid-term policy focus, reflected in the Lisbon agenda of 2000, has on the contrary been on fiscal consolidation plus measures to improve productivity and output, resulting (as explicitly desired) in greater international competitiveness, not greater domestic demand.

China, which controls its exchange rate, could decide to revalue its currency, as many have urged. But even if China were to eliminate its current account surplus entirely, only a fraction would accrue to the United States as US imports from China switched to other low-income countries. That would still leave a current account deficit in excess of the targeted level. Moreover, what would an appreciation large enough to eliminate China's surplus do to China's economy, where processing exports has led China's growth? Exports have not been China's only source of growth in demand. Public and private construction has boomed, and Chinese consumption has grown in excess of eight percent a year 1989 to 2005, the highest growth in the world. But exports have been the driving sector.

The argument developed here suggests that the US deficit can continue for some years, and even rise above its current level. Of course, a significant depreciation of the dollar might nevertheless occur. Financial markets are driven by psychological as well as by economic factors. If enough people decide to sell dollars, the dollar will depreciate. If foreigners collectively decide to invest less in the United States than the current account deficit (plus American capital outflow), the dollar will depreciate. Adverse developments in the subprime mortgage market, on which many collateralized debt obligations (CDOs) were based, has increased greatly the risks associated with one newly important class of interest-bearing assets. It remains to be seen whether these developments will dampen foreign enthusiasm for investing in the US financial market as a whole.

A large drop in the dollar would have grave economic consequences, reducing exports and depressing investment in other rich countries. For this rea-

son, their monetary authorities are likely at some point to intervene in foreign exchange markets to limit the resulting economic downturn, in effect substituting official for private capital investment in the United States, and thereby putting effective limits to any depreciation of the dollar. But, of course, the current account deficit cannot rise indefinitely relative to GDP, nor can foreign-owned assets rise indefinitely as a share of total US assets. Sooner or later the process of financial globalization will slow, and eventually stop, probably well before the hypothetical state of "no home bias" is reached. Moreover, aging societies will eventually reach the point at which they cease acquiring new foreign assets and begin to liquidate their outstanding claims. Then the US deficit must decline, perhaps significantly. The trade deficit will need to decline even earlier, as foreigners begin to consume the earnings on their US investments. But that point may not be reached for a decade or longer, especially if people work longer and continue to save past conventional retirement age, as many do.

As Asians and Europeans begin to consume their overseas earnings, and their assets, total expenditure in their countries will rise relative to output, and their surpluses will decline and eventually disappear. This process alone will help reduce the US deficit, without any depreciation of the dollar against their currencies. To what extent the dollar needs to depreciate will depend on the emerging consumption patterns in the ageing societies, in particular on the mix between tradable and non-tradable goods and services, keeping in mind that these categories are themselves constantly changing, as more non-tradables join the category of tradables with increased possibilities for offshoring. Even non-tradables can enter the international accounts insofar as they are provided by temporary migrant workers who remit earnings to their home countries. Elder care is likely to involve both processes – diagnoses of measured symptoms in remote locations, and in situ help by migrant workers, as the children and grandchildren and great-grandchildren of the aged choose to stay in the labor force. Another possibility involves retirement of Asians and Europeans in the United States, just as some Canadians do now. Their assets would then cease to be foreign claims on the United States. The adjustment process involves the classic transfer problem in a more complex setting. How much, if at all, the dollar needs eventually to depreciate will depend on all of these factors, and certainly cannot be foretold years in advance of the required adjustment.

The United States has a vibrant, innovative economy. Its demographics differ markedly from those of other rich countries in that birth rates have not fallen nearly so far and immigration, concentrated in young adults, can be expected to continue on a significant scale. In these respects the United States, although rich and politically mature, can be said to be a young and even a developing country. It has an especially innovative financial sector that continually produces new products to cater to diverse portfolio tastes. The United States has a comparative advantage, in a globalized market, in producing marketable securities; and in exchanging low-risk debt for higher risk equity. It is not surprising that savers around the world want to put a growing portion of their savings into the US economy. The US current account deficit and the corresponding surpluses elsewhere, described as imbalances, do not necessarily signal economic disequilibria in a globalized world economy, and may well remain large for years to come.

Reference

Cline, W. (2005), *The United States as a Debtor Nation,* Washington DC: Institute for International Economics.

The US current account deficits and the dollar standard's sustainability: A monetary approach

Ronald I. McKinnon*

Introduction and overview: current account deficits forever?

Economists have failed rather dismally to construct convincing theoretical models of why the seemingly endless US current account deficits are sustained by a seemingly endless willingness of the rest of the world to acquire dollar assets. Reflecting this conceptual inadequacy, many see the continuation of such global "imbalances" to be unsustainable because foreigners – both governments and their private sectors – will eventually cease buying dollar assets, which will trigger a collapse in the dollar's value in the foreign exchanges. Beginning with the infamous twin deficits of the Reagan presidency in the 1980s, such failed predictions have been commonplace for more than 20 years.

Throughout Asia, the Americas, and much of Africa, the dollar remains the dominant money as a vehicle for clearing international payments between banks, as a unit of account for international trade in goods and services, and as a reserve cum intervention currency for governments. True, the euro has become by far the most important regional currency spanning the smaller economies immediately east of the euro zone. There is a "euro standard" in Eastern Europe. But the euro is not yet important for transacting among non-European countries, whereas the dollar dominates transactions *not* involving the United States, e.g., when China trades with Malaysia or Brazil or Angola.

This resilience of the world dollar standard makes the dollar definitive international money. Alone among nations, the United States has a virtually unlimited line of credit with the rest of the world to sustain its current account deficits because, *in extremis,* it could create the necessary international means of payment to repay debts to foreigners. Consequently the United States can borrow heavily in its own currency because creditors of the United States voluntarily build up dollar claims. This confounds the prognosticators of the dollar's imminent collapse because they have seen less highly indebted countries in Asia and Latin America ultimately being forced to repay in crisis circumstances associated with devaluations and default.

What makes the position of the US dollar, and the borrowing capacity of the American economy, so different? Will the consequent large build-up of liquid dollar claims by foreigners eventually undermine the dollar standard, or can the world and the United States live with this dollar "overhang" indefinitely?

The monetary anchor approach

Rather than appealing to America's military or commercial or political hegemony – past or present – to explain the dollar's continued international predominance and increasing US indebtedness, I shall take a more purely monetary approach. It has two main facets.

First is the need for one common international money, really a natural monopoly, to facilitate complex multilateral exchanges in goods and capital flows. It is directly analogous to having a single money – as a medium of exchange, unit of account, and store of value – to facilitate purely domestic transacting within a purely national domain. If the dollar were not playing this invaluable role in today's international economy, the markets would have chosen some other national money to be the world's key currency. In McKinnon (2005a), I touch lightly on this literature emphasizing the importance of inertia in preserving the dollar's domain in international exchange. Once a national money becomes

* Stanford University.

predominant internationally, economies of scale and network effects make it hard to displace.

Second, going beyond the purely domestic monetary analogy, the dollar acts as a *monetary anchor* – sometimes called nominal anchor – for the macroeconomic policies and price levels of other countries. This anchoring role takes a strong form when countries opt to fix their exchange rates (typically within a narrow band) indefinitely against the dollar – as with many Western European economies (including Japan) in the 1950s and 1960s under the old Bretton Woods regime, or China from 1995 to 2005, or many small island economies which have dollar-based currency boards such as Hong Kong's. If the fixed nominal exchange rate is maintained long enough, and impediments to trade are absent, inflation rates in the prices of tradable goods in such countries converge to those prevailing in the United States.

More widespread at the present time, however, is a somewhat "weaker" form of the dollar's international role as a monetary anchor. Because prices of tradable goods and services, virtually all primary products and most manufactures (except for exports from industrial Europe) are set in dollars in international markets, central banks in emerging markets and less developed counties unofficially peg "softly" to the dollar – sometimes called Bretton Woods II – in order to better stabilize their own internal price levels. Although most developing countries no longer have official dollar parities, they intervene continually to smooth high frequency, i.e., day-to-day or week-to-week, fluctuations in their dollar exchange rates – and stand ready (with high dollar reserves) to prevent major fluctuations (Reinhart 2000; McKinnon 2005b). This has the added advantage of providing an informal hedge for importers and exporters against exchange rate risk when domestic financial markets are insufficiently developed, or ringed by capital controls, to allow an active market in forward exchange. Occasionally, even more developed economies, which nominally are floaters, will intervene. In 2003 into early 2004, the Bank of Japan intervened massively to buy dollars in order to prevent a sharp appreciation of the yen.

Instead of borrowing in its own currency, a debtor country on the dollar's (or euro's) periphery can only borrow on reasonable terms in foreign exchange – largely dollars (or euros) and so bears the exchange risk. Thus it must worry about fluctuations in the value of its currency against the dollar. A devaluation will increase the servicing cost of its dollar-denominated debts forcing internal bankruptcies in the short run, and inflation in the longer run – as per Argentina's deep devaluation in 2002, or those of the five East Asian crisis economies ten years ago. Once a peripheral debtor country builds up significant foreign currency debts, it becomes vulnerable to an attack with capital flight that leaves it with insufficient dollars with which to repay its (dollar) debts. The resulting debt defaults, loss of access to foreign capital, and deep devaluation can then force a painful cutback in domestic expenditures and a fall of the government. The markets know this, so they limit how much any peripheral country can borrow in the first place – although perhaps not stringently enough.

However, in the new millennium, after more than 20 years of US current account deficits, most US trading partners have become dollar creditors – but creditors which also bear the foreign exchange risk because they cannot lend to the United States in their own currencies. Instead, they pile up dollar claims. Those with substantial holdings of dollar assets worry that a sharp appreciation of their currencies would lead to capital losses for the domestic holders of the dollar assets – as well as a decline in the mercantile competitiveness of their exporters. If prolonged, an appreciation would impose domestic deflation – as per the earlier experience of Japan in the 1980s into the mid-1990s.

Consequently, in order to avoid currency appreciation and deflation, surplus-saving countries in Asia, the Persian Gulf, and elsewhere, are now trapped into acquiring dollar assets from the saving-deficient United States. If purchases of dollar assets by their private sectors are insufficient to cover their current account surpluses, their central banks step in as residual buyers to prevent their currencies from appreciating. The upshot is the huge build-up of official exchange reserves, typically in the form of US Treasury bonds, by central banks in Asia, oil-producing countries, and emerging markets more generally. These *stocks* of official exchange reserves now far exceed any estimate of what is prudent or optimal. Instead, these "reserves" are largely the unwanted residue from their efforts at exchange rate stabilization in the face of ongoing *flow* imbalances – their current account surpluses.

The US current account (trade) deficit is the mechanism by which real resources are transferred from

the rest of the world: the counterpart of foreign net purchases of US financial and other assets. From its central position in the world's financial system, the United States alone can borrow in its own currency, i.e., issue dollar denominated debt. Because the United States is never going to run out of dollars, it can always avoid outright defaults on its government's debts – if only because the US Federal Reserve System can always step in to buy back the US Treasury bonds held by foreigners.

Although foreign creditors see no default risk in holding the US Treasury bonds, they would balk at a substantial loss in the dollar's real purchasing power – as with general inflation in the United States, or substantial devaluations of the dollar against several other currencies that reduce the dollar's purchasing power elsewhere. Then, foreign central banks would no longer be so anxious to stop their currencies from appreciating against the dollar, and would withdraw from being dominant buyers of the US Treasuries.

Consequently, the key to maintaining the dollar standard in its present form – and with it America's indefinitely long line of credit from the rest of the world – lies mainly with the US Federal Reserve Board's control over monetary policy, and not directly with the US Treasury's control over fiscal policy or the American saving rate more generally. *As long as the American price level remains stable, there is no well-defined ex-ante restraint on the amount the United States can borrow internationally.* That is, as long as the dollar's purchasing power over internationally tradable goods and services is stable, foreign central banks are loath to let their currencies appreciate against the dollar for fear of losing mercantile competitiveness in the short run, and facing deflationary stagnation in the longer run.

Is the Fed up to the job? As the center, or "nth", country under the dollar standard, the US Federal Reserve normally does not intervene in the foreign exchanges and, in a dollar-based world, exchange rate changes do not strongly affect the US price level, i.e., pass- through is low. More easily than other central banks, the Fed can conduct a national monetary policy largely independent of events in the foreign exchange markets. Because of highly developed capital markets in the United States, it can focus directly on stabilizing the US price level by open-market operations targeting the federal funds rate of interest, while more or less ignoring exchange rate fluctuations. Indeed, the proper role of the center country is to provide independently a stable price level which becomes the nominal anchor for the system as a whole – one that is particularly valuable for emerging markets on the dollar's periphery.

In contrast, other central banks cannot ignore how their exchange rates are moving against the dollar, and have to adjust to what the Fed is doing. In principle, therefore, the Fed can more easily commit itself to a policy of low inflation – although it has yet to name a definite low inflation target in the mode of the European Central Bank or the Bank of England. Nevertheless, the United States is the country where Taylor's Rule was born (Taylor 1993) – where my colleague John Taylor estimated the rule econometrically as if the Fed was targeting a rate of inflation of about 2 percent in the American CPI.

Although providing a stable monetary anchor is all well and good in normal times, America's monetary hegemony could still be undermined by calamitous "non-monetary" events. One is an outbreak of protectionism in the United States that forces other countries, such as China, to appreciate their currencies, i.e., depreciate the dollar, much like the Nixon shock in August 1971. The second is a downturn in the US economy, such as the current spreading housing crisis that essentially forces the Fed to abandon its goal of price stability and flood the economy with liquidity. In either case, the large overhang of liquid dollar assets owned by foreigners makes the Fed's management of the ensuing crisis more difficult – and threatens America with the loss of international monetary hegemony. Let us discuss each in turn.

Protectionism in the United States

Having the United States becoming more protectionist is a major threat to the dollar's pre-dominance as international money. Other than ever-present political populism in a globalizing world requiring continual industrial restructuring, is there a legitimate economic cause for concern that foreign competitive pressure on American industry is too great?

The large US current account deficit funded by foreigners buying dollar assets is helpful in averting a credit crunch in the saving-deficient American economy. However, the transfer of Asian savings to the

US in real terms shrinks the size of the US manufacturing sector, a shrinkage that is at the root of the protectionist upwelling in the American mid west and east coast – even though full employment in the country overall has been well maintained by the offsetting expansion of service industries.

Why is US manufacturing particularly affected? The principal Asian creditors – Japan, China, Korea, Taiwan – and the principal European creditor Germany, only export manufactures and are themselves major importers of services and raw materials including oil. Thus, their trade (saving) surpluses with the rest of the world, and bilaterally with the United States, are embodied in a surplus of manufactured goods exported to the United States – forcing a contraction in US manufacturing employment (McKinnon 2005c). Notice that because of more rapid technical change in manufacturing compared to other sectors of the economy, employment in manufacturing has been falling in all of the mature industrial countries. But it is falling relatively faster in the United States because the American saving deficiency necessitates net imports of manufactures from foreign industrial, or industrializing, countries.

So, American protectionism for manufacturing is not purely gratuitous politically. But unfortunately, the protectionists see it as an exchange rate problem rather than an international saving imbalance. Although this perception is false, it is no less of a threat to de-stabilizing the purchasing power of the dollar and igniting inflation in the Unites States.

The large trade and saving surpluses of the oil producing countries, such as those in the Persian Gulf, do not generate a similar protectionist response in the United States. Although Americans do not like the high price of oil, they need it. Moreover, oil is homogenous and relatively anonymous in its impact on American industries – and there is no "obvious" exchange rate or tariff measures that the United States could take to change the behavior of, say, Saudi Arabia.

Conflicted virtue

By threatening trade sanctions against imports from trade-surplus countries unless they appreciate their currencies, many politicians and economists in the United States hope to force widespread devaluations of the dollar against the yen, renminbi, and the currencies of other saving-surplus countries – much like the Nixon Shock of August 1971.

These threatened American trade sanctions thrust the surplus Asian countries onto the horns of a dilemma, which I call *conflicted virtue* (McKinnon 2005b). Trade-surplus countries are "virtuous" in the sense of being high savers, but this naturally generates a collective current account surplus in trade with the saving-deficient United States. American politicians and many economists then misinterpret these foreign trade surpluses, often accompanied by large build-ups of official dollar exchange reserves, as *per se* evidence of unfair currency manipulation to keep Asian currencies undervalued. So American politicians apply pressure to have the Asian currencies appreciated.

However, any individual Asian government knows that a substantial appreciation of its currency against the dollar would create domestic macroeconomic turmoil: exports, domestic investment, and spending more generally, would fall with slower economic growth. A sustained appreciation of its nominal exchange rate would eventually lead to deflation – as in Japan in the 1980s and 1990s after the yen had risen all the way from 360 to the dollar in August 1971 to touch 80 in April 1995. But if it fails to appreciate, the United States would apply trade sanctions on its exports. Thus, the foreign creditor country becomes "conflicted" – whence conflicted virtue.

In the worst case scenario, American political pressure takes a more general form. Beyond any individual foreign country, suppose most American trading partners were coerced into agreeing to appreciate. Most have trade surpluses of greater or lesser degrees as the counterpart of the huge US trade deficit. William Cline (2005) is a leading advocate of a more general devaluation of the dollar against 30 or more leading US trading partners. From the monetary approach to exchange rate determination, however, *a general nominal depreciation of the dollar could only be sustained if US monetary policy became more expansionary relative to its trading partners,* i.e., inflation at home and relative deflation abroad.

In sustaining such a general dollar devaluation, how the necessary monetary adjustment would be partitioned between inflation in the United States and deflation elsewhere is quite arbitrary. It depends on

the particular historical circumstances associated with such an economically cataclysmic event. For several years after the Nixon shock of August 1971, requiring the sharp appreciation of European currencies, the Japanese yen, and the Canadian and Australian dollars, high inflation in the United States (initially suppressed by wage-price controls) and more subdued inflation elsewhere was the mode of adjustment. For ten years after the Plaza Accord of 1985, when the major industrial countries agreed to have their currencies appreciate against the dollar, there was outright deflation in Japan whose currency appreciated the most, and suppressed deflation in Europe (then called "eurosclerosis"), and relatively modest inflation in the United States.

The exchange rate and the trade balance: the Phillips Curve déjà vu?

The belief in the economics profession, and among fellow travelers, that countries with trade surpluses should appreciate their currencies to (help) reduce their surpluses is very widespread. It lends respectability to American, and even European, politicians who demand that the currencies of Asian creditor countries be appreciated. Although plausible (like the belief in the Phillips Curve trade-off between inflation and unemployment in the 1950s and 1960s), this belief in the desirability of exchange rate appreciation for trade surplus countries (or devaluation for deficit countries) is not generally valid for the highly open economies characteristic of today's era of globalization.

Starting as an undergraduate, the average "economist in the street" is taught the elasticities model of the balance of trade. It is basically a microeconomic model where export and import functions are separable from the rest of the macro economy and from each other. With this separation, an appreciation should reduce a country's trade surplus by raising the price of domestic exports as seen by foreign importers in their currencies, while the domestic-currency prices of imports increases. Thus, if these agents are at all price responsive, i.e., their price elasticities of demand are only moderately high, exports should decline and imports rise so that the net trade surplus is reduced.

Although this elasticities model is myopic because it ignores more complex macroeconomic repercussions from exchange rate changes, it is so seemingly straight forward that it remains popular for teaching students about the relationship between the exchange rate and the trade balance. When explained to journalists, politicians, or even political scientists, it remains beautifully intuitive. "Sure, if appreciating the renminbi makes Chinese goods more expensive, we will buy less of them; and if American goods sold in China become cheaper, they will buy more of ours". Whence its popularity.

What then are the macroeconomic repercussions that could invalidate the microeconomic myopia of the elasticities model? First, consider economies which are highly open to foreign trade *and* to capital flows (capital account transactions are not in the elasticities model). The location of investment by multinational firms, and even some more purely national ones, becomes quite sensitive to the real exchange rate. If the renminbi is sharply appreciated against the dollar, China suddenly looks like a much more expensive place in which to invest, while the United States becomes more attractive. As investment slumps in China, so does aggregate demand, including the demand for imports. The converse is true in the United States where increased investment stimulates aggregate demand. Although China's export growth slows because of the higher renminbi, so does its import growth slow – leaving the net effect on China's trade surplus indeterminate (McKinnon and Ohno 1997).

But renminbi appreciation has a further macroeconomic repercussion in the form of a wealth effect. Under the dollar standard, the Chinese hold large stocks of dollar assets from their past trade surpluses because they don't (can't) lend to the United States in renminbi. When the renminbi appreciates, Chinese owners of dollar assets suddenly feel poorer because their dollar assets are worth less in renminbi for spending in China. This negative wealth effect further reduces spending in China, including spending on imports, making it less likely that China's trade surplus will be reduced as exports slow (Qiao 2007).

The earlier experience of Japan, under great American pressure to appreciate the yen, is instructive. The yen rose from 360 yen/dollar in August 1971 to touch 80 yen/dollar in April 1995 – an incredibly large nominal appreciation. Japan's trade surplus did not decline but rose erratically from close to zero in the early 1970s to average about 3 percent of Japanese GDP in the 1980s and 1990s. With a slump in invest-

ment, the high yen caused deflation and a long period of economic stagnation from 1992 to 2002 (Japan's lost decade), but did not succeed in its primary objective of reducing Japan's trade surplus. The stagnating economy reduced the demand for imports even as export growth slowed as a result of the high yen. From the early 1970s through 2007, Japan's price level fell relative to America's thus causing its "real" exchange rate to depreciate back to where it was before the Nixon shock of forced dollar depreciation in 1971!

So, sharp currency appreciations can be economically disastrous while failing to reduce a trade surplus. However, the mainstream of the economics profession continues to believe that the exchange rate should be assigned to adjusting trade imbalances, i.e., the dollar should be devalued against Asian currencies in particular – a belief that could yet undermine the dollar standard.

The Phillips Curve fallacy, that moving to a higher rate of inflation will permanently reduce unemployment, provides an uncomfortable parallel to the fallacy that the "real" exchange rate can be manipulated to control the trade balance. Both are rooted in microeconomic myopia that fails to take longer-term macroeconomic repercussions into account.

In the case of the Phillips Curve for a purely national economy, it seems obvious that increasing aggregate demand, although somewhat inflationary, will increase employment. During the Bretton Woods period, this belief lay behind America's refusal to disinflate from the mild inflation of the late 1960s, which was making US industry less competitive under fixed exchange rates. Instead of disinflating the American economy, because of fear of increasing domestic unemployment, President Nixon opted to continue with an easy money policy and restore American competitiveness by forcing, in August 1971, other industrial countries to appreciate their currencies against the dollar. The result throughout the 1970s into the 1980s was high and variable inflation particularly in the United States, economic stagnation with higher unemployment, and no systematic change in the increasingly erratic US trade balance.

Thanks to Milton Friedman (1968), the world is no longer threatened by the Phillips Curve fallacy bringing on another bout of global inflation. But the exchange rate fallacy, that devaluing the dollar will reduce the US trade surplus, is alive and well and could yet undermine the anchoring role of the dollar standard with highly inflationary consequences for the United States.

The transfer problem in reducing the US current account deficit

Rather than an exchange rate problem, correcting today's global trade imbalances is a form of the transfer problem: spending must be transferred from trade-deficit countries (mainly the United States) to trade-surplus countries in the rest of the World (ROW). Reducing the US current account deficit requires that net saving be increased in the United States and reduced abroad – particularly in Asia.

Consider the accounting identity

$$Y - A = CA = - CA^* = A^* - Y^*$$

where A is US domestic absorption (total spending), Y is output (GDP), CA is the current account surplus (negative in the American case), and the starred variables are the counterparts in the rest of the world (ROW).

Given full employment output at home and abroad, then clearly CA can only improve if $\Delta A < 0, \Delta A^* > 0$ and $\Delta A = -\Delta A^*$. To correct a trade imbalance for a large country like the United States., *absorption adjustment must be symmetric with the ROW.*

But contrary to most of the literature on the subject, exchange rates need not, and probably best not, be changed as part of the transfer process for improving the US trade balance (McKinnon 2007c.). To show why this is so, I draw on the older literature on the transfer problem associated with paying war reparations – particularly that by Ronald Jones (1975). Adjustment in absorption, i.e., aggregate spending, is two-sided because the loser (the transferor) must raise taxes to pay an indemnity to the winner (the transferee), which then spends it. But there is no presumption that the terms of trade must turn against the transferor. That is, the losing country, which is forced into running a trade surplus (or smaller deficit), need not depreciate its real exchange rate to effect the transfer.

The definition of the "real" exchange rate is important here. Unlike Jones' approach, in a more "standard" model each country produces just one good

which is, however, differentiated from the one-good output of its trading partner. Then in each country some of its own one-good output is consumed at home and the rest exported. Surprisingly, large-scale macroeconomic models – such as the Sigma model used by the U.S. Federal Reserve – typically still use this analytical simplification whereby all the economy's diverse outputs are combined into a single aggregate. In effect, each country's production (and consumption) of non-tradable goods and services is simply bundled (aggregated) with its production of exportables. With such aggregation, the terms of trade, the price of the home country's one good against that of the foreign country, say P_1/P_2, is the only relative price that can change in response to a transfer of spending. It is usually defined as the "real" exchange rate.

In this oversimplified world of one-good economies, how do the terms of trade change in our hypothetical scenario where absorption falls in the United States but rises abroad? The increase in demand in ROW will be primarily for its own (export) good rather than imports, which are a relatively small share of its GDP. Similarly, the fall in absorption in the United States will be concentrated on its own (export) good rather than imports, which are also a small share of US GDP. Thus, relatively more of the US good is thrown on to world markets than ROW is willing to absorb at unchanged prices, so P_1/P_2 falls. That is, the terms of trade turn against the United States as an endogenous consequence of the transfer of spending. In addition to its primary burden of having to reduce A relative to Y, the United States would face a secondary burden from the adverse change in its terms of trade in the context of these "one-good" per country model specifications. For example, Paul Krugman (1991 and 2007) is one of many influential authors who (mis)use the one good assumption to conclude that the US real exchange rate must depreciate in the context of the necessary reduction in absorption.

But there is a better theoretical approach that relies on a more diversified production in each country. Jones (1975), and many other authors studying the transfer problem, specifies that each country produces a large body of non-tradable goods and services as well as exportables and import substitutes. So, when the fall in expenditures in the United States is paired with a rise in expenditures in Asia and elsewhere, the relative price of tradables versus non-tradables must increase in the United States and fall abroad. How much is anybody's guess. However, with the necessary expenditure adjustments being spread out over some months or years, and modern technology continually eroding the distinction between tradables and non-tradables, this necessary relative price change could be surprisingly modest.

But in the Jones model there is no presumption as to which way the terms of trade need change – except that it may be a small second-order effect. That is, the fall in expenditures in the United States releases American exportables to world markets at about the same pace as the demand for them increases from the increased absorption in ROW. Therefore, in the short run with sticky nominal prices in each country's exportable sector, the safest strategy in the transition is to keep the nominal exchange rate stable so that there are no "false" changes in the real exchange rate, as defined by the terms of trade.

With no change in the dollar's nominal exchange rate so that the dollar prices of tradable goods worldwide remain unchanged on average, the dollar's anchoring role for price levels in peripheral emerging markets (as per the monetary approach) would be undisturbed even though the US trade balance improved from the transfer of spending.

Bretton Woods I and II: mercantilism unbound

Instead of the dollar's monetary anchoring role stressed in this paper, Michael Dooley, David Folkerts-Landau, and Peter Garber (2003) – henceforth DFG – present a mercantilist interpretation of why so many emerging markets have been "softly" pegging to the dollar since the early 1990s. DFG presume that emerging markets in general, but Asian countries in particular, are deliberately undervaluing their currencies to generate export surpluses – particularly to the United States. They see the trade surpluses of these emerging markets (including Japan?) to be sustainable because of compatible mutual interests. The United States needs external financial support to offset its low domestic saving and the emerging markets (including Japan apparently) want higher real growth through exports to promote development.

DFG are to be commended for coming up with a model that at least tries to come to grips with long-term global "imbalances" i.e., why the US current

account deficits have run on for such an unexpectedly long time. They are right to ridicule proponents of dollar devaluation as throwing red meat to the protectionists, and scathing of those who use faulty inter-temporal modeling of international capital flows to continually predict an imminent collapse of the dollar. However, my alternative monetary approach to explaining the willingness of Asian governments, and those in other emerging markets, to stabilize their dollar exchange rates differs from DFG's mercantilist approach in several dimensions.

In this overview, however, I focus just on the most essential difference: DFG's frequent and incorrect use of the word *undervaluation* to reflect the exchange rate policies of countries on the dollar's periphery. In effect, DFG still see the exchange rate as a control variable for the net trade balance in line with the elasticities model of the balance of trade. Whereas I see the exchange rate itself to have little or no predictive power for the net trade balance, which is dominated by saving-investment imbalances in the United States compared to its periphery, the dollar exchange rate is significant for price-level determination on the periphery.

In their original paper, DFG (2003) drew an intriguing parallel between Bretton Woods I from 1950 to 1971 – where the principal high-growth peripheral countries were those of Western Europe and Japan – and what we now call Bretton Woods II, where the high-growth peripheral countries are now in Asia with a scattering of emerging markets elsewhere. In DFG's view of the 1950s and 1960s, the Western European countries and Japan – under cover of the Bretton Woods parity arrangements – kept the dollar values of their currencies "undervalued" in order to promote more rapid export growth into the American market. The Americans tolerated this mercantilist behavior because, in the Cold War, they were anxious to promote recovery in Western Europe and Japan.

Under Bretton Woods II in the 1990s to the present, a large fringe of emerging markets – particularly in East Asia – intervene heavily to keep their dollar exchange rates "undervalued", in order, according to DFG (2003), to generate export surpluses to better promote their economic development. They are willing to treat the resulting huge build- up of official exchange reserves, largely invested in low-yield US Treasuries, as an opportunity cost of more rapid export growth. On the other hand, the United States has tolerated this mercantilist behavior of the Asian group because it needs cheap finance to cover its very low rate of saving. Because both sides benefit, DFG see the Bretton Woods II regime of high Asian trade surpluses and high US trade deficits to be sustainable. Whence the appeal of their model to explain ongoing global trade "imbalances".

Under Bretton Woods II, the more mature industrial countries, particularly the euro zone in Europe but also countries like Canada and Australia, now simply float their currencies so that they are not consciously "undervalued". In the accompanying box on "Rules of the Dollar Standard Game: Bretton Woods II", I summarize current exchange rate arrangements worldwide. Under "Emerging Markets Outside of Eastern Europe", there are two alternative Rule IIIs. To interpret dollar pegging, the first gives the monetary anchor motivation (the McKinnon Rule), and the second – Rule IIIB – gives the mercantilist undervaluation motivation (the DFG Rule). Japan, with its chronic deflation and sporadic, but sometimes quite massive, foreign exchange interventions against the dollar, is classified separately with its own four rules. The United States, as the normally passive center country, gets its own four operating rules.

Taking the monetary approach, when domestic capital markets are underdeveloped or in disarray for some other reason, then the central bank in a country on the periphery of a more stable valued central currency finds it much easier to peg to it as an external monetary anchor in its quest for domestic price-level stability. Consider some historical examples.

After World War II, the capital markets in both Western Europe and Japan were in great disarray with open and repressed inflation, multiple exchange rates, and government controls over both interest rates and bank lending. In 1948, with the advent of the Marshall Plan, individual European countries were encouraged to consolidate their finances, eliminate multiple exchange rates and balance of payments restrictions for current account transactions, curb inflation, and then each peg to the dollar at a unified exchange rate. The culmination of this process was the setting up of the European Payments Union (EPU) in 1950, backed by a US line of credit, to begin clearing international payments multilaterally by central banks at fixed dollar exchange rates –

Box 1

Rules of the Game: Bretton Woods II, 1992 to 2007

Emerging Markets outside of Eastern Europe

I. Fix exchange rates, or smooth exchange rate fluctuations, against the U.S. dollar with or without declaring official dollar parities.
II. Hold official exchange reserves mainly in US dollars.
III. Adjust monetary policy to maintain dollar exchange rate as nominal anchor for domestic price level – as per the monetary approach of McKinnon (2005).
IIIB. Alternative interpretation: keep dollar exchange rate undervalued to generate an export surplus to promote more efficient industrialization – as per the mercantilist approach of Dooley, Folkerts-Landau and Garber (2003).
IV. Free currency convertibility on current account, but use capital controls when necessary.

Euro Zone and other Industrial Countries except Japan

V. Float exchange rate freely but keep US dollars as a small precautionary reserve.
VI. Pursue an independent monetary policy to target domestic inflation directly – as per Taylor's Rule.
VII. No exchange controls on current or capital account.

Japan

VIII. Intervene to prevent sporadic upward ratchets of the yen against the dollar and deflation.
IX. No independent monetary policy in liquidity trap to stimulate domestic demand. Rely on export expansion.
X. Hold large dollar exchange reserves.
XI. No exchange controls on current or capital account.

The United States

XII. Remain passive in the foreign exchange markets without a balance of payments or exchange rate target. Accept large current account deficits to compensate for short-fall in domestic saving (or saving glut abroad).
XIII. Keep US capital markets, including custodial accounts, open for foreigners.
XIV. Pursue an independent monetary policy to target domestic inflation directly – as per Taylor's Rule – and provide a nominal anchor for emerging markets as well as Japan.
XV. Temporarily suspend Taylor's Rule if deemed necessary for countering the domestic business cycle.

not even with the one percent margins of variation in the Bretton Woods agreement itself. With some modifications, these central dollar parities for Western European currencies held for the better part of 20 years – although the one percent margins of variation around these central rates became common after 1958.

Japan's situation was similar. From 1945 through 1948, there was open and repressed inflation, there were multiple exchange rates, and all kinds of interest rate and balance-of-payments controls for allocating foreign exchange. Then in 1949, the Detroit banker Joseph Dodge was sent to Japan with an American line of credit and instructions to encourage the Japanese to consolidate fiscally and curb inflation, unify the exchange rate, and begin phasing out exchange controls on current account transactions. Because of the financial chaos before 1949, the Japanese had no idea (nor did the Americans) what an equilibrium number for the unified exchange rate should be that would end the inflation but keep the economy viable for exporting. So they just guessed. They picked 360 yen to the dollar to be the anchor, and then geared the Bank of Japan's monetary policy to maintaining this rate so that the economy would grow into it.

But they did not guess quite right. Inflation continued for a year or two before being phased out – and this left the yen somewhat overvalued in the sense that, in the early 1950s, Japanese companies were having difficulty exporting. But rather than give up their hard-won nominal anchor of 360 yen per dollar, they chose to disinflate further rather than directly help tradable goods producers by devaluing. It worked. By the mid-1950s, Japan settled on a high export-led growth path (much like China's today) with the domestic rate of WPI inflation in tradable goods converging to being virtually the same as that in the United States, the anchor country, until the Nixon shock of 1971 (McKinnon and Ohno 1997, and McKinnon 2007b).

Although probably more than enough historical background for most readers, the main point is that, in both Japan and Western Europe in the 1950s and 1960s, dollar exchange rates were set to anchor national price levels and stabilize domestic financial markets – as our monetary approach would have it. Unlike what DFG (2003) suggest, these rates were

not cunningly "undervalued" to promote export surpluses and secure a mercantile advantage over the United States. Indeed, the United States itself had an overall current account surplus during "Bretton Woods I".

Since the early 1990s, under the looser dollar pegging called Bretton Woods II, the search for a monetary anchor also describes the behavior of Asian countries and emerging markets elsewhere better than DFG's alleged mercantilist plot to deliberately "undervalue" their currencies to generate export surpluses. There are too many of these countries to do a historical analysis of each one.

However, consider just China. Before 1990, China's currency was inconvertible with exchange controls and mandatory state trading companies for importing and exporting that (with the exception of special economic zones) insulated the domestic structure of relative prices from the international one: the so-called airlock system. In this early phase of China's liberalization of its domestic markets, it would not have been possible to use the nominal exchange rate as a monetary anchor. Indeed, wherever the official exchange rate was set (beginning at one yuan per dollar in 1978) was quite arbitrary and made little difference to actual economic decision making within the country. And China did experience something of a roller coaster ride in domestic rates of inflation and real growth rates (McKinnon 2007a) into the early 1990s.

From 1993 to 1995, China suffered a major bout of inflation, peaking out at over 20 percent per year. In 1994, in a major move toward current account convertibility to satisfy the International Monetary Fund, China decided to unify its multiple "swap" exchange rates with the official exchange rate – including a net depreciation in the unified rate of about the same order of magnitude as the internal rate of inflation. Of course, nobody knew precisely what the new unified rate should be in "equilibrium", but by 1995 the rate was pegged at 8.28 yuan per dollar and held there for ten years. The economy grew into this new monetary anchor and inflation converged down to the American level. Indeed, in 1997/98, there was net deflationary pressure in China from the Asian crisis when the surrounding smaller countries (and export competitors) – Korea, Indonesia, Malaysia, Philippines and Thailand – were forced into depreciating. Fortunately, China ignored the foreign advice to depreciate with them (which would have made the regional calamity much worse), held on to its nominal anchor of 8.28 yuan/dollar, and engaged in a large internal fiscal expansion to overcome the deflationary pressure.

So, the China story in Bretton Woods II is similar to that of Japan's and Western Europe's in Bretton Woods I. Before securely pegging to the dollar, all of these countries had inflation, financial disorganization, and inconvertible currencies. The most efficient way out was to peg to the more stable central money, and then move toward greater currency convertibility so that the dollar peg became a more effective monetary anchor. What is clear, however, is that the nominal exchange rate cum future monetary policy in each case was chosen in a crisis situation to secure domestic financial stability. The dollar exchange rate was not deliberately, or even accidentally, undervalued so as to secure a mercantile advantage for exporting into the American market.

Using our monetary approach, the Bretton Woods II model in which peripheral countries continue to peg – albeit loosely – to the dollar as an anchor, is potentially more robust than DFG's mercantilist model. The monetary model could survive a major re-balancing of trade flows associated with a rise in net saving in the United States accompanied by an equivalent fall in Asia – all with nominal exchange rates remaining unchanged as under our previous discussion of the transfer problem.

The US housing crisis, the trade balance, and the US Treasury

The necessary decline in overall spending in the United States must fall mainly on the household sector. The huge net spending deficit of American households, including residential construction, of the order of 4 percent of GDP in 2006 and earlier was without historical parallel. However, with the subprime crisis in home mortgages putting new restraint on mortgage lending, coupled with a fall in home prices, the American household spending deficit could reverse fairly quickly and become a normal surplus.

Should we worry about a deficiency in global aggregate demand when American households reduce their spending? In the longer run, the overdue righting of the financial imbalance in American house-

holds is both opportune and necessary to reduce the huge American current account deficit. But, in the near term, when American households are no longer "consumers of last resort", how can this be accomplished without falling into a pit of deficient aggregate demand at the global level?

Instead of nattering about the dollar's exchange rate, which is the wrong variable to adjust, the US Secretary of the Treasury should now approach his counterpart finance ministers in East Asian countries and possibly Germany to expand aggregate demand jointly. In China, for example, household consumption has been lagging behind the very rapid growth in GDP; and China's recent success – not fully anticipated – in collecting taxes could be generating an as yet unrecognized fiscal surplus. Similarly, Japan has actually been running public sector surpluses over the past four years. So these governments, and Germany's, can afford to be fiscally expansive over the next two years or so as part of a world-wide countercyclical policy. Apart from international altruism, each of these countries has an individual incentive to expand fiscally because their exports will decline as the American consumer is forced to retrench.

If foreign governments jointly become more expansionary, the United States can better avoid another unwise round of unduly easy monetary policy – like that following the collapse of the high-tech bubble in 2001. And further American fiscal expansion (government dissaving) is not desirable if the current account deficit is to be reduced. (This does not rule out a balanced-budget expansion such as a substantial increase in the federal gasoline tax to support a much needed rebuilding of roads and bridges.)

But how and with which incentives can US Treasury Secretary Henry Paulson orchestrate a collective fiscal expansion in Asia and Europe? In April 1995, his illustrious predecessor, Robert Rubin, announced a strong dollar policy and the end of two and a half unhappy decades of Japan-bashing to get the yen up and the dollar down, which severely damaged the Japanese economy. Circumstances are not quite the same in 2007/08. But today's China-bashing to get the renminbi up has been going on for more than four years, with legislation in Congress threatening high tariffs on Chinese goods unless the renminbi is sharply appreciated. Somewhat surprisingly, Japan-bashing also returned earlier in 2007 when the incoming Democratic committee chairmen – Levin, Rangel, Frank, and Dingel – wrote to Secretary Paulson to criticize the weak yen and unduly low interest rates in Japan (McKinnon 2007b).

At this critical juncture, with the fall in American consumer spending, the way forward is clear. Secretary Paulson should call a summit of Asian and European finance ministers to work out a joint program of fiscal expansion outside the United States. In return, he would reinstate Rubin's strong dollar policy by ending the bashing of China and Japan to appreciate their currencies. Ideally, he could even promise to reform the notoriously arbitrary US anti-dumping laws and other protectionist legislation. And the Fed would forgo an unduly easy money policy that would otherwise weaken the dollar.

At the beginning of his term as Secretary of the Treasury, Henry Paulson announced his intention of getting the United States to engage China "constructively". He judged that a smooth economic and political relationship between the two economic giants was key to their mutual prosperity in the new millennium. He was right.

But suppose, instead of this constructive engagement, the doctrinal battle on the exchange rate is lost. At the behest of American protectionists and many economists, suppose the US government moves toward a policy of forcing continual dollar devaluation on its trading partners until there is a substantial reduction in the US trade deficit. But because the supposed link between the relative price effects of exchange rate changes and the trade deficit is not there, the US trade deficit need not fall. In denial, the US government keeps pushing for further devaluation – as it did with continued forced appreciations of the yen in the 1970s through mid-1995.

Once foreigners see this happening on a world-wide scale, they will stop buying dollar assets – leaving the dollar in potential free fall and losing their monetary anchor. But the major damage would be to the United States itself. The cessation of foreign purchases of dollar assets and capital flight from the United States will shock the saving-deficient American economy with a sharp credit crunch and high interest rates. Domestic spending in general, and that for investment in particular, would fall sharply so as to compress imports and reduce the trade deficit. But such a reduction in the trade deficit would come

primarily from the catastrophic fall in domestic absorption and not from the relative price effects of the dollar devaluation, unlike the way the elasticities model would have it.

Thus, in depreciating the dollar and ending the dollar standard, be careful what you wish for!

Summary and conclusion

The sustainability of the huge US current account deficit depends on the continuance of the world dollar standard. If the United States as center country maintains a stable price level, countries with trade surpluses are loathe to let their currencies appreciate against the dollar for fear of losing mercantile competitiveness in the short run while risking deflation in the long run. If private capital inflows are insufficient to fund the US current account, then foreign central banks step in to buy dollar assets to prevent their currencies from appreciating. Thus, the deficit could continue indefinitely with no well defined upper bound on America's net international indebtedness.

However, this uneasy equilibrium could be upset if the Federal Reserve loses monetary control by some "accidental" domestic event, say, pumping too much liquidity into the economy to avoid a cyclical downturn – as might be the case with the current subprime mortgage crisis. Alternatively, if the US protectionists succeed with bashing China or Japan to force the dollar down, then foreign holders of liquid dollar assets would again become nervous. There could be a tipping point where investors in Asia or the Persian Gulf so fear the loss of the dollar's international purchasing power that they jettison their dollar holdings – despite the short-run pain of letting their own currencies appreciate. Such a deep and general dollar devaluation would then cause massive inflation in the United States itself.

More positively, as the old literature on the transfer problem would suggest, the United States can reduce its current account deficit without devaluing the dollar. If spending falls in the United States (the silver lining in the housing crisis?) matched by an increase in spending in trade-surplus countries, then the American trade deficit diminishes without a dollar devaluation turning the terms of trade against the United States.

References

Cline, W. (2005), *The United States as a Debtor Nation,* Washington DC: Institute for International Economics.

Dooley, M., D. Folkerts-Landau and P. Garber (DFG 2003), *An Essay on the Revived Bretton Woods System,* Frankfurt: Deutsche Bank, Global Markets Research.

Friedman, M. (1968), "The Role of Monetary Policy", *American Economic Review* 58, 157–203.

Jones, R. W. (1975), "Presumption and the Transfer Problem", *Journal of International Economics* 5, 263–274.

Krugman, P. (1991), *Has the Adjustment Worked?,* Policy Analysis in International Economics 34, Washington DC: Institute for International Economics.

Krugman, P. (2007), "Will There Be a Dollar Crisis?" *Economic Policy* 51, 437–467.

McKinnon, R. I. (2005a), *The World Dollar Standard and Globalization, New Rules for the Game?,* Stanford University, September.

McKinnon, R. I. (2005b), *Exchange Rates under the East Asian Dollar Standard: Living with Conflicted Virtue,* Cambridge: MIT Press.

McKinnon, R. I. (2005c), "Trapped by the International Dollar Standard", *Journal of Policy Modeling* 27, 477–486.

McKinnon, R. I. (2007a), "Why China Should Keep Its Dollar Peg", *International Finance* 10, 43–70.

McKinnon, R. I. (2007b), "Japan's Deflationary Hangover: Wage Stagnation and the Syndrome of the Ever Weaker Yen", *Singapore Economic Review,* forthcoming.

McKinnon, R. I. (2007c), "The Transfer Problem in Reducing the U.S. Current Account Deficit", *Journal of Policy Modeling* 29, 669–675.

McKinnon, R. I. and K. Ohno, (1997), *Dollar and Yen: Resolving Economic Conflict between the United States and Japan,* Cambridge: MIT Press.

Qiao, H. (2007), "Exchange Rates and Trade Balances under the Dollar Standard", *Journal of Policy Modeling* 29, 765–782.

Reinhart, C. (2000), "The Mirage of Floating Exchange Rates", *American Economic Review* 90, 65–70.

Taylor, J. (1993), "Discretion versus Policy Rules in Practice", *Carnegie-Rochester Conference Series on Public Policy* 39, 195–214.

Possible Depreciation of the US Dollar for Unsustainable Current Account Deficit in the United States

Eiji Ogawa* and
Takeshi Kudo**

The United States has been faced with an increasing current account deficit since the latter half of the 1990s. Its current account deficit stood recently at over 6 percent of GDP. We remember that the current account deficit was over 3 percent of GDP in the mid-1980s when the US dollar was rapidly depreciated after the Plaza Accord in September 1985. The current account deficit of recent years has been regarded as being at a dangerous level when compared with its size in the mid-1980s.

Although the US dollar began to weaken several months before the Plaza Accord, its depreciation gained momentum after this event. The real effective exchange rate of the US dollar depreciated by nearly 40 percent from its peak in early 1985 to early 1988 as shown in Figure 1. Following the depreciation, the current account deficit declined from 3.4 percent of GDP in the last quarter of 1986 to 1.4 percent in the second quarter of 1990.

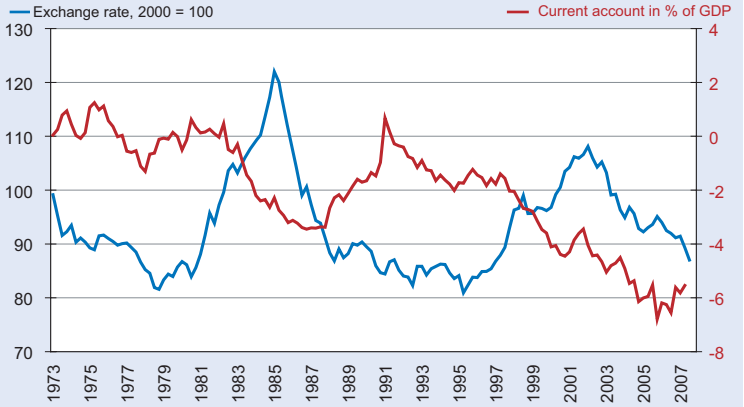
The current account can be decomposed into the trade balance, net income receipts from abroad and unilateral current transfers, as shown in Figure 2. The trade balance has almost continuously deteriorated. Income receipts have been decreasing along a gentle trend as the international investment position deteriorated.[1] Unilateral current transfers are stable except for the first quarter of 1991 when the United States received the military transfers on the Gulf war from the allies.

* Hitotsubashi University, Tokyo.
** Nagasaki University, Nagasaki.

[1] The Bureau of Economic Analysis of the US Department of Commerce reported that the United States has shifted from a creditor to a debtor position in 1986 if the direct investment position is valued at current cost, or in 1989 if it is valued at market value.

Figure 1

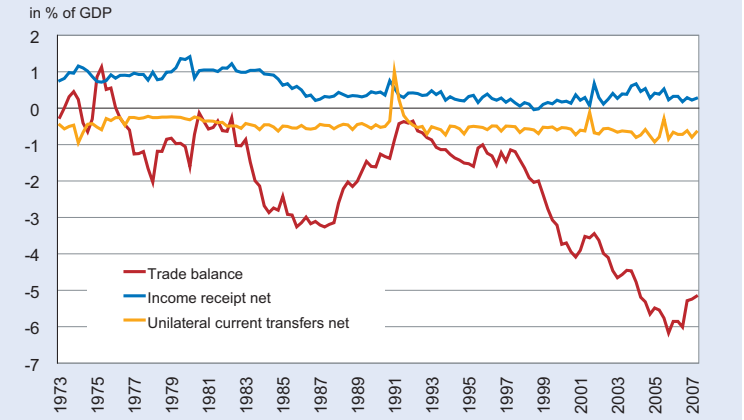
US Current Account and Real Effective Exchang Rate of US Dollar



Sources: Federal Reserve Board of Governors; Bureau of Economic Analysis.

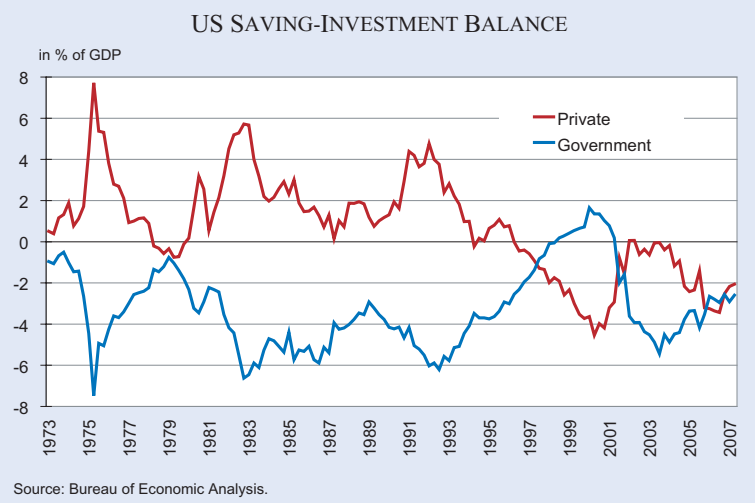
Figure 2

Decomposition of US Current Account



Source: Bureau of Economic Analysis.

Figure 3



Source: Bureau of Economic Analysis.

Figure 3 shows the saving-investment balances for each of the private and government sectors. The private sector had excess savings during almost the entire period until 1995, while the government had excess investments. Although the government sector had excess savings around 2000, both of the private and government sectors have had excess investments since 2003.

Some researchers question whether the US current account deficit is sustainable at the current exchange rate of the US dollar because the current account deficit is increasing and has exceeded 6 percent of GDP.[2] We might need another "Plaza Accord". However, we have already observed the recent appreciations of the euro, the Japanese yen, and some other currencies that are floating against the US dollar while other currencies have been officially or *de facto* fixed to the US dollar and have been depreciating against the above currencies at the same time.

This paper will firstly demonstrate the empirical results from Kudo and Ogawa (2003) and Ogawa and Kudo (2004) regarding the unsustainable US current account deficit (see the next section). Furthermore, we will present some results from a simulation analysis (Ogawa and Kudo 2007) to show how much depreciation of the US dollar is needed to reduce the current account deficit. Estimated VAR models are used to conduct the simulation analysis about the impact of hypothetical exchange rate movements on the current account deficit. In conclusion, we will point out that the US dollar depreciation will have asymmetric effects on the other currencies, given the fact that some currencies are formally or *de facto* fixed to the US dollar.[3]

Unsustainable current account deficit in the United States

Many researchers investigated sustainability of the current account deficit in the United States. Among them, Kudo and Ogawa (2003) and Ogawa and Kudo (2004), using the methodology of Bohn (1995) and Ahmed and Rogers (1995) in order to derive the necessary and sufficient conditions for a sustainable current account deficit. In this context the sustainability of the current account deficit was empirically analyzed from a perspective based on the domestic investment-savings relationship or international capital flows as well as international trade flows according to Mann (2002). Following Mann (2002), we investigated whether the current account is sustainable in the sense of the external debt solvency. Results of our empirical analysis are based on the sample period from the first quarter of 1960 to the fourth quarter of 2002 (Ogawa and Kudo 2004).

Perspective on international trade flows

In our empirical analysis based on international trade flows, we used current account data and classified this data into its main components such as exports, imports, and income accounts (that is represented by repayments of external debt) in terms of trade flows to investigate the sustainability of the US current account deficit. Repeatedly we analyzed not only the current account data but also some combinations of the components.

Stationarity of the current account deficit is the condition for sustainability of the current account – given that the sustainability of the current account

[2] Kudo and Ogawa (2003) conclude that the US current account deficits are unsustainable from the three views suggested by Mann (2002), while Matsubayashi (2005) does not reject the hypothesis of the sustainability of the US current account deficits.

[3] See Ogawa (2004). Ogawa and Sakane (2006) identify the Chinese exchange rate policy after the announcement of the reform on July 21, 2005. Added to the regression shown by Frankel and Wei (1994), they employ the Kalman filter method. Ohno and Fukuda (2003) use the high frequency (intra-daily) data to exclude the correlated shocks among the currencies in the investigation.

deficit is defined as a situation where a current account deficit does not diverge from its current level but converges to this level. In this context we adopted a unit-root test to investigate whether the current account data in itself is converging. Moreover, we used a co-integration test to analyze whether some combinations of the major components mentioned above have a co-integrating relationship, i.e. a long-run stable converging relationship.[4] If a combination of the components has a co-integrating relationship, we can conclude that the current account deficit is sustainable.

Based on the analysis mentioned above, we investigated the sustainability of the US current account deficit. Our unit-root test delivered the result that the current account deficit has not a converging but a diverging tendency. In addition, most of the combinations of components did not suggest a co-integrating relationship, which means that they have no long-run stable converging relationships. Thus, these results showed that the US current account deficit is unsustainable from the perspective based on international trade flows.

Perspective on the domestic saving-investment balance

The same empirical exercise was carried out in Ogawa and Kudo (2004) based on the saving-investment balance. In this case, components like repayments of external debt, national gross savings, and national gross investments are taken into account. National gross savings are divided into private and government savings, and national gross investments are analogously classified into private and government investments. We could also produce data series of saving-investment balances of the private sector and the public sector.

We conducted the co-integration test regarding all of the combinations of savings and investments for the purpose of investigating the sustainability of the US current account deficit. The result of the co-integration test revealed that combinations of the components mentioned above have no co-integrating relationship, which means that the combinations have no long-run stable converging relationship. Therefore, the US current account deficit appears to be not sustainable also in terms of savings and investments.

Perspective on international capital flows

Thirdly, we investigated which components of the international capital inflows finance the current account deficit in the long run. In our empirical analysis based on international capital flows, we divided capital flows into changes in foreign reserves, capital inflows and capital outflows, given that the current account corresponds to the relevant capital account. In the analysis on the items in the financial account, we used direct investment inflows, portfolio investment inflows, and other investment inflows, on the one hand, and direct investment outflows, portfolio investment outflows, and other investment outflows, on the other. In addition, we created data series on the direct investment balance, the portfolio investment balance, and other investment balance.

Again we conducted the co-integration test regarding all of the combinations of capital account components in order to examine the sustainability of the US current account deficit. The co-integration test confirmed that the combinations of components have no co-integrating relationships for all of the combinations of international capital flows to the United States. Therefore, it could be postulated that the current account deficit in the United States is not sustainable in terms of international capital flows.

International capital flows finance the current account deficit

We also carried out co-integration tests for the combination of the current account deficit and the financial balance, the results of which revealed – unlike the former cases – a general co-integrating relationship for the combination of the US current account deficit and the financial balance. Next, we decomposed the financial balance into the direct investment balance, the portfolio investment balance, and other investment balance. We found that there is a co-integrating relationship in the combination which includes the current account deficit and the portfolio investment balance. Accordingly, we concluded that the US current account deficit has been financed by portfolio investment inflows from foreign countries,

[4] Noticing that the linear restriction which is described in the previous section is imposed on the co-integration vector, Miyao (2001) tests the co-integration by using the framework of the Engle-Granger test. Though he carries out a unit-root test on the series of repayments of external debt, imports, and exports, this is similar to carrying out the Engle-Granger test on the system of repayments of external debt, imports, and exports by imposing the restriction (1,1,–1) on the co-integration vector.

which, in turn, has kept the total balance of payments to show a long-run stable convergence to a level (Ogawa and Kudo 2004). In other words, the unsustainable current account deficit in the United States has been "stably" financed by capital inflows from foreign countries.

Effects of the US dollar depreciation on the US current account deficit

VAR models and data

Ogawa and Kudo (2007) investigated how the US dollar depreciation would affect the US current account deficit. In this context we simulated how much depreciation of the US dollar was needed for current account sustainability, given the estimated parameters of vector auto-regression (VAR) models. Three VAR models were estimated in our analysis. The first model (Model 1) is a "two variables VAR model" which contains the exchange rate and the current account. The second model (Model 2) is a "three variables VAR model" including the exchange rate, the trade balance, and factor income receipts from abroad from a viewpoint of international trade flows. The last model (Model 3) is another "three variables VAR model" which encompasses the exchange rate, saving-investment balances for the private and the public sectors from a viewpoint of domestic saving-investment balance.

The following data were used for the analysis. First, the log of the real effective exchange rate of the US dollar was adopted as one of the elements in the three VAR models. The real effective exchange rate data was taken from the Federal Reserve Board. Second, the trade balance and the income receipts from abroad were taken into consideration to investigate the view of international trade demonstrated by Mann (2002). These data were taken from the quarterly international transactions accounts released by the Bureau of Economic Analysis (BEA) of the US Department of Commerce. Third, the data of the saving-investment balances of the private and public sectors were taken from the national income and product accounts (NIPA), collected also by the BEA, to investigate the domestic saving-investment view according to Mann (2002). These data, except for the exchange rate, were normalized by GDP. The sample period of all data is from the first quarter of 1973 to the first quarter of 2006.

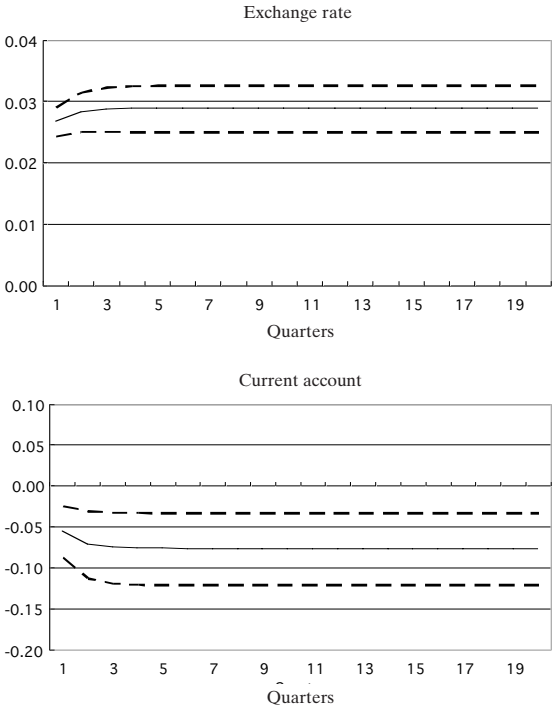
Impulse responses to the exchange rate shocks

Impulse responses to the exchange rate shock are obtained from the individually estimated VAR models. The impulse responses to the exchange rate shock in the first model are shown by Figure 4(a). If the initial exchange rate shock is an appreciation of about 2 percent, the exchange rate will appreciate by about 3 percent after twenty quarters and the current account will deteriorate by about 0.07 percent of GDP. Conversely, we can say that the 30 percent depreciation of the US dollar after twenty quarters of the initial shock improves the current account by 0.7 percent of GDP. This result is striking because the large depreciation, which equals the depreciation after the Plaza Accord, leads only to an improvement in the current account by 0.7 percent of GDP. This result means that we may need the largest depreciation in the history to return the US current account to a permissible level.

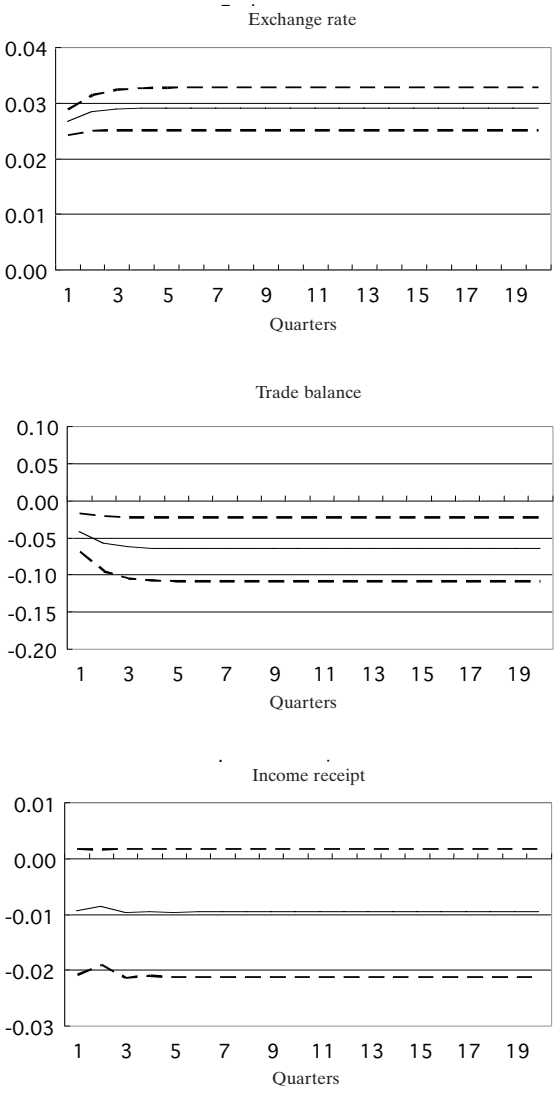
Figure 4(b) depicts the impulse responses to the same type of shock in the second model. Again, if there is an initial exchange rate shock of 2 percent appreciation as before, the exchange rate will appreciate by around 3 percent after twenty quarters,

Figure 4
The Accumulated Impulse Responses to the Exchange Rate Shocks

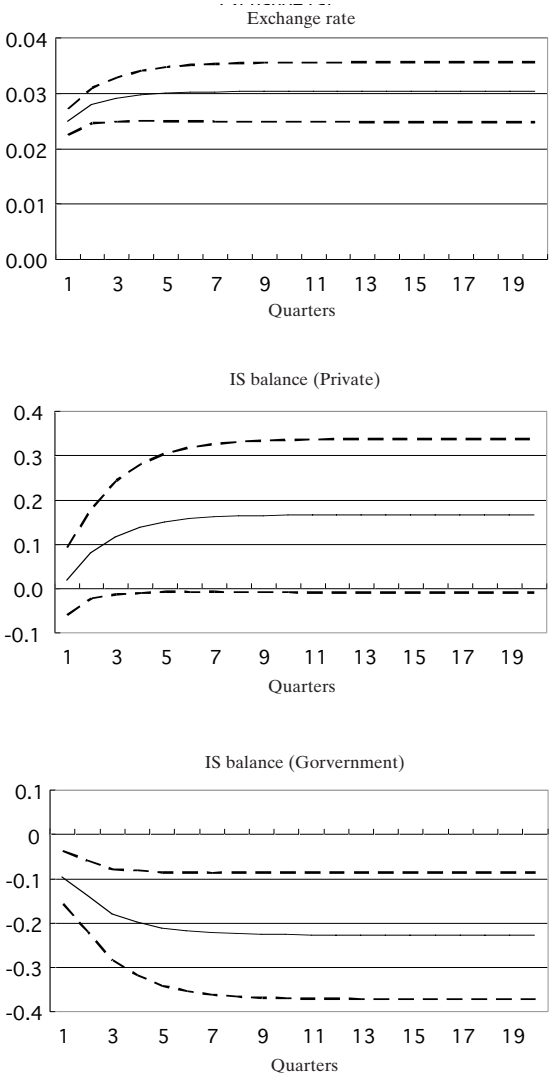
(a) Model 1: Exchange rate and Current account



(b) Model 2: Exchange rate, Trade balance and Income receipt



(c) Model 3: Exchange rate, IS balance (Private) and IS balance (Government)



Notes: The initial shock is normalized to one standard error. The solid lines show the impulse responses, and the dashed lines show the one-standard deviation bands.

Source: Ogawa and Kudo (2007).

while the trade balance will deteriorate by about 0.07 percent of GDP and income receipts are expected to decrease by about 0.01 percent of GDP. The joint effect of the exchange rate shock on the current account remains the same as in the first model.

The calculation results of the third model are illustrated in Figure 4(c), which again suggests that the initial appreciation of the exchange rate by 2 percent leads to an appreciation of around 3 percent after twenty quarters. In addition, the saving-investment balance of the private sector will rise by about 0.17 percent of GDP, while that of the government sector will fall by about 0.23 percent of GDP. The joint effect of the exchange rate shock on the current account is again the same as in the first model.

We conclude that it is inevitable for the US dollar to depreciate against other currencies including the East Asian currencies, and that this conclusion is robust because we are able to get the same results from the different models, whether from the view of international trade or the domestic saving-investment balance.

Simulated dynamics of reducing the current account deficit of the United States

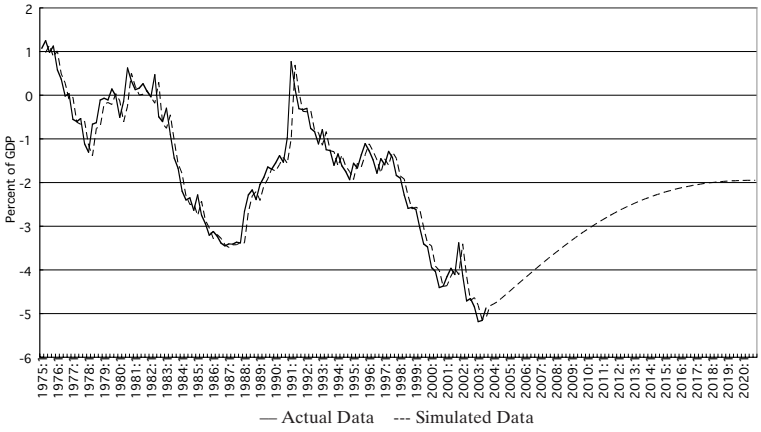
Based on the above-mentioned three VAR models we further examined the extent to which a US dol-

lar depreciation is necessary to safeguard the country's current account sustainability (see also Ogawa and Kudo 2004). Here we summarize the results of simulation analyses regarding the dynamic effects of the US dollar depreciation on the US current account deficit in the case of the first model. We examined three hypothetical cases, where the real effective exchange rate of the US dollar depreciates against its trading partners' currencies by 10, 30 and 50 percent in the second quarter of 2004.

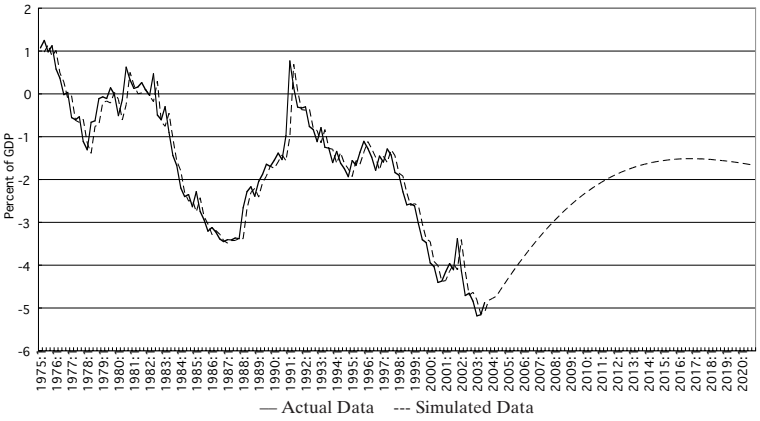
Figure 5(a) shows the current account behavior that is obtained by the simulation in the case where the US dollar depreciates by 10 percent in the second quarter of 2004. The 10 percent depreciation would gradually reduce the current account deficit to 2 percent of GDP by 2018. Figure 5(b) suggests that the 30 percent depreciation of the US dollar would reduce the current account deficit to 2 percent of GDP by 2011 and then to 1.6 percent of GDP in 2018. In the case that the US dollar sharply depreciates by 50 percent in the second quarter of 2004, a reduction of the current account deficit to 0.8 percent of GDP is expected by 2013.

Figure 5
Simulated Current Account in the United States

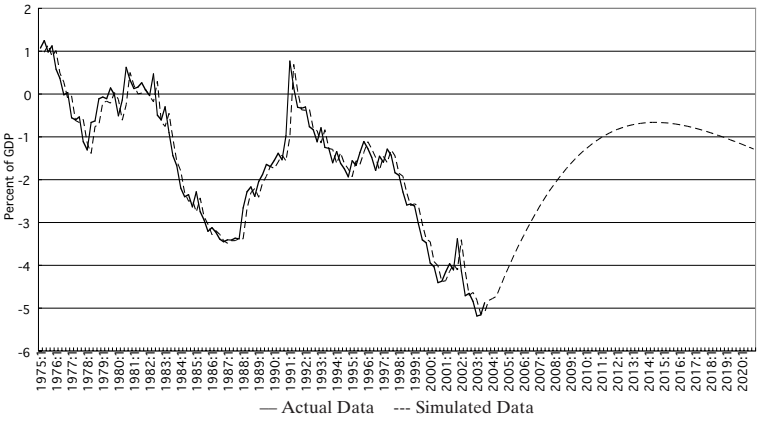
(a) Case of 10% depreciation of the US dollar in 2004: Q2



(b) Case of 30% depreciation of the US dollar in 2004: Q2



(c) Case of 50% depreciation of the US dollar in 2004: Q2



Source: Ogawa and Kudo (2004).

Conclusion

This paper presents the empirical result that the current account deficit of the United Sates is unsustainable. It also shows how much the US dollar should be depreciated for reducing the US current account deficit. We conclude that some scenarios of US dollar depreciation would reduce the current account deficit to a level of under 2 percent of GDP in the next several years. The results were derived from VAR models by taking into account relationships between the current account and the exchange rate without exogenously reducing fiscal deficits. It is expected that a smaller depreciation of the US dollar would reduce

the current account deficit to the same level if the US government were to reduce the fiscal deficit at the same time.[5]

It is found that the responses of the other currencies to a sudden and sharp depreciation of the US dollar will differ from one country to another, because the linkages of some currencies to the US dollar are stronger compared with the euro and the Japanese yen. Especially, the Chinese yuan still has a very tight linkage to the US dollar while it is continuously revaluing against the US dollar at a relatively slower pace. Based on the above analyses, a more flexible exchange rate system appears to be necessary for countries with strong linkages to the US dollar to respond appropriately to a possible depreciation of the US dollar in the future. For example, Ogawa and Ito (2002) show that the dollar peg in the East Asian countries is a result of "coordination failure" in the choice of the exchange rate system among the East Asian countries. The monetary authority of China announced the reform of its exchange rate system which includes the adoption of a managed floating exchange rate system with reference to a currency basket on July 21, 2005. Implementation of the reform by the Chinese monetary authority should make sense for regional coordination in conducting exchange rate policies. The implementation might lead to a solution of the "coordination failure" in conducting exchange rate policies among the countries.

References

Ahmed, S. and J. H. Rogers (1995), "Government Budget Deficits and Trade Deficits: Are Present Value Constraints Sustained in Long-term Data?", *Journal of Monetary Economics* 36, 351–374.

Bohn, H. (1995), "The Sustainability of Budget Deficits in a Stochastic Economy", *Journal of Money, Credit and Banking* 27, 257–271.

Frankel, J. A. and S. Wei (1994), "Yen Bloc or Dollar Bloc: Exchange Rate Policies of the East Asian Economies", in: Ito T. and A. O. Kruger (eds.), *Macroeconomic Linkage,* Chicago: University of Chicago Press.

Husted, S. (1992), "The Emerging U.S. Current Account Deficit in the 1980s: A Cointegration Analysis", *Review of Economics and Statistics* 74, 159–166.

Kim, S. and N. Roubini (2003), *Twin Deficit or Twin Divergence?: Fiscal Policy, Current Account, and Real Exchange Rate in US,* New York University, mimeo.

Kudo, T. and E. Ogawa (2003), *The U.S. Current Account Deficit Is Supported by the International Capital Inflows?,* Hitotsubashi University, Faculty of Commerce and Management, Working Papers, 92.

Mann, C. L. (2002), "Perspectives on the U.S. Current Account Deficit and Sustainability," *Journal of Economic Perspectives* 16, 131–152.

Matsubayashi, Y. (2005), "Are U.S. Current Accounts Deficits Unsustainable?: Testing for the Private and Government Intertemporal Budget Constraints", *Japan and the World Economy* 17, 223–237.

McKinnon, R. I. (2001), "The International Dollar Standard and the Sustainability of the U.S. Current Account Deficit", *Brookings Papers on Economic Activity,* 2001(1), 227–239.

Milesi-Ferretti, G. M. and A. Razin (1996), *Current-Account Sustainability,* Princeton Studies in International Finance 81, Princeton University.

Miyao, R. (2002), *Another Look at Origins of the Asian Crisis: Tests of External Borrowing Constraints,* ESRI Discussion Paper Series 11, Economic and Social Research Institute, Cabinet Office, Tokyo.

Ogawa, E. (2004), "Regional Monetary Cooperation in East Asia against Asymmetric Responses to the US Dollar Depreciation", *Journal of the Korean Economy* 5, 43–72.

Ogawa, E. and T. Ito (2002), "On the Desirability of a Regional Basket Currency Arrangement", *Journal of the Japanese and International Economies* 16, 317–334.

Ogawa, E. and T. Kudo (2004), *How Much Depreciation of the US Dollar for Sustainability of the Current Accounts?,* Hi-Stat Discussion Paper 44.

Ogawa, E. and T. Kudo (2007), "Asymmetric Responses of East Asian Currencies to the US Dollar Depreciation for Reducing the US Current Account Deficits", *Journal of Asian Economics* 18, 175–194.

Ogawa, E. and M. Sakane (2006), "The Chinese Yuan after the Chinese Exchange Rate System Reform", *China & World Economy* 14, 39–57.

Ohno, S. and S. Fukuda (2003), "Exchange Rate Regimes in East Asia after the Crisis: Implications from Intra-daily Data", *Seoul Journal of Economics* 16, 119–181.

Osterwald-Lenum, M. (1992), "A Note with Quantiles of the Asymptotic Distribution of the Maximum Likelihood Cointegration Rank Test Statistics", *Oxford Bulletin of Economics and Statistics* 54, 461–472.

[5] Another candidate of the adjustment channel of the current account is fiscal consolidation because the fiscal deficit is the element of the so-called "twin deficits". Kim and Roubini (2003) estimate the structural VAR and conclude that fiscal consolidation alone does not reduce the current account deficit.

The US current account deficit: No reason to panic!

Bernhard Gräf*

While the dramatic widening of the US current account deficit in the last ten years gave rise to heated discussions in the market and in academic circles and resulted in a large number of publications on its long-term sustainability, people paid little attention to the recent improvement. After all, the US current account deficit fell by one percentage point to 5.5 percent of GDP in Q2 2007 from its previous peak in Q2 2006. And it is currently no less than 1¼ percentage points lower than the historic record of 6.8 percent of GDP in Q4 2005. For the full year of 2007 a US current account deficit of nearly USD 770 bn, i.e., 5.6 percent of GDP, is expected, falling from USD 811 bn, i.e., 6.2 percent of GDP, in 2006. In the medium to longer term, the decline in global imbalances is set to continue, thus reducing the risk to the international economy. Furthermore, it should ease the pressure on the single European currency. Thus there is no reason to panic.

In the following, the reasons for the change in the US current account will be examined using a model. On this basis, it is argued that the short-term improvement derived from the model is set to continue in the longer term, due to shifts in the investment/savings balance both in the United States and in the surplus countries.

A model for explaining the pattern of the US current account

What are the major drivers of the US current account deficit and what needs to happen to bring it down? To answer this question, Deutsche Bank Research has developed a model to shed light on the US current account. We use the following variables that are standard in academic literature:

1. the growth differential (and thus an explanation from the trade theory perspective),
2. the USD exchange rate (representing an explanatory approach from the capital flows perspective), and
3. the oil price which, owing to the low price elasticity of demand, has a strong short to medium-term impact on the current account.

Variable I: Growth differential

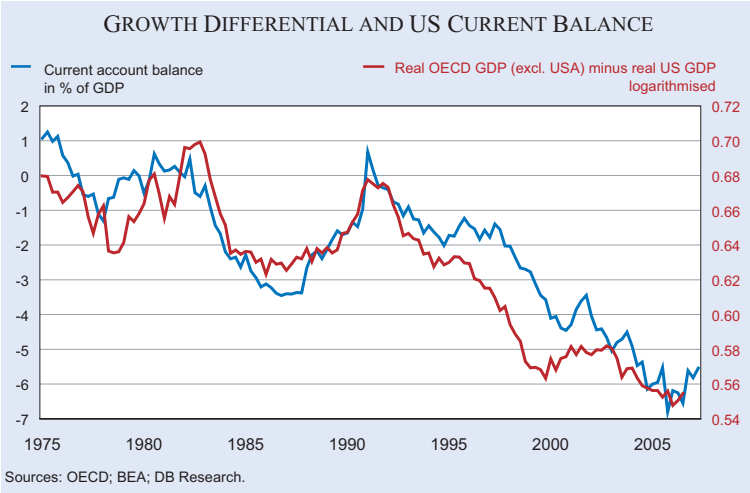
If an economy's growth exceeds that of its main trading partners, the import pull exceeds exports, generally resulting in a current account deficit. In the US case this is accentuated by the Houthakker-Magee asymmetry (Houthakker and Magee 1969). The import elasticity of the United States is higher than that of its main trading partners, with the result, that the US trade balance deteriorates even if the rates of growth are the same.

Houthakker-Magee asymmetry: many causes

The higher import elasticity in the case of goods can largely be attributed to demographic factors, the age structure and the proportion of immigrants in the United States (Brook, Sedillot and Ollivaud 2004). In their consumption patterns, younger generations favour a higher proportion of imported goods than older generations, while national services, such as healthcare, tend to play a less-than-proportional role. Additionally, immigrants usually prefer goods from their home countries. Another explanation is the dynamic growth of the country's most important trading partners. It has been demonstrated, for instance, that countries with strong economic growth boast a broader range of export products and their exports are of higher quality, which boosts demand for them in the United States. This effect is said to be the chief factor behind the Houthakker-Magee asymmetry. The transfer of production abroad and the vertical integration of US companies as well as the structure of US external trade have probably also been contributing factors. A reduction of the US import elasticity of goods, and thus a contribution towards narrowing the US current account deficit from this side, is unlikely.

* Deutsche Bank Research.

Figure 1



Although the emerging economies are becoming increasingly important, we have based our study on the growth differential between the US and other OECD countries in order to simplify matters – and to permit estimates on a quarterly basis. For such purposes, the log difference between countries' real GDP is adopted to measure the growth differential. OECD countries account for nearly 60 percent of US imports and 70 percent of US exports. Figure 1 clearly shows the close correlation of the net growth differential between the US and its OECD partners with the US current account balance.

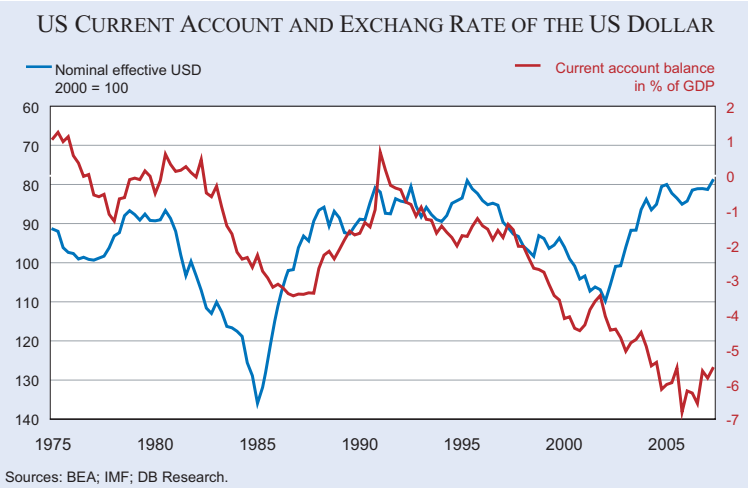
Variable II: USD exchange rate

While the development of the US current account balance tracked the US dollar with a time lag of about two years in the twenty years from 1975 to 1995, this correlation appears to be less pronounced from around the mid-1990s and no longer seems to have applied since the beginning of the 2000s. Other things being equal, currency depreciation makes a country's imports more expensive and exports cheaper – improving the country's current account balance once J-curve effects disappear. From its last high in early 2002, the US dollar fell by over 12 percent on a trade-weighted basis in each of the following two years, depreciating overall by 30 percent to date. Common rules of thumb for the US current account's reaction to exchange rate changes assume an improvement of roughly USD 50 billion in the US current account for each ten percent dollar depreciation. On this assumption, the US current account ought to have improved by approximately USD 150 bn. However, the opposite happened: the US current account deficit rose by USD 65 bn in 2003 and by roughly USD 120 bn each in 2004 and 2005. If the correlation between the current account and the US dollar remained intact since the beginning of the 2000s, then other factors must have affected the current account more than offsetting the improvement triggered by the weaker exchange rate (Figure 2).

Variable III: Oil price

One explanation for the opposite development of the US dollar and the current account deficit is the drastic rise in oil prices in recent years. Between 2002 and 2006 the average US import price for oil and energy climbed from USD 23.7 to nearly USD 60 per barrel. While the volume of imports has increased only modestly, the US bill for imported energy has tripled since 2002 to almost USD 300 bn. If oil prices had stayed at their 2002 level, US bill energy imports would have amounted to only just over USD 110 bn in 2006 and would have been lower by more than USD 180 bn, or 1.4 percent of GDP. Other things being equal, the US current account would then have posted a deficit of only USD 630 bn, or 4.8 percent of GDP, in 2006. As a

Figure 2



consequence, since 2002 over half of the growth in the US current account deficit has been oil-price induced. This is the reason why we have decided to include the oil price in our estimate of the US current account alongside the conventional variables of economic growth and the US dollar.

Two-step error correction model

Our estimate is based on a relatively straightforward, two-step error correction model. To begin with, we estimated the equation for the long-term correlation between the US current account balance as a percentage of GDP and the three explaining variables of the growth differential, the US dollar and the oil price as absolute, log metrics.

(a) The long-term equation

The estimate is based on quarterly data from Q1 1980 to Q3 2006. The equation is:

(1)

$$CAB\% = \alpha_0 + \alpha_1 * [ln(USGDP) - ln(OECDrGDP)] + \alpha_2 * NEUSD + \alpha_3 * ln(OIL) + \varepsilon$$

where

CAB%	*US current account balance as % of GDP*
USGDP	*Real US GDP in 2000 USD*
OECDrGDP	*Real GDP of the other OECD countries in 2000 USD*
NEUSD	*Nominal effective USD exchange rate*
OIL	*Price of Brent Blend oil in USD per barrel*
ln	*Logarithm*
α_0	*Intercept*
$\alpha_1, \alpha_2, \alpha_3$	*Coefficients*
ε	*Error term*

The regression results are as follows:

R^2	*0.90*
Adj. R^2	*0.90*
D.W.	*0.45*

Variable	Coefficient	Value	Lag (quarters)
GDP	α_1	*– 39.20*	*1*
NEUSD	α_2	*– 4.24*	*8*
OIL	α_3	*– 0.97*	*3*
Intercept	α_0	*– 4.53*	*–*

All the variables are integrated at degree 1, and are thus not stationary. In addition, they are co-integrated. A coefficient of determination (R^2) of 0.90 is therefore not surprising. The residual variables arising from this estimate (ε) were then used to estimate the short-term dynamics which was done in first differences and additionally contains a dummy variable for Q1 1991. The transfers of around USD 40 bn from the Iraq war allies were posted at that time, which resulted in a surplus of the US current account and cannot be explained by the three variables used in our model.

(b) The short-term dynamics

In the second step of the error correction model, the model was then estimated in the form of first differences:

(2)

$$\Delta LB\% = \beta_0 + \beta_1 * \Delta[ln(USBIP) - ln(OECDrBIP)] + \beta_2 * \Delta(NEUSD) + \beta_3 * \Delta[ln(OIL)] + \beta_4 * DUMMY + \beta_5 * ERROR + \varepsilon$$

where

DUMMY	*Dummy variable for Iraq war transfers in Q1 1991*
ERROR	*Error correction term = residual variables from the long-term equation*
Δ	*First differences (difference vs previous quarter)*
β_0	*Intercept*
$\beta_1,.., \beta_4$	*Coefficients*
ε	*Error term*

The regression results of the short-term dynamics are as follows:

R^2	*0.37*
Adj. R^2	*0.34*
D.W.	*2.13*

Variable	Coefficient	Value	Lag	T-value	P-value
GDP	β_1	*– 13.60*	*1*	*2.81*	*0.006*
NEUSD	β_2	*– 1.28*	*6*	*1.42*	*0.154*
OIL	β_3	*– 0.46*	*0*	*1.98*	*0.047*
DUMMY	β_4	*1.26*	*0*	*3.86*	*0.000*
ERROR	β_5	*– 0.18*	*1*	*3.37*	*0.001*
Intercept	β_0	*– 0.07*	*–*	*2.19*	*0.029*

The first differences of the variables used are all stationary. In addition, all the variables have the expected signs: stronger growth in the US than in the other

OECD countries leads to a deterioration in the US current account, an appreciation of the US dollar on a trade-weighted basis also leads to a higher US deficit, as does a rise in the oil price. The error correction term also has the required negative sign. All variables except the exchange rate are significant at the 5 percent level.

Houthakker-Magee asymmetry fulfilled

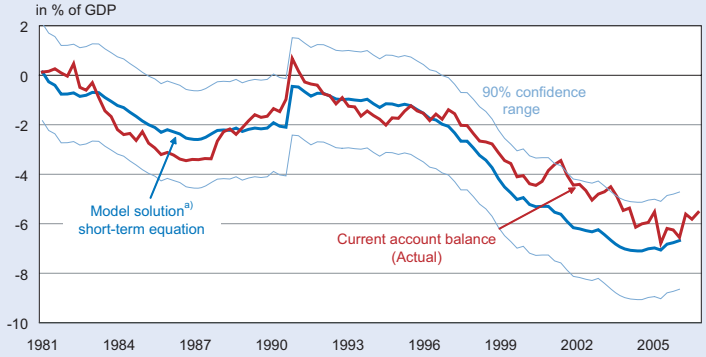
The absolute term in our short-term equation has a negative sign. Our estimate therefore confirms the Houthakker-Magee asymmetry, i.e. US import elasticity is higher than that of its main trading partners. As a result, the US current account deteriorates even if growth in the US is the same as that of other OECD countries, and exchange rates and oil prices are constant. As mentioned earlier, this would offset the relief from a one-time USD devaluation if the US and its main trading partners grew at the same pace. Consequently, if a one-time USD devaluation is to help improve the US current account on a sustained basis, US growth needs to be lower than that of other OECD countries.

Model shows good fit with reality

Figure 3 suggests that our model produces a relatively good fit with reality. The estimates for the quarter-on-quarter change in the US current account (as a percentage of GDP) derived from the short-term dynamics were added to the figure of the US current account in Q1 1981. Only in recent years does the model solution deviate somewhat more strongly from the actual development. However, it still lies within the 90 percent confidence range and at the end of the period more or less matches the actual value.

Figure 3

MODEL SOLUTION: "SHORT-TERM EQUATION"



a) Model solution = US current account balance in Q1/1981plus the quarter-on- quarter change derived from the short- term dynamic.

Sources: BEA; DB Reserach

Effects on US GDP

From the annualised coefficients of the short-term dynamic we derive the following adjustment effects:

1. If economic growth in the US is one percentage point higher than that of other OECD countries, the US current account deteriorates by about 1/2 percent of GDP per annum. In absolute figures this is about USD 65 bn.
2. A depreciation of the US dollar by 10 percent on a trade-weighted basis at the same time improves the US current account by about 1/2 percent of GDP.
3. If the oil price rises by 10 percent, the US current account deteriorates by almost 0.2 percent of GDP.
4. If all variables remain constant, the US current account deteriorates by about 0.2 percent of GDP per annum (Houthakker-Magee asymmetry).

Contributions of individual variables to the change of the US current account

With our US current account model we can also ascertain the contributions which the individual variables make to the change in the US current account deficit. The results show that the expansion of the deficit since 2003 is attributable to the growth differential and the rise in oil prices. These two factors therefore more than offset the dampening effects which the US dollar depreciation has had on the current account. Without the dollar depreciation, the US current account deficit would have grown more by about 1.2 percent of GDP and would have stood at almost 7 1/4 percent of GDP in 2006.

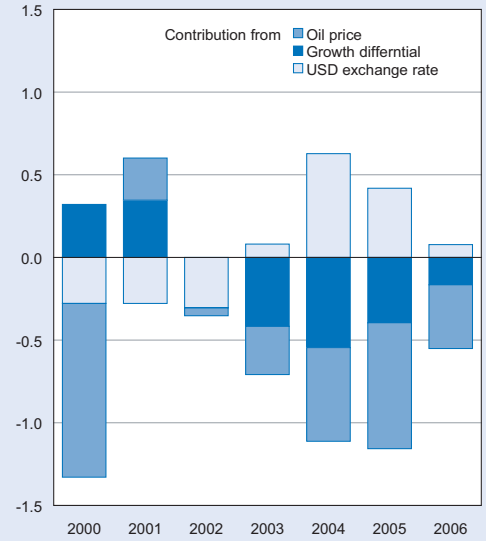
US current account to improve in 2007 and 2008

After economic growth in the United States was still a good

Figure 4

CHANGE IN US CURRENT ACCOUNT BALANCE

in % of GDP



Sources: DB Research.

1/4 percentage point higher than in other OECD countries last year, we expect the growth differential to reverse this year. We forecast US economic growth at 1 3/4 percent in 2007 while other OECD countries should average growth of a good 2 1/2 percent. The negative difference of 3/4 percentage points would, according to our model, improve the US current account by 0.4 percent of GDP. The growth differential will probably narrow in 2008 but should still be just under 1/4 percentage point in other OECD countries' favour. This would mean a further 0.1 percent of GDP improvement in the US current account in 2008.

As to the outlook for the US dollar, we expect a further depreciation of 5 percent on a trade-weighted basis in 2007 and 2008 each, improving the US current account by a good 1/4 percent of GDP each year. We assume the oil price to remain at an average level of USD 70 per barrel in 2007 and to fall slightly to USD 68 per barrel next year (minus 3 percent), which would relieve the US current account by 0.1 percent of GDP.

Allowing for the negative absolute term in our short-term equation (2), the US current account deficit would narrow to a good 5 1/2 percent of GDP this year and come down further towards 5 1/4 percent of GDP next year. This would be a tangible improvement of almost one percent of GDP versus the level reached in 2006 and might be a first step on a long-term path of correction.

Longer-term adjustment scenarios: orderly return to balance

What form can an orderly reduction of the US current account deficit take without major disruptions to the global economy?

$S - I = X - M$

A country's current account balance corresponds to the difference between exports and imports (of goods, services and investment income) plus transfers. Since, in an open economy, there is an identity of investment and savings – supplemented by the external balance – the current account (X – M) is the difference between national savings and investment (S – I). Since both the public and private sectors can invest and save, the current account balance must be equal to the sum of the financial balances of the private and public sectors.

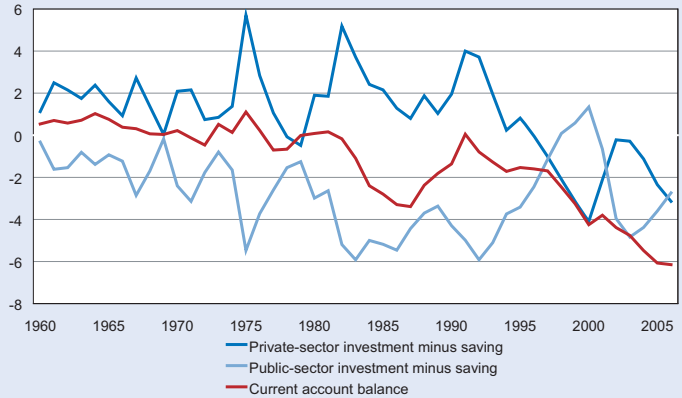
US savings-investment balance …

Weaker US economic growth can be caused by shifts in the savings-investment balance. For instance, growth of the US economy can be slowed down by a higher household savings-income ratio. Higher pri-

Figure 5

US FINANCIAL BALANCES

in % of GDP



Sources: BEA; DB Research.

vate savings improve the financial balance of the private sector (saving minus investment) and hence improve – ceteris paribus – the US current account. We expect to see this process already starting in the current year. The private savings ratio, which fell sharply in the wake of the US property boom to 0.4 percent of disposable income in 2006, should pick up again in 2007 and 2008. This is indicated by the recession in the housing sector and falling house prices, which is causing consumption financing via the so-called mortgage cash-outs to dry up. The upshot is weaker growth in private consumption and thus in the economy as a whole. The adjustment process outlined could also be supported by fiscal consolidation that improves the financial balance of the public sector and thus the current account. This process is also underway already. The central government budget deficit improved from 1.9 to 1.2 percent of GDP in fiscal year 2006/07.

… and elsewhere

If the US current account deficit is indeed due only to some extent (and possibly only to a small extent) to developments within the country itself and is more the result of investment decisions by international investors as suggested by the theory based on capital flows, an important key to solving the US current account problem would lie outside the US (Dovern, Meier and Scheide 2006). The savings glut in the surplus countries would need to decline. Less capital would then flow abroad (to the US) and the US current account would improve correspondingly. There are signs today that the high savings in some countries with current account surpluses are already on the decline. And the process should accelerate in coming years.

Oil-producing countries: Focusing more on diversifying their economies

The oil-producing countries, for instance, are no longer investing their revenues only in the US capital market but are using a growing share to diversify their economies and thus reduce their dependence on oil revenues. Given that oil reserves are on the wane, this process is likely to gather momentum and domestic investment in this area should rise. Together with stronger growth in consumption spending, this will lead to lower savings and thus less capital invested in the United States and, on the other hand, to stronger economic growth and higher imports from the United States.

Asia: Strengthening the domestic markets

The savings glut is also likely to decline in the Asian countries with high current account surpluses. Investment activity there lost appreciable dynamics in the wake of the Asian crisis. Investment as a percent of GDP is down by over ten percentage points from its previous peak. This process should gradually reverse. It is also likely that households there will adjust their spending to rising incomes and therefore cut back on their high savings. This is likely to happen – albeit to a lesser extent – in China, too, where private-sector savings are equivalent to about half of GDP. A small growth difference in favour of the main trading partners of the United States appears plausible in coming years. Such a development would present no problems for the world economy since it would take the form of more moderate US growth (without recession) and stronger growth in the other countries.

Further 30 percent USD depreciation needed as well

Assuming a negative growth differential of 1/4 percentage point p.a., the US dollar would need to depreciate, too, by around 30 percent overall, or just over five percent p.a., on a trade-weighted basis over the next five years to bring down the US current account deficit to 3 1/2 percent of GDP. This appears to be a quite realistic possibility considering the development from 2002 to 2004 when the US dollar fell in value by about 25 percent on a trade-weighted basis. However, the US dollar would have to depreciate primarily against the currencies of those countries which have correspondingly high surpluses in bilateral trade with the United States. If the devaluation were to be concentrated on the USD/EUR rate, the global imbalances would merely shift from the US to Euroland, which would not make economic sense. As a result, it is above all the Asian currencies which need to make the necessary exchange rate adjustments. At the top of the list is China, which has by far the biggest surplus with the United States (2006: approx. USD 250 bn) and whose currency has appreciated by only 9 percent against the US dollar since 2005, and Japan. The yen has even depreciated by about 6 percent against the US dollar since 2005 despite Japan's trade surplus of over USD 90 bn at last count with the United States. A 30 percent depreciation of the US dollar on a trade-weighted basis should imply the following changes in relation to the

key currencies for US current account purposes: Against the Chinese renminbi – 40 percent, Japanese yen – 35 percent, the euro – 5 percent, Saudi rial – 45 percent, Mexican peso – 20 percent, etc. (see also Cline 2005).

A further ray of hope: Trade in services

However, aside from possible growth and exchange rate shifts, trade in services provide another ray of hope that might facilitate a reduction of the US current account deficit and do so in two ways:

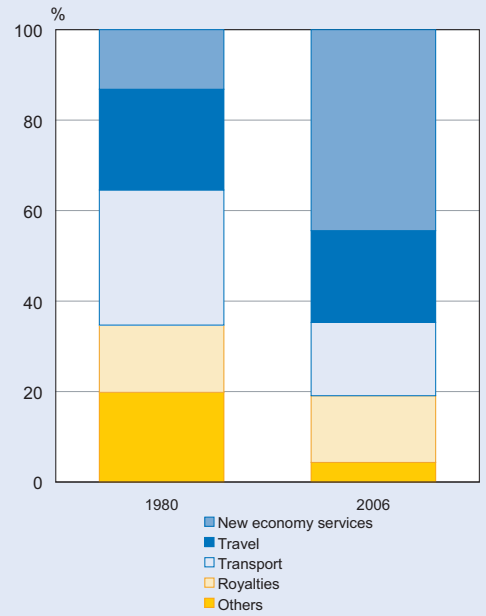
Firstly, a further intensification of global trade in services could provide tangible support in narrowing the US current account deficit. The United States has been able to benefit strongly from the fast expanding international trade in services in the past few years. Since 1980, global services trade has grown a good deal faster than merchandise trade. This is true especially for corporate services, referred to in the literature as "new economy services", for instance in the areas of IT, finance and insurance, patents, licenses, engineering documentation and the like and other corporate services.

The United States is a very strong international player in this field. While the country's total exports of services (roughly 30 percent of total exports of goods and services in 2006) have grown eight-and-a-half-fold since 1980, leading to a surplus in the services account of USD 80 bn at last count, whereas exports of miscellaneous corporate services (approximately 12 percent of total exports of goods and services in 2006) have risen twenty-eight-fold over the same period, trebling their share of total exports of services to 43 percent and boosting the surplus in this sub-segment from USD 3½ bn to around USD 71 bn over the past 26 years (Figure 6). Although the importance of the services account for the current account has tended to wane in recent years, the fact that the surplus has been on the rise again for three consecutive years could mark a turnaround here.

Secondly, no evidence of a Houthakker-Magee asymmetry has been found in the case of US imports of services (Hooper, Johnson and Marquez 1998; Mann 2004). While studies reveal that in the case of goods the US import elasticity exceeds export elasticity by ½ to one percentage point, in the case of services it is ¼ to ½ percentage point lower (Box 1).

Figure 6

CLASSIFICATION OF US SERVICE EXPORTS



Source: DB Research.

The reason for this probably lies in the "new economy services", where the United States plays a leadership and first mover role and which therefore were, and are, in strong demand abroad. The United States could well benefit more than proportionally, as it did in the 1990s, from continued fast-growing international trade in services. The "new economy services" could therefore help reduce the US current account deficit in coming years.

US current account: On the right track

In our view, a dismantling of the international trade imbalances is possible over the longer term, barring a rapid and sharp slide in the value of the US currency and a deep recession. Firstly, the relationship between saving and investment in the United States will shift towards saving, a process which, in view of the recession in the housing sector, should have already started in 2007 and which, above all, is of a cyclical nature. An upturn of US households' savings-income ratio also appears probable in the longer term. Secondly, adjustments in the surplus countries, especially in the oil-producing countries and the Asian economies, should set in motion a countervailing process there. Together, the two developments will bring down the US current account deficit. In addition, the United States is benefiting strongly from fast expanding international

Box 1

Selected estimates of US income elasticities

	Data period	Exports of		Imports of	
		Goods	Services	Goods	Services
Pain & van Elsum (2004)	1987–2000		1.7		
Mann (2003)	1976–2000		2.1		1.5
Wen-Lewis & Driver (1998)	1980–1995	1.21	1.95	2.36	1.72
Houthakker & Mageee (1969)	1951–1966	0.99		1.51	
		Export of goods and services		Imports of goods and services	
Mann (2003)	1976–2000	1.4		2.2	
Hooper, Johnson & Marquez (1998)	1960–1996	0.8		1.8	
Cline (1989)	1973–1987	1.70		2.44	

Source: Brook, Sedillot and Ollivaud (2004).

trade in services, which should continue and likewise help reduce the US current account deficit. The country is the frontrunner especially in the so-called "new economy services", which are the real drivers of the growth in services. Thus, there is much to suggest that the necessary adjustments to bring down the US current account deficit are starting. They will not happen rapidly but gradually. Therefore there is no reason to panic!

References

Brook, A. M., F. Sedillot and P. Ollivaud (2004), *Channels for Narrowing the US Current Account Deficit and Implications for Other Economies,* OECD Economics Department Working Paper 390.

Cline, R. W. (2005), *US Fiscal Adjustment and Further Dollar Decline Required to Curb Rising US External Debt,* News of the 19th of September, 2005, Institute for International Economics, Washington DC.

Dovern, J., C. P. Meier and J. Scheide (2006), *Das hohe Leistungsbilanzdefizit der Vereinigten Staaten: Ein Risiko für die Weltwirtschaft und für die wirtschaftliche Entwicklung in Deutschland?,* Kieler Diskussionsbeiträge 432/433.

Mann, C. L. (2004), "The US Current Account, New Economy Services, and Implications for Sustainability", *Review of International Economics* 12, 262–276.

Hooper, P., K. Johnson and J. Marquez (1998), *Income and Price Elasticities for G-7 Countries,* International Finance Discussion Papers 609.

Houthakker, H. and S. P. Magee (1969), "Income and Price Elasticities in World Trade", *Review of Economics and Statistics* 51, 111–125.

Europe's future after the European Council meeting of June 2007: A panel discussion

Europe's future after the European Council of June 2007 was discussed by a panel of distinguished economists at a recent CESifo conference. After the constitutional process was hindered by the referenda in France and the Netherlands, the Council has reached an agreement over a treaty that might serve as a substitute to a constitution for Europe. While this treaty has been signed at the recent Lisbon summit, its implications for policy making in Europe is open for debate. Whether the Constitutional Treaty is a major breakthrough which will bring back momentum to European policy or whether further political steps will be necessary was discussed by five competent participants. Massimo Bordignon chaired the panel and gave an introductory overview of the major elements of the agreement. This introduction was followed by brief statements by the panellists on their individual assessments of the agreement.

Massimo Bordignon*

The idea behind this panel discussion is to learn more about the pros and cons of the agreement reached in June 2007. In June 2007, the European Council agreed to convene an intergovernmental conference, which would start in July and finish its work by the end of the year. In this way, the resulting treaty can be ratified by the national parliaments of the member states well in advance of the next election of the European Parliament, which will take place in the summer of 2009.

The intergovernmental conference is aimed at changing the existing treaties along the lines of a mandate given to it by the European Council reflecting the political compromise found in June 2007. So what are the main features of this compromise? First, there has been a clear attempt to play down the importance of the amendments which are introduced. Whether these constitute indeed structural changes with respect to the original proposal for a constitutional reform or just a matter of rhetoric is open to discussion. Everybody was well aware that the French President could not return from the Council with the proposal for another constitutional change. He simply could not risk holding another referendum in his country. This is the reason why we are no longer talking about a new constitution for Europe but just about reforming the existing treaties. Many things have been changed from the original Constitutional Treaty with the aim of reducing all the symbolic hindrances, which could, in turn, indicate that we are gradually moving towards a unified Europe. For example, the treaties will no longer mention a European anthem, a representative flag or a political motto. Instead of the EU minister of foreign affairs, the already existing High Representative of the European Union will take over such a position. Also, there will no longer be "framework laws" of the EU, but the usual directives, regulations, and decisions will continue to prevail. In sum, we are no longer trying to introduce a new constitution, but a type of "mini treaty".

A large part of the provisions, which were agreed upon in the 2004 intergovernmental conference and thereafter included in the Constitutional Treaty, will actually remain in the new treaty. Basically, the intergovernmental conference starting in July 2007 will have two reformed treaties as its outcome: first, the Treaty on European Union (TEU), and second, the Treaty on the Functioning of the European Union (TFEU), which will replace the existing Treaty Establishing the European Community (TEC). Therefore, there will be a sort of two-level treaty. If one considers this agreement in terms of the two treaties' names, it sounds like we are indeed going to have a constitutional structure: the former something like a fundamental treaty on the EU, and the latter less fundamental concerning the functioning of the Union. Of course, it is easier to change the latter than the former, exactly like it often happens in the national states with constitutional changes versus legislative changes. Somewhat paradoxically, it then looks like we will have more of a constitutional structure now than we had with the original Constitutional Treaty.

The second point is that the package of all the institutional changes, which were foreseen in the original Constitutional Treaty, will be implemented. For example, there will be a President of the European Union who will stay in office for two years. There will be a new kind of High Representative, who will also be the Vice President of the Commission and also be

* Catholic University of Milan.

responsible for external relations. Finally, there will be a reduction of the number of Commissioners. So it really looks as if the "mini treaty" has recovered most of the things that were already included in the Constitutional Treaty.

But there are also some important novelties. For example, the national parliaments will gain importance. One of the problems with the previous constitutional proposal was that a lot of power was given to the European Parliament at the expense of the national parliaments. Now, the national parliaments will have eight weeks – not six weeks as before – to examine the Commission's legislative draft proposals. And if a majority of national parliaments decides that a draft violates the principle of subsidiarity, the Commission will be forced to reconsider it. Consequently, it looks like there will be more democratic control, with national parliaments being able to countervail more strongly against the drift toward centralisation at the European level.

Furthermore, the Charter of Fundamental Rights will be given legal value according to the annex. But it is also specified that the Charter of Fundamental Rights will work only within the limits of the competences of the EU, which basically means allowing the individual countries to opt out if they wish to do so.

Finally, the double majority system (55 percent of Council votes representing 65 percent of the EU's population) will also be adopted in the new treaties. The only difference is that the introduction of the new majority rules has been postponed until 2014, and that a country can also ask for a further transition period up to 2017. This poses an interesting question which I would like to pose to the participants: If the EU manages to work with the old rules of the Treaty of Nice for the next ten years, will there really be a switch to the new rules? Would it still be necessary?

The last point that I want to mention is Sarkozy's amendment, which we should worry about as economists. Mr. Sarkozy convinced his colleagues to accept a change in Article 2 of the original Constitutional Treaty. This article originally said that the European Union shall offer its citizens an internal market where competition is "free and undistorted". Now the article just reads: "the European Union shall establish a single market". It is not clear whether these changes are just symbolic or substantial. Certainly they are not going to affect the treaty article on competition policy so that the Commission appears to still maintain all powers regarding competition policy. But as we all know, in politics symbols are often very critical. Therefore, we should wonder if this amendment changes the EU's direction in terms of competition policy.

In my view, these are the most important aspects of this new treaty. Now I would like to invite all the speakers to tell us their opinion and assessment of the June 2007 Council agreement, starting with Daniel in alphabetical order.

Daniel Gros*

The most important aspect to keep in mind when judging the new "Reform" (or the Lisbon Treaty) is that this text continues the old game of a dynamic disequilibrium. Assuming it gets ratified, the new treaty creates at least two new potential power centres in the form of the High Representative and the permanent Presidency of the European Council. An important point of detail here is that the permanent "President" of the European Council will not preside the Council of Ministers. The European Council consists of the Heads of State and Government that meet once or twice every six months, and the Council of Ministers is the one that meets in nine different formations on a ministerial level on a different schedule. Here the Presidency will continue to rotate. Therefore, in the end we will have three centres of power (High representative, permanent Presidency of the European Council and rotating (national) Presidency of the Council of Ministers), and they will all compete against each other.

Two Presidencies of the European Council and the Council of Ministers are likely to have different policy goals. The decision making rules are formally the same for the European Council and the Council of Ministers, but in reality voting almost never takes place in the European Council, whereas voting is much more frequent in the Council. Moreover, whereas the former has a permanent agenda-setter (with a tenure of 2.5 years), the specialised Councils of Ministers do not – except the Euro Group which has an elected President. This set-up will give us a new dynamic disequilibrium, and we cannot know beforehand how this will play out. For example, if Tony Blair became the first President of the

* Centre for European Policy Studies, Brussels.

European Council, he would probably have a strong agenda, possibly both on internal reforms and on foreign policy issues. This could result immediately in a competition with the Head of the Commission (Mr. Barroso?) to show who is more important, who eclipses whom, etc. Then we might have another famous person, for example, Mr. Fischer (the former German foreign minister) as the High Representative and he would also come with a strong agenda, possibly in competition with the President of the European Council. The competences of these institutions are not well defined in the new treaty. Should there be a conflict it is thus not clear who would win. Of course, it is also possible that they all agree and work harmoniously together, but this is definitely not a foregone conclusion. Basically, we launch a new game. This is the essence of what has been achieved with the new treaty. It is thus actually an advantage that the new treaty does not pretend to constitute the final constitutional settlement.

As an aside one might note that the ratification process can only increase the "democratic deficit" of the EU. The new treaty is being sold in France, for example, as a miniature treaty, although it is basically ninety or ninety-five percent of the Constitutional Treaty. And this term is really indicative for the characterisation purpose. The democratic deficit will be increasing because the negative referenda in the Netherlands and in France will be ignored. Both French and Dutch get almost exactly the same treaty, but this time via parliament. And the only important change for France is one-half sentence in the preamble (now without the reference to competition).

One additional point which I want to underline is that this two-level treaty structure could turn out to have very important consequences. First of all, the fact that there will not be anything called "constitution" means that it is easier to make additional changes if the dynamic disequilibrium described above does not work well. If the Constitutional Treaty had been approved by referendum in France and in the Netherlands, we would perhaps have the constitution and it would be very difficult to change anything.

The new treaty consists of two parts: the Treaty on the European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU). The first one I would call the "fundamental law" of the EU, whereas the second one is closer to "normal" laws at the national level. Unfortunately their contents are not quite the neat differences and packages we would like to see in a true constitution. Therefore, it is not a perfect separation. But it is a beginning of a process which might make it easier to make changes in future: it should be easier to change a normal law (the TFEU) than the fundamental law (TEU).

This is partially already the case. The TFEU includes a Passerelle clause. This means that on a number of issues the Council can switch to qualified majority voting just by unanimous Council decision (without any need to change the Treaty). This makes it possible to change the TFEU without going through the parliaments, without convening an intergovernmental conference. And I bet that when we talk about treaty changes next time one important aspect will be to say: "We make a difference between the TEU and the TFEU in the sense that for changes in the fundamental law in the TEU we continue to have a requirement that we need unanimous approval". The functioning of the European Union, in contrast, might be changed with some super-majorities so that no single member country can impede changes in that part of the construction. Of course, you will then have to have opt-out clauses for areas which are important to sovereignty, like perhaps for the UK.

One aspect of the way in which agreement on the new treaty has been achieved has not been sufficiently underlined: A fundamental policy decision of strategic nature seems to have been taken by the UK. In a nutshell the UK did not dare to say to the others, "We have these red lines and you cannot go ahead without us". Instead, what the UK said was, "We have these red lines, but we do not want to hold you up. You, the others, can go ahead and we just opt out". And that is, I think, extremely important because it means that from now on it will be very difficult for any single member state to say, "The EU cannot go ahead because we do not want it to". The answer will be, "You do not want to go ahead with us? Then let us (the vast majority) use the common institutions, and you just get an opt-out".

In many cases, the country that does not want to go ahead will be the UK. I do not think that a true multi-speed Europe will emerge in the sense of many different groups in different areas. Instead, the only major cleavage I see in Europe is between the UK and the continent. You see it with Schengen, which comprises basically the entire con-

tinent by 2008 already. You see it with the euro area which is expanding as well. We do not need to think about multiple speeds and core Europe all the time. The basic question is: Can and does the UK want to keep up with the pace of integration set on the continent?

Otherwise I think that the game is not yet decided. New rules will come into effect, and at present nobody really knows what the results of these rules will be, whether the EU will be more efficient, will take better decisions and more decisions, or whether because of the fighting between these new institutions decisions will become more difficult and more painful. And at any rate, by 2012 we will have to reinvent Europe again.

Gérard Roland*

I actually agree with nearly everything the former speaker said. I am just going to restate it with some different accents. First of all, the most important thing is that soon it is going to be behind us. In Europe there has been an immense progress in integration in the last twenty years. It has been really positive both regarding the deepening and widening of integration, the creation of EMU and its enlargement, etc. To be sure, it was good and necessary to have such success behind us, since there are many other crucial issues ahead on the European agenda where indeed the Commission and the institutions will have to show what they can do and what they can deliver for the EU-citizens.

We economists tend to think that a constitution means credibility. But in fact there appears to be a lot of ambiguity that is the result of compromises. Consequently, it depends on what you make of it. Take the President of the Council as an example. He could either be the new head of Europe, or he could be just an honorary person, just like the presidents of Italy and Germany, for instance.

What I find interesting in the constitution is precisely these flexibility clauses through which a change of the decision-making rules can be agreed by unanimity. We tend to think of the constitution in terms of commitment, credibility etc., but in the case of the EU we have to see it as an evolutionary process. Many people may now think, "it is behind us, let us now think of new policies" and so on. But the important thing is to make it work the way it is. And there are many things that can be used both with what is in there and also with the practices as they emerge.

Another important aspect to be addressed is the choice of the President of the Commission. In this context, the problem of ambiguity emerges again. The President of the Commission has to be elected by the European Parliament, and proposed by the Council. A priori, one can argue that the Council makes the decision as before and the Parliament is just asked to approve. The European Parliament wanted Chris Patton to be the President of the Commission, he was their candidate. Yet their wish was pushed aside and Mr. Barroso got the job. The European Parliament managed to get Mr. Buttiglione out. But if the EU wants to move ahead regarding this matter, we should probably follow the German practice. In Germany the big parties nominate their candidates and announce them before the elections. And there is also a campaign for him or her. Analogously, the European Parliament should say, "our candidate for the President of Commission is Mr. X". The Socialists should announce, "Our candidate is going to be Ms. Y". Of course the Council can always override them. But if there is a nomination of a candidate and a campaign for the President, the Council's intervention would meet with some difficulties. In addition, it is a political practice that has to evolve.

André Sapir*

In my opinion, the real problem persisting in the European integration process is that the "large" countries have become gradually less important. They are the victims that are making the biggest sacrifices. In order to make them willing to go on with integration they should get more power. The basic question is therefore: Is the June 2007 compromise going to solve this problem? And how come we are getting all the problems from Poland, for example, which is a large country?

I will use the second half of my time to answer these questions but would like start from where Daniel and Gérard left things. I also fully agree with the assessment that Daniel made. I just want

* University of California, Berkeley.

* Université Libre de Bruxelles.

to add one factual element. The intergovernmental conference is not going to finish in December, it is going to finish on October 15th. So it is going to be a very short intergovernmental conference. After that, there will be discussions in the capitals and in the European Council. The reason for this shortness is that indeed the mandate that has been given is extremely detailed, and there is very little room for manoeuvre.

What is also clear – something on which I agree with Daniel as well – is that in a sense there is a decrease in transparency. I do not like to use the term "democratic deficit". Everybody could go on a website to see the Constitutional Treaty. But we are not going to be able to see the new reform treaty. Just as they have done for the Treaty of Amsterdam and others, they are simply going to show us the "first differential". And one of the difficulties with reading the mandate is that you need to have the Treaty of Nice and the Constitutional Treaty, because in the new treaty reference is made to both. Sometimes it states how the Treaty of Nice is being amended, and sometimes it states how the Constitutional Treaty is going to be changed. So the legibility has clearly decreased. The degree of transparency is reduced.

I also agree on the dynamic disequilibrium. One of the important issues is the triangle between the Commission, the Council and the European Parliament. In the past, there was a clear dominance on the part of the Commission and the Council. Hence, according to the old model, the Commission was the gatekeeper and had the responsibility for putting forward legislation, whereas the Council was the ultimate decider. The Parliament had a relatively minor role. Now the role of the Parliament will be significantly enhanced with co-decision powers. Co-decision had already come up, and now its scope is being increased. As we saw in the services directives, for instance, the role of the Commission was minor. It put forward the legislative proposal and then what came out of it? In the ultimate result the Commission's proposal did not play any role. It was an agreement essentially between the Parliament and the Council. With co-decision, the initial proposal does not play a role. What matters is what you get at the end, and at the end there is conciliation between the Council and the Parliament. So the role of the Commission is getting less significant, and the Commission has to rethink its role with the new elements of the Presidency and the High Representative who is part of both the Council and the Commission. And indeed, if you speak to people in the Commission, they are saying, "We need to reinvent ourselves". This is the beginning of reinventing Europe. And there are different models for that. Gérard put forward one, with the elected Commission. But this more politicised role does not coincide at all with its role as the guardian of the treaty. So the Commission will have to choose in the future which role it wants to emphasize.

Now, what are the big projects coming up? And I will link this question to the big countries as well. It seems to me that there are two issues. One is about the Euro Area, and the other is about the external affairs. About the Euro Area: we recognize that the Ecofin can be broken down into the Ecofin with 27 countries, and the Euro-Ecofin. It is getting recognised that finance ministers of the Euro Area can decide on a number of issues among themselves. This has been institutionalised. At the same time the Euro Group will remain, consisting of the same finance ministers but meeting in a smaller group, without some of their advisors but with the President of the ECB. Therefore, the Ecofin is the place where finance ministers coordinate their economic policies, and the Euro Group is the place where they have an informal dialogue with the ECB. Consequently, the incentive for a country to become a member of the Euro Area might not be the exchange rate, but the simple fact that the country's finance minister can participate in the Euro Group meetings.

Then, there will be issues of the economic governance which are brought up by Mr. Sarkozy, like the Stability Pact, the euro-dollar exchange rate, etc. Also, the issue which will certainly come up is the matter of external representation in the IMF, the G7, etc. People are even discussing the notion of a High Representative for Money and Financial Affairs, which could be the President of the Euro Group. I think the issue of the governance of the Euro Group will become increasingly important. It is unlikely that we are switching to an economic government, but there will be some elements of visibility on the political side next to the central bank. For foreign affairs, I think there are negative and positive aspects. Let us consider Mr. Solana and his function now: he has no money, no instruments but only his voice. By linking him to the Commission, the EU can grant him the ability to link foreign policy with the typical instruments that a Commissioner has at his disposal, like foreign trade and foreign aid. And this will be the power of the new High Representative:

he will not be somebody who just speaks, but somebody who has the ability to influence the other traditional instruments of foreign economic policy inside the Commission. So he will be the person in charge of foreign policy but will be able to draw on the foreign economic policy tools, too.

Moreover, he will be a Vice President of the Commission and, at the same time, chair the Council meetings as well as coordinate foreign services that are to be built. So that person will have quite a big responsibility. Therefore, there will clearly be the issue of the future President of the Commission, because he is playing quite a big role in foreign affairs at the moment. For this reason, the High Representative and the President of the Commission will be competing against each other.

Mika Widgrén*

I mostly agree with the other speakers, and I do not have anything to add. So let me concentrate on the aspect of voting. I am glad that this political decision has been made, but we cannot be sure whether it will be accepted in all the member states. Regarding the voting procedures, the constitution has achieved an improvement in terms of transparency. The majority voting system can also be easily updated, if necessary. Although, as Gérard suggested, we might not desperately need any change to improve the role of the European Parliament, it actually seems that the internal rules of the Council largely affect the Parliament's capability to have influence on decisions. The new rules have important implications with this respect. Since these new rules effectively reduce the majority threshold in the Council, the Parliament becomes a more equal partner of the Council. Therefore, the new rules enhance the role of the European Parliament and are a step towards an implementation of a "true" co-decision system.

The voting rules themselves in this disguised constitution seem to be somehow cumbersome. Why not 50 percent? Think about the majority rule of 55 percent of the member states – what does it mean? Another concern is that the majority rule of 55 percent for the member states is accompanied by the 65 percent rule for population. Such a dual voting rule system delivers a clear advantage to the bigger member states like Germany. The 65 percent rule is more restrictive than the 55 percent one. And if the population criterion is more restrictive, then it dominates the membership criterion. I am still quite fond of the original idea of the Commission in the 1990s to have a simple "fifty-fifty" rule.

In Europe we have a huge variance in population. In the United States, the fifty-fifty-rule applies between the Senate and the House. That mimics the square-root rule which is still, I would say, valid for evaluating political fairness in the EU. So the deal would be "anyone from any member state has equal power". To repeat, the square-root formula gives every voter the same power, regardless of his or her member state.

When electing the national government, Germany has more voters than Finland does, for instance. So in the case of making a EU-wide political agreement among the national governments, Germans need to be compensated in terms of power to guarantee that each German has exactly the same power in Brussels as a Fin. And the so-called Penrose idea is that compensation should be made in proportion to the square-root of a country's population size. If we would decide everything in the EU by using a referendum, compensation would be strictly proportional to the population – "one man, one vote". But we have two types of majority voting and that is the reason why the square-root rule appears to work better. Actually, together with Daniel, I proposed to use 65 percent of the square-root of populations plus 55 percent of the members. Since it is rather difficult to change from 55 to 50 percent, that would actually be a very good compromise.

One brief additional comment on the EU budget. I expect some serious problems to emerge when the member states start to negotiate for the next budget framework, since the new members feel somehow mistreated in my view. They will claim that their budget share should be larger, which will, in turn, make the agreement with the old members rather difficult.

* Turku School of Economics, Turku.

Fiscal policy in EMU after the reform of the European Stability and Growth Pact

Manfred Weber and
Karl Knappe*

The EC Treaty's rules on fiscal policy, together with the European Stability and Growth Pact, have always been a particularly contentious part of the Maastricht Treaty. Fiscal policy remains the responsibility of member states. Their room to manoeuvre has been reduced, however, since national policies are not supposed to undermine Europe's common, stability-oriented monetary policy or work to the detriment of other member states.

From the outset, some governments have had difficulty following the rules.[1] November 2003 saw their first test when the economic slowdown in some member states sparked a conflict between the European Commission and the Council of Economic and Finance Ministers (ECOFIN) on how to deal with the deficits in France and Germany and led ultimately to the reform of the Stability Pact early in 2005.

In principle, it makes excellent sense to review and – if necessary – adapt the rules of a new currency regime a few years after its implementation. The reform of the Stability and Growth Pact in 2005 was no sober stock-taking exercise, however. It was motivated by the desire of national governments for greater flexibility and for enhanced consideration of local conditions during a difficult period.[2] As a result, the pact was adapted to the situation instead of adjusting national policies to the rules. Two-and-a-half years after the Pact's reform, some initial conclusions may now be drawn about whether the changes have resulted in better budgetary policy.

Experience to date with the reformed Stability and Growth Pact

The excessive deficit procedure

When the reformed Stability and Growth Pact took effect, three countries (Germany, France and Greece) were already running excessive deficits and two others (Italy and Portugal) joined them in the course of 2005. All nominal deficits of above 3 percent were deemed excessive without taking account of any exempting circumstances. This is progress compared to the contentious debate surrounding the warning issued to Germany in the winter of 2001.

The recommended *corrective action* complied with the rules of the Treaty and the Stability Pact. Germany and France both had to reduce their cyclically adjusted deficit by 0.5 percentage points a year. The recommendations to the other three countries were more stringent since the state of their public finances was significantly worse.

The formal decision by Italy and Portugal not to implement *one-off measures* may be linked to the reform of the Pact because these are now explicitly

Box 1

Excessive deficit procedure

1. Commission report if a member state exceeds at least one reference value or is in danger of running an excessive deficit. Factors taken into consideration include the level of investment spending, potential growth and the business cycle, implementation of the Lisbon Agenda, the amount of budgetary consolidation in "good" times and the sustainability of debt.
2. Council decision by qualified majority on whether an excessive deficit exists.
3. Council makes recommendations to the member state with a view to eliminating the excessive deficit within six months. Proposed corrective action should be more stringent if the level of indebtedness is high than if it is low.
   The cyclically adjusted deficit (after deduction of one-off or temporary measures) should be reduced by at least 0.5 percent of GDP every year.
4. If the member state fails to take action, the Council recommendations are made public.
5. If the member state still fails to follow the recommendations, it is given notice to implement, within a four-month period, the measures the Council considers necessary to reduce the deficit.
   If the member state follows the recommendations within four months, the Commission terminates the procedure.
6. If the member state has not taken any action after four months or publicly declares that it does not intend to take action, sanctions are imposed.
   The recommendations and procedural steps are suspended if the deficit is significantly and steadily reduced to around 3 percent of GDP.

* Association of German Banks.

[1] For example, nearly all countries failed to adjust their budgets during periods of strong growth and followed a counter-cyclical pattern during the downturn. In addition, there was a widespread tendency to bypass the rules of the Pact, for example, through overly optimistic assumptions in their national stability programmes, by using one-off measures, creative accounting and by misreporting (see Annett 2006).

[2] For an overview of the discussion about the reform of the Stability and Growth Pact and the details of the reform of the Pact, see Buti (2006), Fischer et al. (2006) and Morris et al. (2006).

Box 2

Excessive deficit procedures by country

Germany
- January 2003: Council decision that Germany had an excessive deficit, the deficit should be corrected by 2004.
- November 2003: suspension of the procedure.
- January 2005: Council decision that the deficit should be corrected by 2005.
- March 2006: Council decision to give notice to Germany to correct its excessive deficit of over 3 percent of GDP by 2007. The following factors were taken into consideration:
  - The planned increase in VAT in 2007.
  - Structural reforms which had been introduced would need time to take effect.
  - The structural adjustments of at least 1 percent of GDP planned for 2006 and 2007 reduce on average the cyclically adjusted balance by 0.5 percentage points annually.
- June 2007: end of the procedure, the deficit had fallen to 1.7 percent in 2006 and was forecast to fall further in 2007.

France
- June 2003: Council decision that France had an excessive deficit. Recommendation to correct the deficit by 2004.
- November 2003: suspension of the procedure.
- January 2005: Council decision that the deficit should be corrected by 2005.
- January 2007: end of the procedure. Deficit in 2005 just under 3 percent of GDP. Forecast for 2008: Deficit of 2.2 percent and a reduction of the structural deficit by 1.4 percentage points.

Greece
- July 2004: Council decision that Greece had an excessive deficit. Recommendation to correct the deficit by 2005.
- February 2005: Council decision to give notice to Greece to take action to correct its excessive deficit by 2007. Reason: revised statistics put the deficit well in excess of 3 percent.
- Autumn 2005: Council decision that Greece had taken effective action.
- April 2006: Greece called on to introduce sustained measures to reduce the deficit, to cut the cyclically adjusted deficit by at least 0.5 percentage points annually from 2007, to speed up its reduction of debt, to implement the planned pension reforms and improve methods of compiling and reporting data on the public sector.
- June 2007: end of the procedure. 2006 deficit below 3 percent of GDP. Forecast of 2.9 percent for 2007 and 2.7 percent for 2008. Structural deficit reduced by nearly 3 percentage points in 2005 and 2006. Forecast of a further decrease by 1.8 percentage points till 2009.

Italy
- July 2005: Council decision that Italy had an excessive deficit (more than 3 percent of GDP in 2004 and 4 percent of GDP in 2005 in the budget). Recommendation to correct the deficit by 2007. The government sharply revised the deficit upwards to 5.7 percent after going over the country's finances on taking office in 2006. Italy called on to reduce its structural deficit by at least 1.6 percentage points between 2005 and 2007.
- The measures introduced by the government to date are regarded as compatible with the Council recommendations as long as they are implemented effectively and in full and are complemented by further substantial measures in 2007. The Commission's autumn forecast anticipates a considerably stronger correction (2.3 percentage points) of the cyclically adjusted budget than recommended. The nominal deficit ratio is expected to be around 3 percent in 2007 and 2008.

Portugal
- September 2005: Council decision that Portugal had an excessive deficit. The Portuguese government had announced that it was expecting a deficit of around 6 percent of GDP for 2005. Recommendation to correct the deficit by 2008. Consideration of the economic situation, the significant need for remedial action and the government's decision not to implement one-off measures. Portugal called on to cut the structural deficit by 1.5 percentage points in 2006 and ¾ of a percentage point in 2007 and in 2008.
- The Commission takes the view that the government's measures to date go in the right direction and are within the timeframe. Nevertheless, despite the 2.1 percentage point reduction in the cyclically adjusted deficit in 2006, the Commission's spring forecast anticipates no further significant reduction in 2007 or 2008. Since Portugal was given a lengthy period to correct its deficit, there will be no further action by the Commission for the time being.

excluded from the assessment of the budgetary situation. Nevertheless, there is no reason to reward a decision not to implement one-off measures, as seems to have happened in the case of Portugal.

The *quality of the statistics* remains an element of uncertainty.[3] The rules of the Treaty can only be properly applied if sound statistical data is available. In the case of Greece, in particular, this was not the case for a long time. It is to be hoped that Eurostat's recently published revised figures on Greece's GDP will provide a more reliable basis.

In setting the *deadlines for eliminating excessive deficits*, the Council and the Commission have at times been even more flexible than the flexibilised rules. This sometimes went hand in hand with more stringent recommendations. In each case there were reasonable grounds for showing flexibility, such as forecasts of weak economic growth or the high level of new debt in Italy and Portugal.

This has certainly increased the acceptance of the new rules among governments and thereby reduced

[3] Mora and Martins (2007) show that there are significant differences in the reliability of government deficit and debt figures among member states. Further, they think that the size of deficits may have an impact on the way statistical offices revise data.

the risk of the deficit procedure imposing demands on countries which would be difficult to meet. On the other hand, the reform of the Stability Pact had already made the rules less rigid. There is a real danger that the consideration of additional special circumstances will weaken recommendations to cut excessive deficits even further.

It seems that governments will no longer resist categorisation of their deficits as excessive or protest when given notice to take remedial action if they are allowed more time to implement the corrective measures. If the Pact is not stringently applied for reasons of practicality, it must at least be ensured that countries *actually take the necessary measures.*

In all five countries the period from the emergence to the elimination of an excessive deficit has been and still is far longer than was intended by the Treaty. The flexibility of the revised Stability and Growth Pact with respect to the time of correcting an excessive deficit has again been stretched to the limits, and partly even beyond.

Longer implementation periods than are set by the Pact should be granted only if corrective action has already been decided on or if it is clearly to be adopted by parliament in the near future. In the cases of Italy and Portugal, the measures were judged merely on the basis of budget plans, on the assumption that they would be implemented in full and on the expectation of further activities.

Accelerated growth and low interest rates have made it significantly easier to bring down the excessive deficits. In general, the reduction of deficits can be attributed more to the *favourable economic climate* than to incisive action. Where action has been taken, it has aimed primarily at raising government revenue.[4] The extraordinary low level of interest rates for a long period of time has helped to keep public expenditure in check. Considering the high level of debt in many countries, the budgetary room for manoeuvre could quickly evaporate once interest rates start to rise.

True, the rise in spending has been curbed, but less than would have been possible in times of higher growth. Further, *progress towards future-oriented budget structures* has generally been slow. Public spending must be geared more strongly to promoting growth, and consumptive expenditure must be curtailed in order to fund these future-oriented areas and to create financial scope to deal with the impact of demographic trends on public finances.

All countries which have had excessive deficits since 2002 still have debt levels of over 60 percent of GDP. One should bear in mind that this level was simply the European average at the start of the 1990s. This figure, therefore, is highly influenced by the expansionary fiscal policies in the two decades before. Hence, a public debt close to 60 percent cannot be regarded as indicating solid or sustainable public finances.

The scenarios in the stability and convergence programmes concerning the development of *debt to GDP ratios* demonstrate clearly that the objectives of most governments are not ambitious. In France, Germany and Portugal, compliance with the strategies outlined in the programmes will not see debt ratios dip below the 60 percent threshold until 2015. Italy, under its baseline scenario, will be at 80 percent in 2015 and Greece at 70 percent. In around ten years' time, therefore, these countries will still lack an adequate cushion against additional age-related strains. This is exactly the time, when the ageing of the population will start to exert a significant impact on public finances. This is a long-term threat to cohesion in the euro area.

Avoiding excessive deficits

The Stability and Growth Pact contains rules designed to prevent excessive deficits from arising in the first place. Each country follows a medium-term budgetary objective, which is normally to achieve a balanced budget over the economic cycle. This "medium-term objective" (MTO) should leave sufficient room for automatic stabilisers to work in "bad times" and still keep the deficit below the 3 percent limit. Eight of the 13 euro countries had a cyclically adjusted deficit in 2006. A balanced budget is forecast for Belgium in 2008, for Austria in 2009 and for France by 2010. The remaining five countries are allowing themselves even more time.

The most recent stability programmes were published at the beginning of 2007. At the time, most of their *growth forecasts* were close to the Commission's projections in its autumn 2006 forecast. Only Greece and Portugal were significantly more opti-

[4] The improvement in the German budget, for example, can be largely attributed to an increase in VAT by three percentage points in 2007.

Box 3

Medium-term budgetary objectives

Rules for setting medium-term objectives:

- Objectives are based on the cyclically adjusted deficit. One-off measures are excluded (structural deficit).
- Country-specific medium-term budgetary objectives should be between
  - ➔ a cyclically adjusted deficit of 1 percent of GDP in countries with low debt and high potential growth and
  - ➔ a cyclically adjusted balanced budget or surplus in countries with high debt and low potential growth.

mistic. Greece expected an annual GDP growth rate of 4.0 percent between 2006 and 2008, compared to the Commission's forecasts of 3.7 percent p.a. The Portuguese government based its stability programme on a forecast of 1.9 percent per year, while the Commission expected only 1.5 percent. Despite their relative optimism, both countries expect still to have *cyclically adjusted deficits* at the end of the projection period. While the French growth forecast was in line with the Commission's assessment, the French government planned to achieve a surplus in its structural deficit in 2010 and the Commission expected a deficit of 1.8 percent in 2008. This gap can clearly not be closed in the years 2009 and 2010.

For some countries the Commission, in its 2007 autumn forecast, expects a more favourable outcome compared to the stability programmes, because the economic outlook has brightened somewhat. Germany, for instance, may be able to achieve a balanced budget in 2010.[5] Further, the growth forecast of Greece has now been confirmed, but the government is still far more optimistic with respect to the cyclically adjusted deficit than the Commission forecast that includes the government's measures taken since the publication of its stability programme.

In addition, the new Commission forecast now clearly shows that the French stability programme was based on an unrealistic assessment of future budget developments. France will neither be able nor is it willing to reach a balanced budget by 2010. The same is true for Austria, Italy and Portugal. All of them will miss the medium-term objective in 2009 and most probably also in 2010.

Most of the countries that failed to meet the medium-term objective in 2006 are adhering in their stability programmes to the benchmark of reducing the cyclically adjusted deficit by 0.5 percentage points annually. The budget plans in the countries with a cyclically adjusted deficit of more than 2 percent in 2006 expect to reduce their deficits by more than 0.5 percentage points per year. They are assumed to be experiencing "good times", since their GDP growth exceeds the increase in potential output. The envisaged adjustment paths of these countries are therefore in line with the Stability and Growth Pact.

But there are exceptions, namely Austria, Germany and Slovenia. Slovenia's structural deficit of 1 1/2 percent can probably be deemed acceptable over a longer period of time for a country in a catch-up phase. Austria and Germany cannot count on such considerations. In their stability programmes, they do not fulfil the requirement of a yearly reduction of the cyclically adjusted deficit by 0.5 percentage points. Both governments point to structural reforms taking place. In the case of Germany, this view may be correct, as the country's deficit has been reduced at high speed. This development is also reflected in the Commission's economic fore-

Table 1

Cyclically adjusted deficit at the end of the projection period (in percent of GDP)

	Stability programmes		Commission's 2007 autumn forecast
	2009/10	Percentage point change on 2006	2009
Austria	+ 0.4[a)]	+ 0.3	– 0.8
Belgium	+ 0.9	+ 0.5	0.0
Finland	+ 2.8[a)]	– 0.0	+ 4.0
France	+ 0.2[a)]	+ 0.7	– 2.4
Germany	– 0.6[a)]	– 0.3	– 0.2
Greece	– 1.6	+ 0.6	– 2.3
Ireland	+ 1.6	– 0.4	0.0
Italy	– 0.4[a)]	+ 0.9	– 1.9
Luxembourg	+ 0.9	+ 0.7	+ 1.7
Netherlands	+ 0.7	+ 0.1	+ 0.7
Portugal	– 0.5[a)]	+ 0.7	– 2.1
Slovenia	– 1.1	+ 0.1	– 1.0
Spain	+ 1.6	– 0.1	+ 1.4

[a)] 2010.

Sources: European Commission (2007a and 2007b); national stability programmes; Association of German Banks.

[5] According to the recent German government forecast, the country will have achieved a balanced budget in nominal terms in 2007.

Table 2
Growth in real GDP and potential output in the projected period (2006 to 2009 or 2010, in percent per year)

	Gross domestic product		Potential output
	Stability programmes	Commission's 2007 autumn forecast	Stability programmes
Austria	+ 2.6	+ 2.8	+ 2.6
Belgium	+ 2.3	+ 2.4	+ 2.8
Finland	+ 2.9	+ 3.4	+ 3.8
France	+ 2.3	+ 2.2	+ 2.0
Germany	+ 1.8	+ 1.9	+ 1.8[a)]
Greece	+ 4.0	+ 3.7	+ 4.0
Ireland	+ 4.8	+ 4.9	+ 4.7
Italy	+ 1.5	+ 1.5	+ 1.7
Luxembourg	+ 4.6	+ 4.7	+ 5.2
Netherlands	+ 2.4	+ 2.8	+ 2.4
Portugal	+ 2.1	+ 1.5	+ 2.1
Slovenia	+ 4.3	+ 4.5	+ 5.2
Spain	+ 3.4	+ 3.5	+ 3.5

[a)] Based on GDP growth and output gap figures.

Sources: European Commission (2007a and 2007b); national stability programmes; Association of German Banks.

cast. When it comes to Austria, however, the Commission does not expect to see any improvement.[6] Furthermore, this country is also an illustration of the fact that the stability programmes often do not contain all the required information and sometimes fail to spell out the budgetary implications of policies.[7]

The objective of a balanced budget in the medium term is apparently still not being taken as seriously as necessary by some governments. The idea that public deficits will enhance growth is seemingly still relatively popular among politicians even though there is plenty of evidence that sound fiscal policy can do more to boost employment than deficit spending. Sometimes national political concerns or constraints are responsible. This is illustrated by the budget plans and tax-cutting programme in France, the additional expenditure programmes in Germany after public income grew more than anticipated, and the watering down of pension reform in Italy.

Promoting sustainability

All in all, the reformed Stability and Growth Pact has not encouraged participating countries to reduce their debt rapidly in order to make public finances fit for the future. The repeated warnings in the Council's recommendations about budget sustainability have done nothing to change this. Contrary to what many people think, the deficit and debt reference values are not goals but ceilings that should not be exceeded under any circumstances. This requires factoring in a safety margin that is large enough to cope with the budgetary challenges posed by cyclical and, above all, demographic developments.[8]

In the February 2006 report by the Economic Policy Committee and the European Commission "The impact of ageing on public expenditure: projections for the EU 25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004 to 2050)", the Commission calculates the gap between the structural deficits in

[6] "The overall conclusion is that, in a context of robust growth prospects, the programme envisages slow progress towards the MTO through a relatively back-loaded adjustment that is based mainly on not-fully-specified expenditure restraint. There are risks to the achievement of the budgetary targets after 2008 and the MTO might not be reached by the end of the programme period." (Recommendation for a COUNCIL OPINION on the updated stability programme of Austria, 2006 to 2010, 30 May 2007).

[7] "The stability programme does not contain a qualitative assessment of the overall impact of the September 2006 implementation report of the National Reform Programme within the medium-term fiscal strategy. In addition, it provides no systematic information on the direct budgetary costs or savings of the main reforms envisaged in the National Reform Programme and its budgetary projections do not explicitly take into account the public finance implications of the actions outlined in the National Reform Programme." (Recommendation for a COUNCIL OPINION on the updated stability programme of Austria, 2006 to 2010, 30 May 2007).

Box 4
Rules on the adjustment path towards medium-term budgetary objectives

- Member states which have not yet achieved their medium-term budgetary objective should take steps to meet the objective within a reasonable period of time.
- Benchmark for determining what constitutes a reasonable period: reduction of the cyclically adjusted deficit by an average of 0.5 percentage points of GDP annually.
- Adjustment should be swifter in good times than in bad. "Good times" are periods in which output exceeds its potential level.
- When defining the adjustment path, structural reforms may be taken into account as long as they have a verifiably positive effect on the long-term sustainability of public finances.

[8] An overview of the different concepts of sustainability of public finances and the risks contained in the budgets of the euro area member states can be found in ECB (2007) and Giammarioli et al. (2007). The relationship between the Stability and Growth Pact and the future costs of population ageing under different pension regimes is discussed by Beetsma and Oksanen (2007). All these publications show clearly the necessity of timely government action to cope with the negative effects of future demographic changes on public finances.

Table 3
Public debt at the end of the projected period (in percent of GDP)

Country	Stability programmes	Commission's 2007 autumn forecast
	2009/10	2009
Austria	56.8[a)]	57.2
Belgium	74.3[a)]	79.0
Finland	33.7[a)]	29.8
France	58.0[a)]	64.1
Germany [1)]	64.5[a)]	60.3
Greece	91.3	88.8
Ireland	21.9	28.5
Italy	100.7[a)]	101.2
Luxembourg	8.5	5.4
Netherlands	44.2	41.7
Portugal	62.2[a)]	64.5
Slovenia	27.7	23.8
Spain	32.2	33.0

[a)] 2010.

Sources: European Commission (2007a and 2007b); national stability programmes.

public finances and a sustainable budget for 2050 at around 3½ percentage points of GDP. If this gap is not closed, the average debt ratio in the EU will rise – according to the Commission's calculations – to almost 200 percent.

If all medium-term budgetary objectives were met in 2010, the sustainability gap would only be half as wide and the debt ratio in 2050 would be around 80 percent – still significantly above the reference value. Unfortunately, past experience and the most recent stability programmes and political statements make even this prospect unrealistic.

Most national budgets currently lack sufficient financial room to cope with the impact of the demographic trend. Yet it will only be about ten years before the adverse effects begin to be felt. So there is no justification for delay in correcting excessive deficits or bringing down high debt ratios. Introducing more flexibility into the Stability Pact has clearly sent out the wrong signal.

This is all the more regrettable given that, as the above calculation shows, comparatively modest action taken today would deliver noticeable beneficial effects in the long term. At present, a fiscal policy focussing on sustainability would not, in most member states, require much more stringent measures than those already contained in their stability programmes. In a few years' time, with no change in the governments' present attitude, the measures, which will then be necessary to reach a sustainable level of debt, will have to be much tougher.

Budgetary governance at EU level

The reform of the Stability Pact did not change its fundamental nature. With good reason: the common monetary policy in the euro area is complemented by a central framework for national fiscal policy. Admittedly, some of the expectations associated with the Pact are not always realistic. This applies, for example, to the idea that peer pressure in the Council would encourage "good" fiscal behaviour. This is based on the assumption that "peer pressure" will lead national governments to obey the rules in a common interest. However, looking at the experience since mid-2005, for example the comparatively long adjustment periods, the governments seem to lean more towards generosity, knowing that they may get into difficulties themselves one day and will then depend on the understanding of their counterparts.

The whole procedure also suffers from the fact that undesirable developments often come to light only after a country's finances are re-examined after a change in government or when previously reported figures are revised. Re-examining the books on taking office may be a prevalent political practice. But if the ensuing "surprises" occur too frequently, they are no longer convincing, particularly if successive governments are drawn from the same small group of parties. Then they only show that the response to troubled public finances is rarely a consistent policy of consolidation.[9]

This is no small problem, as a central element of the Treaty depends on reliable data. Otherwise it is unable to function effectively. At present, new figures put up by a government have to be accepted *nolens volens,* at least after an examination by Eurostat. Unfortunately, up to now, there is no strong enough incentive not to tinker with statistical data which are the foundation of one of the most important parts of the Maastricht Treaty.

[9] There may be also a relationship between political instability, i.e. a higher risk for a ruling government being voted out of office, and the level of deficits of the country in question (see Debrun and Kumar, 2007), as such a government may try to positively influence the electorate by generous public expenditures.

Has the revision of the Stability and Growth Pact changed fiscal policy in EMU?

Both the Treaty's articles on fiscal policy and the Stability and Growth Pact are necessary to ensure smooth interaction between the central bank and fiscal policy in a currency union where monetary policy is made centrally and fiscal policy at national level. It was doubtful from the outset whether practice would match up to promise. Governments cannot generally be accused of breaking the rules. Technically, there is little to fault them about their behaviour to date, even if the rules have occasionally been stretched to their very limit. This has usually been done for reasons that at least bear considering.

In the political arena, it is not easy to stick to fiscal ideals in the face of narrow short-term interests or party strategies. On the other hand, experience has shown that popular steps are often not essential in safeguarding a politician's post. In any event, these are not examples of long-term policy thinking. There is no arguing with financial arithmetic, particularly when it comes to a combination of excessive debt and future demographic strains.

Looking at typical patterns of behaviour among politicians, at first sight, the lack of sanctions in the preventative arm of the Stability Pact would seem to be a shortcoming. Yet, penalties of this kind would run counter to the fundamental concept of the Treaty, which provides for sanctions if the behaviour of one member state damages another.

The performance of fiscal policy in the euro area since 2005 has not been as smooth as one would have hoped, but we have seen no severe crisis as that of the period between 2003 and 2005. Yet, looking at how some problems have been addressed, the feeling remains that, when difficulties arise again, we will see renewed attempts by governments to test the limits of the new Pact or to change the rules instead of making the necessary adjustments. This feeling is based above all on the persisting unwillingness to act with the long term in mind and see sustained budgetary consolidation as one of the most important tasks for the future.[10] The reform of the Stability Pact aimed at a higher "economic rationality". This alleged improvement in economic rationality of the revised Pact has up to now not led to a perceptible improvement in the economic rationality of fiscal policy.

[10] Coeuré and Pisani-Ferry (2005) call for a "Sustainability and Growth Pact". Even if the technical problems of their proposition (including the present value of age-related net implicit liabilities, ARNIL) may turn out to be too grave and leave too much room for debate about statistical definitions and calculations, the underlying idea deserves full support. In the end it may turn out that the Stability and Growth Pact must be enhanced by including sustainability rules in order to force governments to take long-term needs into consideration. Otherwise, one of the authors' conclusions will prove to be correct: "Failure to agree on and enforce a common fiscal philosophy could be a strong negative signal for the future of monetary union."

References

Annett, A. (2006), *Enforcement and the Stability and Growth Pact: How Fiscal Policy Did and Did Not Change Under Europe's Fiscal Framework,* IMF Working Paper 06/116.

Beetsma, R. and H. Oksanen (2007), *Pension Systems, Ageing and the Stability and Growth Pact,* European Commission Economic Papers 289.

Buti, M. (2006), *Will the New Stability and Growth Pact Succeed? An Economic and Political Perspective,* European Commission Economic Papers 241.

Coeuré, B. and J. Pisani-Ferry, (2005), *Fiscal Policy in EMU: Towards a Sustainability and Growth Pact?*, Bruegel Working Paper 2005/01.

Debrun, X. and M. S. Kumar (2007), *The Discipline-Enhancing Role of Fiscal Institutions: Theory and Empirical Evidence,* IMF Working Paper 07/171.

European Central Bank (ECB, 2007), "Challenges to Fiscal Sustainability in the Euro-area", *Monthly Bulletin of the ECB,* February 2007, 59–72.

European Commission (2007a), Public Finances in EMU – 2007, *European Economy* 3, Luxembourg: Office for Official Publications of the EC.

European Commission (2007b), Economic Forecast, Autumn 2007, *European Economy* 7, Luxembourg: Office for Official Publications of the EC.

Fischer, J., L. Jonung and M. Larch (2007), *101 Proposals to Reform the Stability and Growth Pact. Why So Many? A Survey,* European Commission Economic Papers 267.

Giammarioli, N., C. Nickel, P. Rother and J. P. Vidal (2007), *Assessing Fiscal Soundness – Theory and Practice,* European Central Bank (ECB) Occasional Paper 56.

Mora, L. G. and J N Martins (2007), *How Reliable are the Statistics for the Stability and Growth Pact?,* European Commission Economic Papers 273.

Morris, R., H. Ongena and L. Schuknecht (2006), *The Reform and Implementation of the Stability and Growth Pact,* European Central Bank (ECB) Occasional Paper No 47.

China – Opportunities of and Constraints on the New Global Player

Horst Siebert*

In transforming its centrally planned economy, China did not experience a J-type transformation curve like that seen in Central and Eastern Europe in the 1990s, when Poland, Hungary and the then still united Czech and Slovak Republics lost roughly 20 percent of their GDP. In contrast, China has enjoyed high average annual GDP growth rates of nearly ten percent for the last 25 years since the Deng Xiaoping reforms commenced in 1978. In 2006 it achieved a USD 2.7 trillion economy; the preliminary figure for 2007 GDP is USD 2.9 trillion (World Bank 2007a; World Bank Beijing Office 2007a and 2007b). China now represents the world's third largest economy, accounting for 5 percent of world GDP in 2005. For many economists, this success story is a puzzle.

Expressed in per capita terms, China's output is still low. Gross national income at current market prices (GNI) per capita stood at USD 2,000 in 2006, at the same level as the average for the low and middle income countries (USD 2,037) and at about 5 percent of the US level. According to this measure, China ranked 128th in the world economy in 2005. World Bank data for 2004 indicate that 9.9 percent of the total population lives on less than one US (PPP) dollar per day.

Factors driving growth

Growth occurred evenly over the last two and half decades with high average annual real GDP growth rates of nearly ten percent per decade (Table 1): the preliminary figure for 2006 is 10.7 percent. However, quarterly growth rates show a high volatility. GDP per capita has risen by an average annual real rate of about 8 percent since 1978 (IMF 2006a) and real wages have also increased by 8 percent (since 1987). According to World Bank estimates, poverty was reduced for 422 million people in the period 1981-2001, using the criterion of income of one US dollar per day. The two main drivers of growth were exports and investment (Siebert 2007a and 2007b).

Exports as a stimulus for growth

Exports are a major driver of economic growth in China, amounting to 34 percent of GDP (2005). This figure relates to exports from mainland China, i.e. excluding exports from Hong Kong. This high export share is unusual since large countries normally have a much lower export share. The trade account had a surplus of 4.4 percent of GDP in 2005 and the current account surplus stood at 7.1 percent of GDP in the same year; in 2006 the current account surplus had risen to 9.5 percent of GDP. China has a world market share of 6.8 percent, measured in terms of merchandise trade (2005). Foreign trade is estimated to contribute between 3 and 4 percent of GDP growth (World Bank Beijing Office 2007b).

Chinese exports have risen in real terms at the rapid rate of 12.4 percent since 1980, while world merchandise exports have expanded at 4.9 percent over the same period. In the period 1995 to 2005 China's exports rose more rapidly at 19.7 percent (World Bank 2006a). Rising exports pulled up the economy. They induced production, investment and employment. Note that in order to determine the increase in real terms, i.e. in the volume of exports, nominal export figures, given in renmimbi, have to be corrected by a price deflator. Usually the trade deflator for goods published by the Customs Administration is applied.

Nearly all exports represent merchandise exports, i.e. exports of goods (excluding services). Almost all merchandise exports are produced in the manufacturing sector (92 percent in 2005). Yet while China is considered to be the manufacturing workshop of the

Table 1

China: Real growth rates of GDP, exports and investment[a)]

	1970–1980	1980–1990	1990–2000	2000–2006	1980–2006
GDP	6.2	9.3	10.4	9.8	9.8
Exports	n.a.[b]	5.7	14.1	23.3[c)]	12.4[d)]
Gross capital formation	6.8	8.6	10.6	14.5[b)]	10.6[c)]

[a)] Geometric annual average growth rates in constant 2000 US dollar prices. Data for 2006 on the basis of World Bank projections. – [b)] n.a. = not available. – [c)] 2000–2005. – [d)] 1980–2005.

Source: World Bank, *World Development Online Indicators*, September 2007.

* Kiel Institute for World Economics, Germany, and SAIS Bologna Center, Johns Hopkins University, Italy.

world, it is astonishing that its exports consist not only of low technology products. Almost one third of its merchandise exports (31 percent) are high technology exports. In this respect, China is playing ball in the same league as Japan (22 percent), Korea (32 percent), the Netherlands (30 percent), the United Kingdom (28 percent) and the United States (32 percent), according to the World Bank classification (World Bank 2007c). Although China's high technology exports rely on considerable high technology imports and the issue of delineating high technology exports plays a role, China's export basket is seen to be moving up-market into higher value goods (World Bank Beijing Office 2006b). WTO membership (since 2001) has further improved China's export conditions by securing access to foreign markets.

Investment – the other driver

Gross capital formation stands high at 38.7 percent of GDP (2004), with annual average growth rates amounting to 10.6 percent in the period 1980 to 2005 (see Table 1). Foreign direct investment (FDI) plays an important role in total investment. In 2005, net capital inflows of USD 68 billion were FDI (3.6 percent of GDP and about 8 percent of gross capital formation) – the preliminary figure for 2006 is estimated at USD 60 billion.

Among other components of GDP on the expenditure side, household final consumption accounted for 48.5 percent and general government final consumption for 10.2 percent in 2004. Government investment is included in total investment. Gross national savings for 2005 are estimated at 47 percent of GDP (IMF 2006b). Households presently save close to thirty percent of their disposable income, while firms account for the other part of gross national savings. The difference between the share of savings and investment in GDP, the savings-investment gap, reflects the current account surplus. Marginal capital productivity is declining.

Entrepreneurship

An important contributor to growth is the entrepreneurial spirit of the Chinese. Historically, they have been traders, and they enjoy accumulating family wealth. These characteristics together with the traditional value orientation represent powerful incentives for effort and entrepreneurship and form a strong foundation for bottom-up developments of individuals and municipalities; they encourage economic agents – the entrepreneurs – to organize new combinations of the factors of production in the sense of Schumpeter. The Chinese seem to have been waiting for the Deng Xiaoping reforms, ready to exploit the options created and to embrace capitalism in spite of the Communist Party's official philosophy. It is no wonder that, according to a survey conducted by the University of Maryland, the Chinese now show a larger acceptance of the market economy than the three large continental countries of Europe: 74 percent of the Chinese population supports the market economy compared to 36 percent in France. Entrepreneurs of Chinese origin living outside mainland China have also played an important role in China's economic growth.

The fragility of the banking sector

Whereas the sector of state-owned firms as a whole no longer makes losses, the banking sector is fragile. Banks are state-owned. This applies to the four big state-owned commercial banks as well as to twelve joint-stock commercial banks, city and rural cooperative banks, other banks and asset management companies. Three of the state-owned commercial banks have been partly privatized through initial public offerings, with the state (and the state-owned management companies) still holding about 70 to 80 percent of equity. For instance, in October 2006, 17 percent of the shares of the Industrial and Commercial Bank of China (ICBC), the largest of the four state-owned banks, were introduced to the Hong Kong and Shanghai bourses in the largest world-wide initial public offering ever, making this institution the fifth largest bank with a market capitalization of USD 147 billion. In addition, 8.5 percent of its assets are held by Goldman Sachs, Allianz and American Express. State-owned banks have chosen strategic partners (IMF 2006b). The other two state-owned commercial banks are the Bank of China and China Construction Bank. The initial public offering of the Agricultural Bank of China is pending. Asset management companies are the vehicles through which the government exercises its ownership rights vis-à-vis the four state-owned commercial banks. Each one of the asset management companies is responsible for one of the four state-owned commercial banks.

But China's banking system is fragile. Asset quality is poor and the capitalization of banks is low. There is massive government intervention in the banking

system. Banks are not competitive in terms of international standards. As a result of monetary policy, the liquidity of the banking system is high, banks hold large excess reserves, inter-bank interest rates are low and credits are expanding strongly. Fully functioning bond and equity markets, which could allocate savings to investment more efficiently than bank intermediation, have not yet been developed. Moreover, bank intermediation is subject to political influence and competes with informal financing; more than half of investment is self-financed. Investing savings abroad is not a permitted option for savers. Bank deposits are the main form of savings.[1] Chinese savers seem to have confidence in the state-owned banks. If the depositors ever lost this confidence, a severe risk for a stable growth process in China would arise. Thus it is essential that bank failures leading to bank runs be prevented.

The non-performing loans, resulting from the political pressure on banks to provide credit to inefficient state-owned enterprises, represent a major risk. The stock of the banking system's non-performing loans was estimated at about 40 percent of GDP in 2004 (Blanchard and Giavazzi 2005). Other sources put the percentage of total bad loans in GDP at 21 and – with a higher credibility – at 56 (Roubini and Setser 2005). The proportion of non-performing loans to GDP fell in 2005 (IMF 2006b). However, their total stock is still estimated at 25 percent of GDP at year-end 2005, including 8 percent at the asset management companies (IMF 2006b).

In the past, the government has had to recapitalize the state banks from time to time with sizable amounts. In 1998, the government spent USD 32.6 billion (about 3 1/2 percent of GDP) in order to save the four then wholly state-owned commercial banks (Prasad 2004). In 1999 to 2000 the government injected about USD 169.1 billion or 14 percent of GDP via state-owned asset management companies into the financial sector to clean up the balance sheet of the state-owned commercial banks (ibid.). Bad loans of this magnitude were taken off the bank's books in 1999 and transferred to four asset management companies (Roubini and Setser 2005). In 2003, USD 45 billion or about 4 percent of GDP were used for the same purpose. The People's Bank of China transferred the amount to holding companies in order to recapitalize two of the four state-owned banks (China Construction Bank and the Bank of China). The banks will not convert these assets into renmimbi but rather retain them as international reserves. This signifies an increase in the central bank's balance sheet risk. In 2005, a sum of USD 15 billion was injected into the ICBC and USD 30 billion were transferred to its asset management company. Chinese press reports indicate that a capital injection of USD 100 billion will be needed to prepare the Agricultural Bank of China (with 24 percent of its loans non-performing) for an initial public offering.

China makes use of its international reserves to clean up its banks' balance sheets. Astonishingly, in 2004 China's reserves relative to GDP amounted to a share not too different from that of the non-performing loans of the state-dominated financial system, namely 40 percent. Viewed this way, the international reserves partly represent an insurance against a future failure of the banking system, and this view mitigates against condemning China's accumulation of international currency reserves too harshly.

Monetary policy, balance of payments and exchange rate policy

Money supply and inflation

China experienced high inflation rates in the 1980s and 1990s. For instance, the change in the consumer price index was 19 percent in 1988 and reached its peak of 24.2 percent in 1994. Inflation rates were also extremely volatile. Whereas the inflation rate was amounted to 18.3 percent in 1989, it had fallen to a comparatively low 3.1 percent just one year later. The price level declined in the context of the Asian financial crisis with – 0.8 percent in 1998 and – 1.4 percent in 1999. Compared to the 1980s, inflationary pressure stemming from a considerable increase in the money supply and strong credit expansion was somewhat tempered in the past few years. Consumer price inflation, driven mainly by food prices, was between 0.26 percent (in 2000) and 3.99 percent (in 2004). Recent inflation rates have also been far less volatile than those of fifteen years ago. The money supply (broad money according to the IMF definition) rose in the range of 14.0 percent to 19.6 percent in the period 2000 to 2005 (IMF 2006b). Credit to non-state sectors expanded in a volatile fashion in the same period

[1] In principle, with the WTO opening of the Chinese banking system in 2007 foreign banks should be allowed to offer non-Chinese financial assets.

with rates fluctuating between 2.1 (2001) and 26.5 percent (2002).

An independent monetary policy is complicated by high current account surpluses as they increase outside money. The Chinese Central Bank – the People's Bank of China – purchases foreign exchange and accumulates reserves. Because of the high current account surpluses, it is necessary to sterilize the monetary expansion. That is why the People's Bank of China sells sterilization bonds to the state-owned banks. From 2003 to 2004 the stock of sterilization papers increased by about 265 percent, from 2004 to 2005 it increased by another 88 percent or USD 117 billion – putting the value of the overall stock of bonds at USD 250 billion. However, this vast increase covers only slightly more than half of the increase in reserves. Not all of the outside money can be sterilized. In the future, bonds to China's new Sovereign Wealth Fund may be used to mop up part of the excess liquidity.

Balance of Payments

China has registered a surplus both in the current and in the capital account of its balance of payments for many years. The capital account includes FDI and portfolio flows. In 2006, the surplus in the capital account disappeared in spite of high net FDI inflows. China uses the surplus to accumulate reserves (Table 2). In 2006, the surplus of the current account stood at USD 250 billion, making up 9.5 percent of GDP. This translates into an increase of reserves of USD 247 billion. For 2007, a surplus of USD 378 billion or 11.9 percent of GDP is expected. Then total reserves equal USD 1,428 billion, amounting to about half the GDP.

Capital account controls

Capital flows are controlled. Though current account convertibility has existed since 1996, the capital account has not been liberalized. China is following a cautious and gradual approach to capital account liberalization, taking into consideration the fragility of its banking system. The Asian crisis of 1997 and other currency disruptions, like the financial crisis in Sweden of 1992, have shown the risk of liberalizing the capital account when the banking sector is not sufficiently robust, i.e. when it is not adequately regulated to withstand shocks and when banks have too much leeway in extending loans. From the point of view of the sequencing of liberalization, it is reasonable to make the foreign exchange rate more flexible first and then to liberalize the capital account in a second step. It would be risky to introduce residents' convertibility immediately and fully.

Exchange rate policy

The exchange rate of a country in transition to a market economy can be expected to go through two phases. In the first phase, the transformation process and the opening up to trade, including a sizable reduction in import tariffs, put the export sector and the exchange rate under pressure which depreciates the currency. In the second phase, when the competitiveness of exports has been established, apprecia-

Table 2

China's current and capital account balances

	Current account balance	Capital account balance	Errors and omissions[a]	Increase in gross official reserves	Accumulated foreign exchange reserves[b]
Annual average 1990–2000	+ 13.3	+ 15.2	– 12.8	+ 15.7	–
2001	+ 17.4	+ 34.8	– 4.7	+ 47.5	212
2002	+ 35.4	+ 32.3	+ 7.5	+ 75.5	286
2003[c]	+ 45.9	+ 52.8[c]	+ 18.0	+ 116.7	403
2004	+ 68.7	+ 110.7	+ 26.8	+ 206.2	610
2005[d]	+ 160.8	+ 63	– 16.4	+ 207.3	819
2006	+ 250 (9.5)[e]	– 3[f]	–	+ 247	1,066
2007[g]	+ 378 (11.9)[e]	– 20[f]	–	+ 358	1,428
2008[g]	+ 408 (10.7)[e]	– 10[f]	–	+ 398	1,826

[a] Includes counterpart transaction to valuation changes. – [b] Accumulated reserves in a specific year are not identical to the additions of a period plus the reserves of the previous year due to exchange rate changes. – [c] 2003 figure includes the counterpart transaction to the USD 45 billion of foreign exchange reserves used for bank recapitalization. With this figure, the capital and financial balance would show a surplus of USD 143.7 billion. – [d] Includes bank capitalization and foreign exchange swaps, estimated at USD 28.8 billion. – [e] Numbers in parentheses show the share of GDP in percentage. – [f] Including errors and omissions. – [g] Forecast.

Data sources: 1990-2005: IMF, International Financial Statistics, Online Database, October 2007; Forecasts: World Bank Office, Quarterly Update, September 2007; own calculations.

tion is likely. These two phases can be observed in China.

Throughout the 1980s and the early 1990s, the nominal and the real effective exchange rate of the renmimbi depreciated sharply. The nominal rate (renmimbi to the US dollar) depreciated from 1.5 in 1980 to 8.6 in 1994 (Figure 1). The real effective exchange rate index (which is the inverse of the IMF's real exchange rate index) rose from 33,3 in January 1980 to 167 in June 1993, with February 2000 set equal to 100 (in contrast to the index used by the IMF, an increase in this index denotes a real depreciation). From 1994 to 1998, the renmimbi appreciated nominally relative to the US dollar, i.e. the RMB/USD rate fell. It then was held steady at 8.28 until 2004. Since 2005, the renmimbi has appreciated by 8.28 percent to a rate of 7.65 in May 2007. This looks like a soft crawling peg to the US dollar. In real terms, the renmimbi appreciated from 1993 to 2001, then depreciated unsteadily until March 2007. However, it is amazing that it has remained constant since 2003. It has even depreciated since 2000.

China has followed a policy of pegging the renmimbi, attempting to keep it more or less stable or changing it only slowly. Effective June 21, 2005 the renmimbi is no longer tied to the US dollar alone, but to a basket consisting of the US dollar, the euro, the yen and the Korean won. In addition, the Singapore dollar, the British pound, the Malaysian ringgit, the Australian dollar, the Russian rouble, the Thailand baht und the Canadian dollar are taken into consideration. The weights of the currencies in the basket are supposed to reflect the importance of China's trading partners, but are not disclosed by the Chinese central bank. Disclosure of the weights would allow speculators to guess where the renmimbi might be in the future and when the central bank is likely to intervene. In practice, each day trading on the spot market starts with a central parity of the renmimbi to the US dollar determined by the weighted average of fifteen market makers appointed by the People's Bank of China rather than beginning with the closing price of the previous day. Intraday movements are constrained by a band of 0.3 percent on both sides.

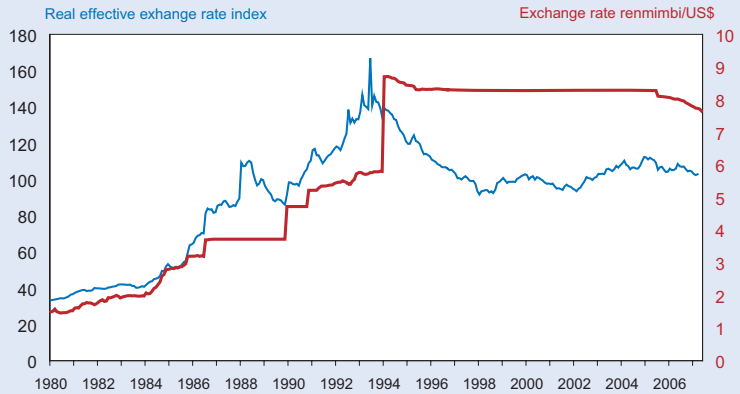
Is the renmimbi undervalued?

Determining the correct exchange rate is a tricky issue. After all, it is a counterfactual question. Economic forces pull the exchange rate in different directions. Some forces clearly work in favor of an appreciation of the renmimbi. Following the trade flow view of the exchange rate, the high current account surpluses of 9.5 percent of GDP in 2006 and the expected surplus of 11.9 percent of GDP in 2007 clearly suggest an appreciation of the renmimbi. Following the capital flow view of the exchange rate, labor productivity growth and China's improved access to other countries' markets also operate in favor of an appreciation, making China more attractive for foreign capital. Other factors, however, would work in favor of depreciation, among them too high an inflation rate (representing a real appreciation but requiring a nominal depreciation) and a liberalization of the capital account. Thus, residents' convertibility would induce market participants to hedge political risks and let them place their savings abroad, in this way increasing the demand for US dollars, euros and other currencies, implying an increased supply of the renmimbi and dragging its value down.

Consequently, the existing capital controls for residents imply an overvalued renmimbi, i.e. the renmimbi would depreciate strongly with a liberalized capital account. Combining the trade flow and the capital flow views, the accumulation of reserves definitively points in the direction of an appreciation. Most importantly, it is the real exchange rate that determines the

Figure 1

RENMIMBI: NOMINAL AND REAL EXCHANGE RATES
monthly values



.Source: IMF, International Financial Statistics August 2007; own calculation.

current account. Yet the real exchange rate has remained constant since 2003 and has even depreciated since 2003. China has used the international reserves as an insurance against the fragility of its banking system (Siebert 2007a). In any case, reducing the Chinese current account surplus will not necessarily solve the US current account deficit problem. Thus, a lower Chinese surplus would raise the world real interest rate and would hurt the US through another mechanism (Corden 2007).

Property rights

Establishing property rights is crucial in transforming a communist, centrally planned society into a market economy. They set incentives for the economic agents to produce, invest, innovate, save and provide work effort. In an approach different from the transformation countries in Central and Eastern Europe, China has developed its property rights step by step. They come in the form of land use rights, ownership titles of firms and residential titles. Land use rights are at the core; even firms need them. Although property rights grant the right to use land, run firms, construct, sell and use buildings and own apartments, all these rights are subject to control by collective authorities, most importantly collectives, municipalities and the Communist Party. Property rights are far different from their interpretation in market economies.

Land use rights for individual farmers were introduced in the Deng Xiaoping reforms. Land use rights are leases on the use of land. They now are granted for 30 years, were initially only given for one year, then for ten and afterwards for twenty years. However, agricultural land is owned and administered by the collectives. According to the Land Management Law of 1998, a contract between the collective landowner (i.e. the collectives) and the private farm household defines the rights and duties of both parties (Article 14). Article 13 of the Constitution, amended in 2004, defines "citizens' lawful private property as inviolable". Land use rights are granted by political decision – they were given to those who worked on the land and Party connections may have played a role. The total number of land-lease contracts is more or less rationed; there is no primary market for land use rights. However, a thin secondary market for land use rights exists, which was constitutionalized in 1988 (deLisle 2004). Farmers can rent out the land with permission, paying a fee to the collective administration. Extension of the land use may be possible.

Land use rights do not comprise full ownership. Land cannot be sold, nor can it be mortgaged. Farmers do not enjoy capital gains on their land. Ultimately, they may not be interested in investing in their land, knowing that this land may have to be returned to the government. Given that farmers cannot negotiate directly with locating firms and developers, they cannot use the proceeds from selling land for investment in firms, for moving to the city or for financing their retirement.

Although land readjustments are restricted, farmers are not protected when the land is allocated to expanding firms or when it is needed for residential construction. Compensation, if any, is low: for rural land it is at about one tenth of the market value. About 34 million farmers lost their land-lease contracts in the period 1987 to 2001 (Lindbeck 2006). De facto, local bureaucrats have ultimate control and ownership of rural land.

Firm ownership is linked to the ownership of land extending for 50 years; it thus hinges on the permission of Party officials. Owning the physical assets that firms use for production (including the machines and the buildings) is not sufficient to establish enterprise ownership. Urban land is administered by municipalities. Sons and daughters of the political elite have had privileged access to land that was used to set up firms. Private ownership of firms depends on which sectors of the economy are at stake and it also varies with provinces and localities. Public ownership prevails in sectors where government is the dominant producer, for instance in energy, transportation and telecommunication. The relationship between asset ownership and land use rights is far from clear. If an entrepreneur has good connections with the local or provincial government, land use rights may de facto not be limited in time. When there is a change in leadership, however, this contract may be void. The relationship with the former political leader and the current leader is crucial.

Residential ownership refers to the ownership of buildings, including private apartments. With the permission of the political authorities, it is possible to convert agricultural land into residential use for individuals. In contrast to rural land, residential leases run for 70 years (some for 50 or 40 years). Property

owners elect their landlord committees in order to protect their property against the local Communist Party politicians.

Property rights are far from being clearly defined; nor are they strong. They are mushy and in constant flux. A property right seems to exist only as long as it is justified by economic success. The characteristics of Chinese property rights are that they have simply followed whatever is needed for high growth. Property rights are rarely respected when an expanding firm needs new location space, when a private investor constructs new residential buildings or when the government pursues an infrastructure project. A monetary compensation requirement with respect to real estate was introduced into the constitution in 2004. Implementation of the property rights system and of individual claim procedures is, however, far from being established. Compensation is controlled by the state. Corruption is prevalent, the court system is in development, and legal advice is scarce. The rule of law is one of China's institutional deficits. A clear bankruptcy law that would allow to sort out property claims in the event of bankruptcy does not yet exist either. The revised bankruptcy law, effective June 2007, attempts to partly remedy this situation.

This form of mushy and adjustable property rights may be appropriate for the Chinese situation in which everything is in flux. These adaptable property rights do seem to create enough certainty for people to invest in the initial period of Chinese transformation, when expected yields are high. The expansion of the domestic market and the opportunity to have access to the whole world economy for the absorption of Chinese products have over-compensated the risk arising from property rights uncertainty. The duration of land use rights for farmers was extended. Auctions were introduced in 2007 to cut down on corruption. It is, however, an open question whether they will prevent collusion between the administration and bidders. Property rights are unlikely to be sufficient later on, when yields become somewhat lower; lower expected yields require more certainty. The approach to property rights is also affected by the process of transforming a communist society in which property rights are not supposed to exist. Apparently, there are ideological constraints to creating property rights. For instance, establishing a rural landowning class would undo the Mao reforms in which rural landowners were expropriated and quite a few of them were executed. Establishing new rights that do not jeopardize the position of the Party is a crucial constraint. Note, however, that the former President Jiang Zemin's "Three Represents" doctrine calls for the inclusion of the entrepreneurial class – usually property owners – in the Communist Party.

Policy issues

The crucial issue for the future is whether China's growth process of the last twenty five years is sustainable.

Over-investment

Over-investment in the real estate sector and in construction can require a correction if an excess supply of real estate develops. As we know from the experience in other countries, over-investment in the real estate sector can have severe implications for the real side of the economy. Examples are Thailand and the Asian currency crisis of 1997 and East Germany. An over-supply of housing and office space leads to a fall of real estate prices, a reduction of employment in the construction industry, and a decline in its growth rate, often becoming negative. This lowers the GDP growth rate. Mortgages lose in value, the balance sheets of banks get into disarray, lending is cut back, and a credit crunch may affect the real side of the economy.

Normal brakes in the process of growth

Normal adjustment processes tend to reduce future growth. As the pool of rural surplus labor becomes exhausted and wages are no longer supported by productivity growth at previous levels, real wages will rise more sharply than in the past. Although the excess supply of rural workers is estimated at 150 million and about 10 million new workers used to join the work force each year in the past, eventually labor will become scarcer. China's appetite for energy and raw materials will drive up the prices of important inputs, making production more expensive. China bidding for these resources on the international markets will raise world market prices; at present, China consumes about 8 percent of the world's petroleum, 27 percent of its cotton and 17 percent of its wheat (Siebert 2007). To mitigate congestion in transportation, more resources will have to be invested in public infrastructure projects

which tend to have lower capital productivity than investment in the private sector.

More importantly, weaknesses will come to the fore. China will have to pay more attention to accidents at the work place and in industrial production, for instance, in the chemical industry. Moreover, environmental constraints will make themselves increasingly felt. Toxic industrial dumping in the countryside has to be halted and existing toxic dumps have to be cleaned up. Air and water pollution and the deterioration of the soil become less and less acceptable as per capita income rises. Pollution causes social costs in terms of serious health damage. All these factors will increase the costs of production. According to the World Health Organization (WHO), seven out of the ten most polluted cities in the world are located in China.

Energy efficiency has to be increased. Retail gasoline prices are still lower than in the United States. Cheap energy helps keep inflation in check, but it distorts energy use. The Energy Information Administration projects China's oil demand to more than double and reach 14.2 million barrels per day by 2025, with net imports of 10.9 million barrels per day. Furthermore, China is both the largest consumer and producer of coal in the world. Hence China faces major energy-related environmental problems.

It may be argued that all these weaknesses can be overcome with a technocratic approach and by social engineering. However, more resources must be diverted towards these bottlenecks, and the capital spent on these issues will have a lower productivity, implying a lower growth rate of the economy. In any case, prices of land, capital, energy and the environment that falsely indicate low scarcity have to be corrected through institutional changes.

Caution with data

A word of caution is in order with respect to the statistical data (Holz 2006). In spite of the fact that the data are subject to review by international organizations, distortions may occur because local and regional politicians have an incentive to massage the statistically measured results in their favor. We know that data were heavily distorted in Central and Eastern Europe prior to the fall of the Iron Curtain. Moreover, statistical revision of data ex-post is common even for statistical offices of industrialized countries. It would not be surprising if, under conditions of high growth and stark structural change, large statistical revisions were to occur in China in the future.

Distorted resource-extensive growth

China's growth is unbalanced in many ways: exports and investment instead of consumption, inflationary risk through money and credit expansion instead of price level stability, the exchange of export goods for international currencies and economic stimulation instead of imports, production and investment instead of social protection, pollution in favor of production instead of environmental protection, and the promotion of urban centers instead of an improvement of rural areas. Gross national saving at 47 percent of GDP (2005) keeps consumption low. Monetary policy supports these distortions.

According to this view, China has followed an inefficient, resource-demanding or even resource-destroying growth path with many distortions. Factoring in these distortions, the GDP growth rate may actually be lower than measured statistically, say at 7.5 percent per year (See sources quoted in Lindbeck 2006, p. 25). That is why some economists are pleading for another growth strategy with fewer distortions (Blanchard and Giavazzi 2005; Roubini and Setser 2005). It seems likely that the normal brakes discussed above will affect the growth rate. Barring political crises, a lower growth rate of, say, 6 percent annually in the next twenty years is more realistic. Such a scenario is also more likely as China's catching-up process, in which imitation is still playing a major role, will eventually lose steam. It would be a different story if China were able to shift out the technological frontier of the world itself and were not dependent on the imitation of Western technological solutions.

Social policy constraints

Issues of social protection have not been a major concern in Chinese growth policy. Unemployment, which has increased due to the restructuring of state-owned firms, is high, given the high GDP growth rate. The urban unemployment rate is estimated at about 5 percent (Prasad 2004). Although generous unemployment insurance has been introduced for the urban unemployed, protecting about 105 million (Lindbeck 2006), other workers are not shielded against unemployment. Protection against

health hazards and old-age pension insurance has not been developed, the level of social protection in China being similar to that of the European countries of one hundred years ago. With the decline of the state-owned enterprises, which provided safe jobs and human services insurance, a mixed system has developed where, for instance, part of the health costs are covered by firms but a large part is self-paid. The inadequate insurance arrangements for health and old-age are one of the reasons for high savings. Private savings needed as a substitute for insurance are inferior in terms of efficiency than an insurance solution. Health insurance, for instance, can be provided more efficiently, if a large number of people with different health risks are insured. Apparently, China has alternative options to following the European social model. However, whichever model is chosen, the need to develop a social insurance system is likely to put a huge burden on the economy.

The growing inequality of the income distribution and the rural-urban divide represent a severe risk for the power of the Communist Party. Discontent among farmers due to relatively low income, the high costs of health services, insufficient pensions in old age and the arbitrary decisions of bureaucrats with respect to land-use rights and local levies may lead to social unrest in the country-side which, traditionally, has played an important role in political change in China. Massive lay-offs in the rust belt, toxic industrial dumping, affecting farming, fishing and water, and industrial accidents may add to the unrest. Social upheaval could threaten the ruling Party. That is why rulers fear the Latin-Americanization of the country and why they have announced the target of a "Harmonious Society". After all, China lacks profound experience in social problem-solving, compared, for instance, to India.

A banking crisis?

The Chinese banking system is fragile. As is well known, money is not neutral. It can have a severe effect on the real side of the economy. There have been currency crises in the past, such as the Asian currency crisis in the wake of which Asian countries had negative growth rates for two years, and, of course, the Japanese bubble, as a result of which Japan stagnating for a decade. At the heart of this question is the issue of confidence. If the Chinese savers, who deposited all their savings at banks, lost their confidence, a bank run might result, putting the hitherto stable growth process in China at risk.

A period of positive surprises

Since the Deng Xiaoping reforms, China has experienced decades of what I call positive surprises. The economic system delivered more than people had anticipated. At the end of each year, most people were in a better position than they had hoped for when the year began. This is not unlike the experience of West Germany in the 1950s and 1960s after the Erhard reforms of 1948, when people could afford their first bicycle, their first motorcycle, their first car, their first vacation trip to Lake Constance or to *Bella Italia* and their first apartment. Under such circumstances it is easy to undertake economic policies. In the future, the Communist Party will face a different problem. The present young generation has grown up with high expectations, is used to big increases in real income and to a strong performance of the economy. Unlike their fathers and grandfathers, they most likely will no longer experience any positive surprises even if the economic system continues to deliver the high GDP growth rates of the past.

Institutional deficits

An efficient economic system requires a reliable institutional framework since most decisions of economic agents need a long-run orientation. When rules and the institutional framework for economic decisions are lacking, economic agents are at the mercy of bureaucrats and Party officials. Those who have the power to decide can hand out favors, usually in return for some compensation. Corruption is the unavoidable outcome. The rule of law therefore is a necessary prerequisite for a sustained growth process.

An important aspect of the rule of law is that rights are given to private firms and households as well as the empowerment to enforce these rights. This calls for corruption to be pushed back and it mandates clearer property rights. In addition, the Communist Party must desist from intervening in administrative and court decisions. Rules must be stable in order to be credible. To respect human dignity goes beyond the demand for economic freedom. All these requirements may limit the power of the Party.

The actual Chinese system of governance has been described as neo-Leninist, blending a one-party rule

and state control of key sectors of the economy with the market mechanism and an open economy (Pei 2006). Patronage secures support by key constituents, including the bureaucracy, the military and the business community. The question remains open whether or not economic freedom, a necessary condition for growth, will start a process in which citizens eventually demand political freedom. The relationship between economic freedom and political freedom, i.e. democracy, seems asymmetrical. Whereas democracy is accompanied by economic freedom (Friedman 1962), economic freedom does not necessarily entail political freedom. A major aspect could be that economic agents will insist on the right to elect those who make the laws governing economic freedom. After all, market capitalism separates economic and political power and this may put political power on the defensive.

The biggest challenge for China may then well be the demand for democracy. Whether or not this political demand for democracy will be forcefully articulated in China in the future cannot realistically be answered at this stage. One answer is that the Chinese derive an immense happiness from being and becoming rich and will be satisfied (for a long time) with a situation in which the Communist Party just lets them get rich. In that case, economic freedom will be all there is. In this scenario, the government remains more or less authoritarian. Another possible answer is that the Communist Party will introduce some cautious steps towards decentralized democratic procedures, for instance letting mayors be elected on a decentralized level. Among the political leaders there is a fear that the Communist Party will fall apart and the country will break up. For the Party, the disintegration of the Soviet Union serves as a negative example besides the Latin-Americanization of social issues. The result may be a cautious attempt of controlled capitalism, which may then serve as a prototype for other countries like the Arab oil countries and some developing countries. The least likely case is the third possible answer, a full move towards western style democracy.

Economic fundamentals may impact on the political system and vice versa. Thus, in generating Chinese multinationals, the issue arises of how China's products are viewed abroad and whether their image portrays the characteristics of freedom. Social inequality may lead to political unrest. Lower growth rates may put the political system into question, and political turmoil may jeopardize the economic growth dynamics of the past. An unstable China, for instance with a growing unrest of the rural population, will represent a threat to the world. Political rulers may then be tempted to play with nationalist sentiment to bolster legitimacy. It will be fascinating to watch how China will develop.

References

Blanchard, O. J., and F. Giavazzi (2005), *Rebalancing Growth in China,* CEPR Discussion Paper 5403.

Corden, W. M. (2007), *Exchange Rate Policies and the Global Imbalances: Thinking about China and the IMF,* Paper for James Meade Centenary Conference, Bank of England, Revised Version of August 2007.

DeLisle, J. (2004), *Property Rights Reform in China,* Paper presented at the Carnegie Endowment of International Peace Conference on "The Future of Political Reform in China", Washington DC, 29th January 2004, available from <http://www.fpri.org/transcripts/lecture.20040126.delisle.chinapropertyrights.html>.

Friedman, M. (1962), *Capitalism and Freedom,* Chicago: University of Chicago Press.

Holz, C. A. (2006), "Why China's New GDP Data Matters," *Far Eastern Economic Review* 169, 54–56.

International Monetary Fund (IMF, 2006a), *International Financial Statistics,* various issues, Washington DC.

International Monetary Fund (IMF, 2006b), *People's Republic of China, Staff Report for 2006 Article IV Consultation,* Washington DC, October 2006, available from <http://www.imf.org/external/pubs/ft/scr/2006/cr06394.pdf>.

Lindbeck, A. (2006), *An Essay on Economic and Social Change in China,* Institute for International Economic Studies, Stockholm University, and Research Institute for Industrial Economics, Stockholm, mimeo.

Pei, M. (2006), "The Dark Side of China's Rise." *Foreign Policy Magazine,* March/April 2006, available from <http://www.carnegieendowment.org/publications/index.cfm?fa=view&id=18110&prog =zch>.

Prasad, E. S. (2004), *China's Growth and Integration into the World Economy: Prospects and Challenges,* IMF Occasional Paper 232.

Roubini, N. and B. Setser (2005), *China Trip Report,* available from <http://pages.stern.nyu.edu/~nroubini/ChinaTripReport-RoubiniSetser.pdf>.

Siebert, H. (2007a), "China: Coming to Grips with the New Global Player", *The World Economy* 30, 893–922.

Siebert, H. (2007b), *The World Economy. A Global Analysis,* 3rd ed. London: Routledge.

World Bank (2007a), *China at a Glance,* available from <http//worldbank.org/AAG/chn_aag. Pdf>.

World Bank (2007b), Selected Indicators, in: *World Development Report 2008, Agriculture for Development,* Washington DC: World Bank.

World Bank (2006c), *World Development Indicators,* Online Data Base, available from <http://www.worldbank.org/data/onlinedatabases/onlinedatabases.html>.

World Bank Beijing Office (2006a), *Quarterly Update,* February 2006.

World Bank Beijing Office (2006b), *Quarterly Update,* August 2006.

World Bank Beijing Office (2007a), *Quarterly Update,* February 2007.

World Bank Beijing Office (2007b), *Quarterly Update,* September 2007.

Global growth prospects for 2008

The global economy expanded in 2007 with growth running above 5 percent.[1] China's economy gained further momentum, growing by an expected 11.5 percent, and for the first time making the largest contribution to global growth evaluated at market exchange rates as well as purchasing-power-parity (PPP) exchange rates. India also grew rapidly at a rate expected to exceed 9 percent and Russia at almost 7 percent (see Figure 1). These three dynamic countries alone are thus accounting for approximately one-half of global growth. Yet it should be noted that other emerging market economies and developing countries have also maintained robust expansions in 2007. On average, the real growth rate is likely to amount to almost 6 percent for Africa, Central and Eastern Europe and the Middle East, while South America is expected to have grown by 5 percent in 2007.

Rapid growth in these countries has counterbalanced continued moderate growth in the United States that is only expanding at approximately 2 percent in 2007, due primarily to the drag caused by the housing correction. Economic growth in the euro area and Japan has also slowed this year. Compared to the real GDP growth rate of 2.8 and 2.2 percent in 2006, the 2007 rate is likely to be only to 2.5 and 2.0 percent in euro land and Japan, respectively.

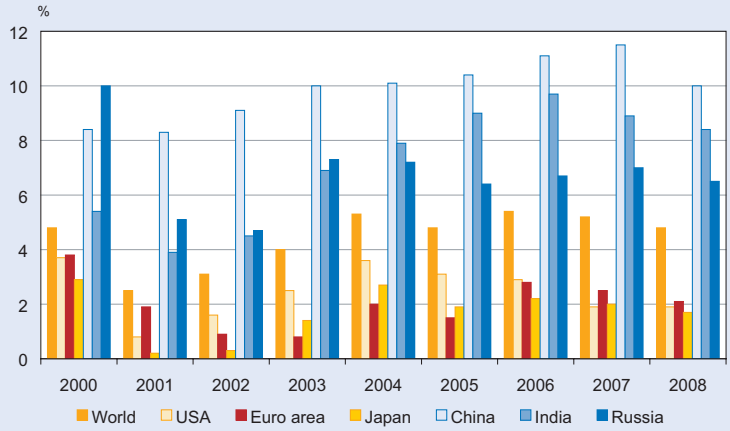
According to the latest IMF forecast, global growth will slow to 4.8 percent in 2008. In the Unites States growth is projected at just 1.9 percent. Ongoing difficulties in the mortgage market are expected to extend the decline in residential investment, while high energy prices, sluggish job growth and weaker house prices are likely to further dampen consumption spending. In the euro area the growth rate is expected to be 2.1 percent in 2008, and this forecast also reflects the lagged effects of euro appreciation, trade spill-overs from the United States, etc. Japan will likely grow at 1.7 percent in 2008, and its decline from 2.0 percent in the previous year is also partly caused by slower global growth and a somewhat stronger yen.

Among emerging markets and developing countries, growth is anticipated to remain strong. The Chinese economy is expected to grow by 10 percent in 2008, while India will expand at 8.4 percent, followed by Russia with a growth prospect of 6.5 percent. On average, Africa will improve its growth rate by almost 1 percent, reaching 6.5 percent in 2008. A slight decrease in growth is expected in 2008 for the country groups of South America (4.3 percent) and Central and Eastern Europe (5.2 percent). In this context, the IMF suggests that strong domestic demand growth in developing and emerging market economies should continue to be a key driver of global growth, with more robust fiscal balances and economic policy frameworks providing scope for most countries to offset some weakening in external demand.

NCW

Figure 1

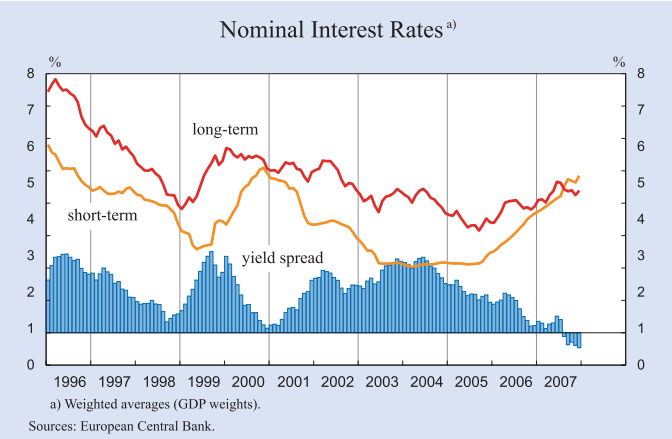
Real GDP Growth: An International Comparison

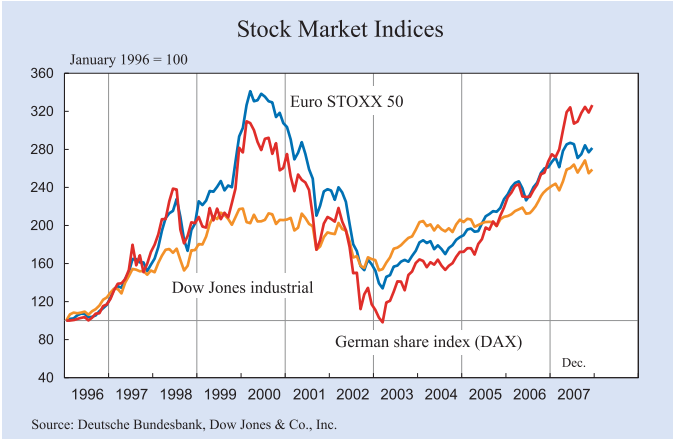


Source: IMF.

[1] International Monetary Fund (IMF), World Economic Outlook, October 2007, Washington DC, Ch. 1.

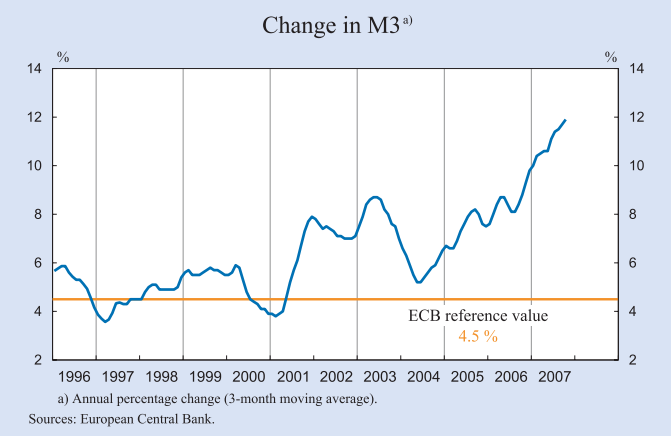
FINANCIAL CONDITIONS IN THE EURO AREA

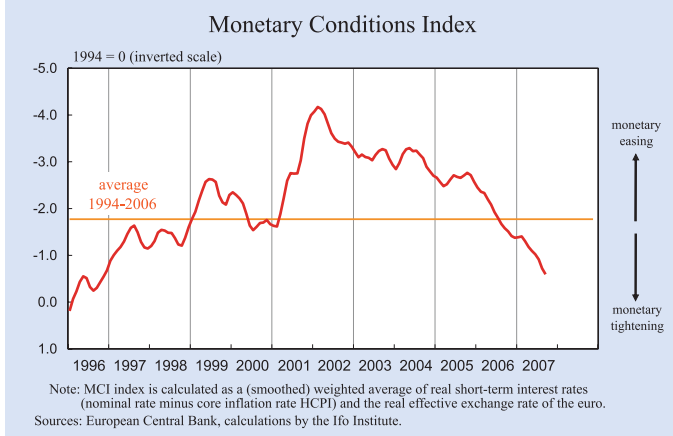




In the three-month period from October 2007 to December 2007 short-term interest rates rose. The three-month EURIBOR rate increased from an average 4.69% in October to 4.85% in December. Yet, ten-year bond yields declined from 4.40% in October to 4.25% in November and 4.39% in December 2007. In the same period of time the yield spread declined continuously from – 0.29% (October) to – 0.46% (December).

The German stock index DAX continued to rise in December, averaging 8,067 points in December 2007 compared to 8,019 points in October. The Euro STOXX slightly decreased from 4,430 in October to 4,386 in December. The Dow Jones International also declined in December, averaging 13,407 points compared to 13,901 points in October.

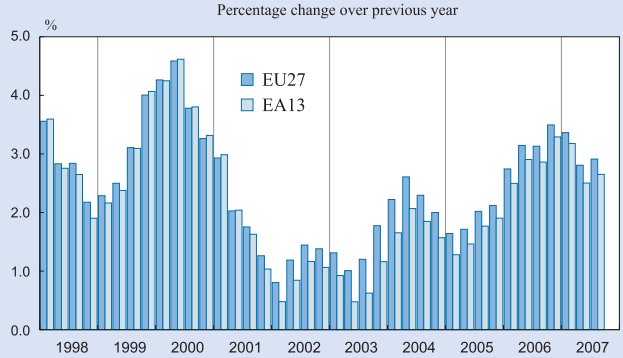




The annual rate of growth of M3 stood at 11.9% in October 2007, compared to 11.7% in September. The three-month average of the annual growth rate of M3 over the period from August to October 2007 rose to 11.7%, from 11.0% in the period May to July 2007.

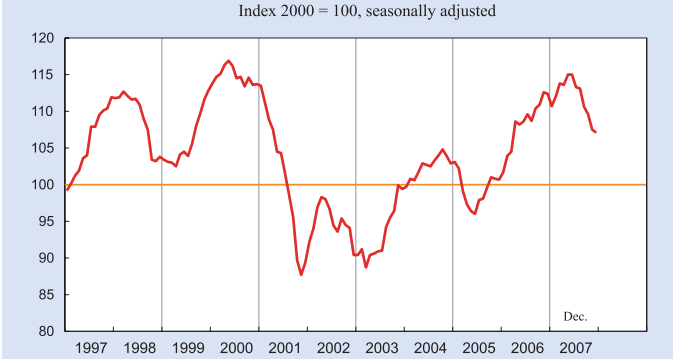
In September 2007 the monetary conditions index continued its general decline that had started in late 2001, signalling greater monetary tightening. This is the result of rising real short-term interest rates and a rising real effective exchange rate of the euro.

EU SURVEY RESULTS



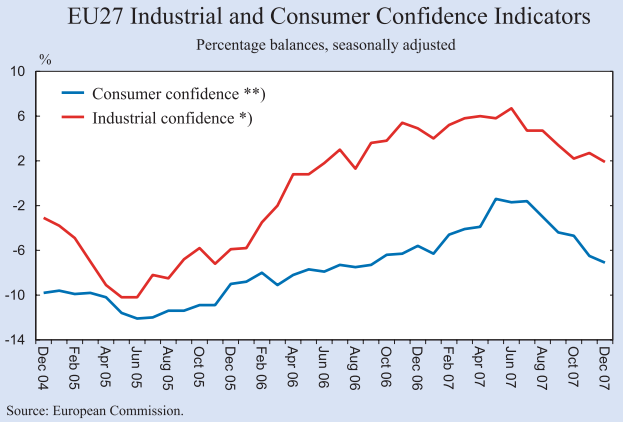
Source: Eurostat.

According to the first Eurostat estimates, euro area (EU13) GDP grew by 0.7% and EU27 GDP by 0.8% in the third quarter of 2007 compared to the previous quarter. In the second quarter of 2007 the growth rate had amounted to 0.3% for the euro area and 0.5% for the EU27. Compared to the third quarter of 2006, i.e. year over year, seasonally adjusted GDP rose by 2.7% in the euro area and by 2.9% in the EU27.

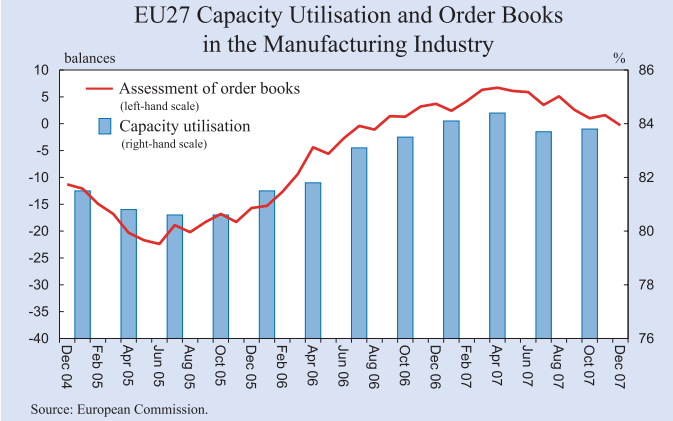


Source: European Commission.

In December, the EU Economic Sentiment Indicator continued to weaken in both the EU27 and the euro area. It declined by 0.4 percentage points in the EU27 and by 0.1 percentage points in the euro area, to 107.1 and 104.7 respectively. However, despite the decline observed in the second half of 2007, the indicator remains well above its long-term average in both areas. Overall economic confidence improved in Italy, while it decreased in Spain, the UK, France, Poland and Germany.



Source: European Commission.



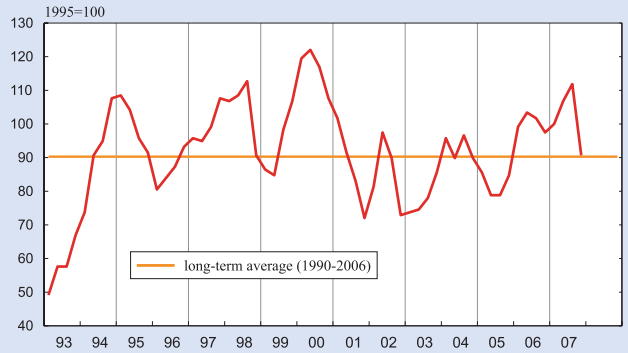
Source: European Commission.

* The industrial confidence indicator is an average of responses (balances) to the questions on production expectations, order-books and stocks (the latter with inverted sign).
** New consumer confidence indicators, calculated as an arithmetic average of the following questions: financial and general economic situation (over the next 12 months), unemployment expectations (over the next 12 months) and savings (over the next 12 months). Seasonally adjusted data.

After a recovery in November, the industrial confidence indicator declined in December 2007. Yet the level of the indicator remains well above its long-term average. Among the large EU Member States, industrial confidence rose only in Germany, while it weakened in the UK, Spain, France and Italy. It remained unchanged in Poland for the sixth consecutive month. In comparison, consumer confidence remained stable in the EU in December 2007, while it continued to weaken in the euro area. Following a peak in May 2007, confidence in both areas has declined fairly steadily. Consumer confidence, however, is still above its long-term average, while for the euro area there is only a two-point difference. In December consumer confidence worsened in Germany, Spain and the UK, while it improved in France and Poland.

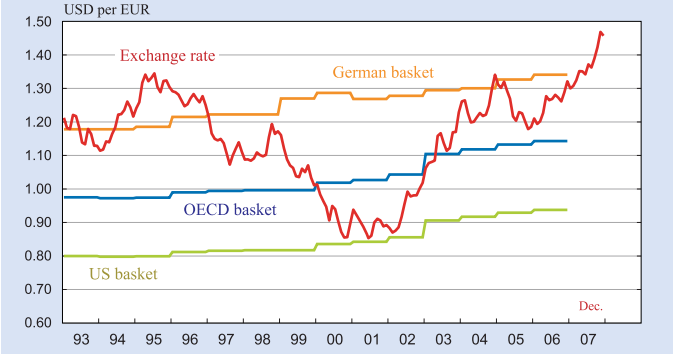
In December 2007 managers' assessment of *order books* deteriorated from 1.0 in October to – 0.3 in December. In September the indicator had reached 2.6. *Capacity utilisation* slightly improved to 83.8 in the fourth quarter of 2007 from 83.7 in the previous quarter.

EURO AREA INDICATORS



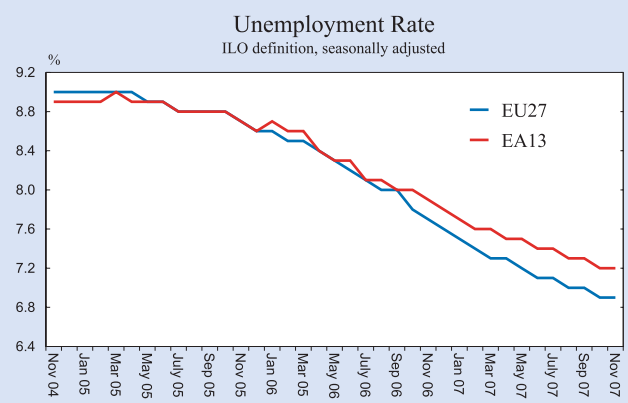
Source: Ifo World Economic Survey (WES) IV/2007.

The Ifo indicator of the economic climate in the euro area (EU13) has clearly worsened in the fourth quarter of 2007. Its decline is attributable to both less positive assessments of the current economic situation and less favourable economic expectations for the coming six months. The latest survey results indicate a slowdown in economic growth in the coming half year.



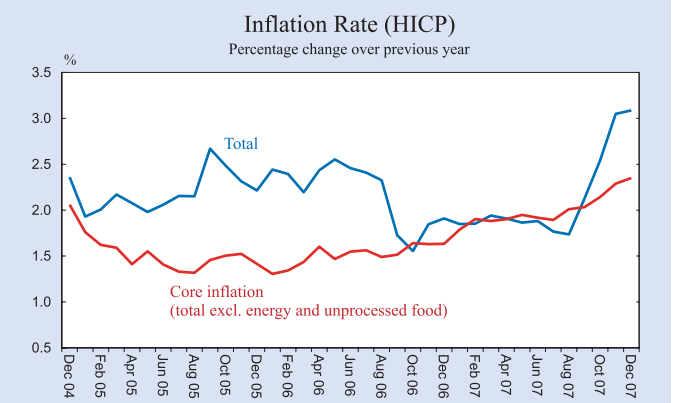
Sources: European Central Bank, Federal Statistical Office, OECD and calculations by the Ifo Institute.

The exchange rate of the euro against the US dollar averaged 1.46 $/€ in December 2007, an increase from 1.42 $/€ in October. In September 2007 the rate had amounted to 1.39 $/€.



Source: Eurostat.

Euro area (EU13) unemployment (seasonally adjusted) stood at 7.2% in November 2007, unchanged from October. EU27 unemployment was 6.9% in November 2007, also the same as in October. It had been 7.7% a year earlier. Among the EU Member States the lowest rates were registered in the Netherlands (2.9%) and Denmark (3.2%). Unemployment rates were the highest in Slovakia (11.0%) and Poland (8.5%).



Source: Eurostat.

Euro area annual inflation (HICP) is likely to have been 3.1% in December 2007. It was also 3.1% in November. This is quite an increase from a year earlier, when the rate had been 1.9%. The EU27 annual inflation rate also reached 3.1% in November. An EU-wide HICP comparison shows that in November 2007 the lowest annual rates were observed in the Netherlands (1.8%), Finland (2.1%) and Slovakia (2.3%), and the highest rates in Latvia (13.7%), Bulgaria (11.4%) and Estonia (9.3%). Year-on-year EU13 core inflation (excluding energy and unprocessed foods) rose to 2.35% in December 2007 from 2.29% in November.

Please register before 15 Feb. 2008.

You may download a registration application form from www.cesifo-group.de/isc. Online-payment with credit card possible.

Early registration fee (up to 18 Jan. 2008):
First day only: € 250
Second day only: € 220
Both days: € 400

Standard Fees:
First day only: € 300
Second day only: € 270
Both days: € 500

Cancellation policy:
A 50% cancellation fee will apply for all cancellations made after 1 March 2008.

Please make payment to CESifo GmbH
Account No. : 43 75 20 73
Bank Code (BLZ) : 700 202 70
BIC : HYVEDEMMXXX
IBAN : DE 17 7002 0270 0043 7520 73

Contact: Deirdre Hall
Ifo Institute for Economic Research
Poschingerstr. 5
81679 Munich, Germany
Tel. +49 (0)89 9224 1410 – Fax +49 (0)89 9224 1409
hall@cesifo.de

European Commission
Representation in Germany
Unter den Linden 78
10117 Berlin, Germany
www.eu-kommission.de

CESifo International Spring Conference 2008

Europe's Economy at a Crossroads

Preliminary Programme

Thursday 13 and Friday 14 March 2008
European Commission, Berlin

CESifo
A joint initiative of Ludwig-Maximilians University and the Ifo Institute

with the hospitality of
EUROPEAN COMMISSION
Representation in Germany

CESifo

EUROPEAN COMMISSION
Representation in Germany

International Spring Conference 2008

13 March 2008

11:00	**Press conference**
12:00	Cold buffet lunch
12:45	**Welcome and Introduction** Gerhard Sabathil, European Commission, Berlin and Kai Carstensen, ifo Institute, Munich
13:00	**Perspectives for Energy Markets** Fatih Birol, International Energy Agency (IEA), Paris (invited)
13:30	**Financial Markets – Frictions and their Impact on the Global Economy** Claudio Borio, Bank for International Settlements (BIS), Basle (invited)
14:00	**Exchange Rates and Monetary Policy** Gian Maria Milesi-Ferretti, International Monetary Fund (IMF), Washington (invited)
14:30	Discussion
15:00	Coffee break
15:30	**Perspectives for the US and Impact on the Global Economy** Michel Péretié, Bear Stearns, London (invited)
16:00	**The European Economy** Jürgen Kröger, European Commission (DG EcFin), Brussels
16:30	**BRICS – Driver of Global Growth** Jim O'Neill, Goldman Sachs (GS), London (invited)
17:00	General discussion
17:30	End of session
19:00	Dinner

14 March 2008

9:00	**Welcome and Introduction** Hans-Günther Vieweg, Ifo Institute, Munich
9:10	**Impact of High Energy Prices on European Sectors and Member States** Elisabeth Waelbroeck-Rocha, BIPE, Paris
9:40	**European Steel Industry: Competitiveness through Value Creation, Fact or Fiction?** Jeroen Vermeij, Eurofer, Brussels
10:05	Discussion
10:20	Coffee break
10:40	**Chemicals** Moncef Hadhri, CEFIC, Brussels
11:05	**Engineering Industries** Michele Schweinöster, ANIMA, Milano
11:30	**Automotive Industry** Thomas Hueck, Bosch, Stuttgart
11:55	**Perspectives for European Industries** Graham Hay, Cambridge Econometrics, Cambridge
12:20	General discussion
13:00	End of session
	Hot buffet lunch
14:30	End of conference

Registration Form

Please register before **15 Feb. 2008.** For more information, visit **www.cesifo-group.de/isc**, the conference's main page.

Last name, first name

Position | Department

Institution

Street address

City | Country

E-Mail

VAT-number

	Standard fees	Early registration fee (up to 18 Jan. 2008)
first day only	☐ € 300	☐ € 250
second day only	☐ € 270	☐ € 220
both days	☐ € 500	☐ € 400

I will attend the conference dinner on 13 March 2008.
☐ Yes ☐ No

Method of Payment
☐ Invoice* ☐ MasterCard/Eurocard
☐ Visa ☐ American Express

Card No.

Valid until | Signature

Mail to Deirdre Hall, Ifo Institute, P.O. Box 860460, 81631 Munich or fax to: +49 (0) 89 9224 1409

*Please make payment to CESifo GmbH
Account No. : 43 75 20 73
Bank Code (BLZ) : 700 202 70
BIC : HYVEDEMMXXX
IBAN : DE 17 7002 0270 0043 7520 73

Online information services of the CESifo Group, Munich

The Ifo Newsletter is a free service of the Ifo Institute and is sent by e-mail every month. It informs you (in German) about new research results, important publications, selected events, personal news, upcoming dates and many more items from the Ifo Institute.
If you wish to subscribe to the Ifo Newsletter, please e-mail us at: newsletter@ifo.de.

CESifo publishes about 20 working papers monthly with research results of its worldwide academic network. The CESifo Newsletter presents selected working papers (in English) in an easily understandable style with the goal of making its research output accessible to a broader public.
If you wish to subscribe to the CESifo Newsletter, please e-mail us at: saavedra@cesifo.de.

If you wish to receive our current press releases, please e-mail us at: presseabteilung@ifo.de.

You can also request these services by fax:

Ifo Institute for Economic Research, fax: (089) 9224-1267

Please include me in your mailing list for:

☐ Ifo Newsletter ☐ CESifo Newsletter ☐ Ifo Press Releases

Name: ……
Institution: .....
Street: .....
City: .....
Telephone: .....
Fax: .....
E-mail: ……