I. Introduction

Three years after the recession started, the nation is mired in debt. Historically high consumer debt levels, near record high budget deficits, and record trade and current account deficits are burdening households, tax payers, and the nation’s economic future.

How much longer will the U.S. be able to borrow from the rest of the world to finance its trade deficits? Already, the U.S. external imbalances are beyond levels that many economists consider sustainable and well above levels that other countries saw immediately before they faced a financial crisis. For instance, Sweden and Finland had current account deficits that were close to or less than the current U.S. levels before they experienced severe financial crises in 1992. Also, Korea had a current account deficit slightly less than the U.S. currently does before going into a tailspin in 1997.

Projections for the future do not bode well either. Even if one assumes that trade deficits will shrink to more moderate levels from their current highs, current account deficits, which include interest payments on the nation’s external debt in addition to the trade deficit, will likely rise to unsustainable levels again. The reason for this divergence is the growing international indebtedness that will require a growing debt service.

The Bush Administration’s irresponsible tax cuts, which have created large long-term structural deficits, have in part benefited from the current account deficits. A growing share of the government’s rising deficits has been financed by overseas investors, especially Asian governments. Consequently, the U.S. has seen lower interest rates and thus not felt the full pinch of the large deficits because of the willingness of foreigners to finance large parts of the government’s deficit.

Because foreign investors hold a growing share of government debt and because U.S. government debt constitutes a rising share of foreigners’ portfolios, investors may become overexposed to the U.S. To diversify, foreigners may look to put their money elsewhere. This could result in higher interest rates and a sharply lower value of the dollar. Barring a financial crisis, the U.S. could face years, if not decades, of reduced consumption and investment, as U.S. economic growth slows below that of its trading partner countries. Either a crisis or a prolonged period of slow growth would help to adjust the current account deficit, but at the price of dramatically lower living standards.

There are policy options, though. For one, more fiscal discipline would reduce the need of the federal government to borrow abroad and thus alleviate some of the risks that could result in a crisis. Second, the U.S. government could continue negotiations with
China to revalue its currency against the U.S. dollar, thereby improving U.S. exports. Third, the U.S. international economic agenda should focus on the development of domestic institutions in trading partner countries that could boost overseas growth and thus U.S. exports. These institutions include broader civil liberties and political rights, stronger local banking systems, as well as progressive taxation and efficient tax collection. International economic policy cannot be an afterthought to domestic U.S. policy, but it has to be an integral aspect of the strategy to create strong and durable growth in the U.S. and globally.

II. Trade Deficits, Current Account Deficits, and External Indebtedness

At the core of the discussion is the trade deficit, the difference between exports and imports. Adding a number of other money flows to this measure, particularly interest payments on the U.S.’ growing external debt produces the current account balance. If the current account deficit is greater than the trade deficit, the U.S. pays more interest for its debt than it earns on assets held abroad. Also, if the current account shows a deficit, the U.S. has to borrow money overseas to pay for it.

For most of the past three decades, the U.S. has exported less than it has imported (figure 1). During the recession of the early 1990s, the trade deficit shrank to less than a quarter percent of GDP. Since then, the trade deficit has ballooned to over 4.5% of GDP.

As trade deficits rose, so did the U.S. external debt. Since 1985, the U.S. has been a net debtor to the rest of the world (figure 2). In 2002, U.S. businesses and governments owed $2.4 trillion to foreigners, net of U.S. assets owned abroad, the equivalent of more than one fifth of the U.S. economy.

U.S. governments and businesses pay interest and dividends to foreign lenders, and do so at an increasing rate. Adding these interest payments, net of the interest receipts from overseas, to the trade deficit, along with other adjustments, generates the current account balance. Since 1992, the current account deficit has been larger than the trade deficit, i.e. the U.S. pays more in the interest than it earns (figure 1).

A current account deficit means that a country is spending more than it is earning. This difference in demand can result from price differences, i.e. exchange rates, and from differential income growth rates. A high dollar raises the price of exports and lowers the price of imports, thus boosting demand for imports and hurting demand for exports. Similarly, faster growth in the U.S. compared to other countries increases domestic demand for imports more than foreign demand for U.S. exports.

The initial appreciation of the dollar in the 1990s resulted from beneficial economic developments. Productivity, growth and profits were higher than in the past and than in other countries. These helped to attract foreign capital (Blecker, 1999a, 2002), which in turn kept interest rates low and further fuelled the boom. After crises roiled Asia in 1997, the dollar’s role as the world’s reserve currency helped attract more
funds since the U.S. was seen as a safe haven. Similarly, amid economic and financial market turmoil after 2001, the strong dollar seemed to be a safe bet.
Figure 1: Trade and Current Account Balances Relative to GDP, 1960 to 2003

Source: Bureau of Economic Analysis, National Income and Product Accounts; Bureau of Economic Analysis, Balance-of-Payments.
Figure 2: Net International Investment Position rel. to GDP, 1976 to 2035

The dollar came under pressure after 2001 because many investors saw ever expanding trade deficits as unsustainable in the prevailing economic climate (WSJ, 2002; Orszag et al., 2004). The dollar’s decline since then was unevenly distributed, with free floating exchange rates, such as the euro, seeing the largest increases, managed floats, such as the Japanese yen, experiencing smaller gains, and fixed exchange rates, such as the currencies of China, Malaysia, or Taiwan, experiencing obviously little changes. It takes 12-18 months before a lower exchange rate affects the trade deficit. Thus, the stabilization of the trade deficit in the second half of 2003 may reflect the dollar’s depreciation since 2002. This effect was less than it could have been because the largest declines of the dollar came against countries that are expected to grow slowly, whereas smaller depreciations came against fast growing countries (Weller, 2004).

III. An Unsustainable Path

To evaluate the sustainability of high trade deficits, we first need to gain a reasonable projection of where the U.S. current account deficit and its external indebtedness are headed. A simple dynamic forecasting model, which assumes as a baseline scenario a moderate trade deficit of 3% and a historical average interest rate of 4.25%\(^1\), illustrates the expected developments of the current account balance, the net international investment position, and the net financial income position of the U.S.\(^2\)

The projections show that even under moderate assumptions, the U.S. external imbalances will grow to high levels (table 1). The current account deficit will initially decline, but it is projected to increase to 4.8% in 2020. Simultaneously, external debt rises to 57.4% of GDP (figure 2). Hence, interest payments exceed interest receipts at a growing rate, so that net interest payments equal more than 2% of GDP in 2020.

If it is instead assumed that the trade deficit remains at about 4% of GDP, the current account deficit well exceeds 5% of GDP, the U.S. debt exceeds 50%, and net interest payments exceed 2% of GDP in the next decade (table 1). Similarly, because the U.S. is a net debtor country, an increase in the interest rate will likely accelerate the growth of the current account deficit, the net international debtor position, and of net interest payments. Inversely, a reduction of the trade deficit in the coming years to 2% of GDP and a decline of interest rates will slow the increases in the external imbalances.

Rising external imbalances are not necessarily unsustainable. The U.S.’ external position has worsened for more than two decades (figure 2). One issue to consider is the ability of the U.S. to service its debt without painful economic adjustments (Mann, 2004). The projections show that the U.S. would have to dedicate more than 2% of GDP in coming decades to repay its debt. This drain on national income could curtail domestic consumption and investment and thus slow growth, making debt repayment harder.

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\(^1\) Over the ten year period ending in 2002, the implicit interest rate defined as gross capital outflows relative to foreign owned assets in the U.S. (excluding direct investment) was on average 4.3%. For the twenty year period ending in 2002, it averaged 5.5%, and for the five year period ending in 2002 it averaged 3.6%. The interest rate assumptions used here attempt to mirror the range of these experiences.

\(^2\) See the technical appendix for a detailed description of the projection methodology.
Table 1
Current Account Deficits and Net International Investment Positions under Different Assumptions, 2010, 2015 and 2020

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Current account balance relative to GDP</th>
<th>Net international investment position relative to GDP</th>
<th>Net international financial income relative to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>3% trade deficit, 4.25% interest rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-3.8</td>
<td>-4.1</td>
<td>-4.4</td>
</tr>
<tr>
<td>4% trade deficit, 4.25% interest rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-4.9</td>
<td>-5.4</td>
<td>-5.9</td>
</tr>
<tr>
<td>2% trade deficit, 4.25% interest rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-2.6</td>
<td>-2.7</td>
<td>-2.9</td>
</tr>
<tr>
<td>3% trade deficit, 5% interest rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-4.2</td>
<td>-4.6</td>
<td>-4.9</td>
</tr>
<tr>
<td>3% trade deficit, 3.5% interest rate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-3.4</td>
<td>-3.6</td>
<td>-3.8</td>
</tr>
</tbody>
</table>

Notes: All figures are in percent. See technical appendix for explanation of calculations.
There is no clear threshold at which point a country’s ability to repay is put in question. Mann (1999) estimated that typically current account deficits decline, either due to lower exchange rates or slower growth, once they reach 4.2% of GDP. The U.S. may be able to sustain higher deficits due to the dollar’s role as international reserve currency and due to faster productivity growth, neither of which is assured for the future (Mann, 1999, 2004). Thus, Mann (2004) suggests that the threshold lies somewhere between 4 and 5% of GDP. Importantly, though, countries that experienced financial crises often had current account deficits below the threshold immediately before a crisis (table 2). Sweden and Finland in 1991, and Korea in 1997 had current account deficits below 5%. Already, the U.S. current account deficit equaled 4.9% of GDP in 2003. What makes the U.S. similar to countries that subsequently experienced a crisis are not only its large current account deficits, but also its growing private sector, government and international indebtedness (Weller, 2001; Kaminsky and Reinhart, 1999). However, what distinguishes the U.S. from crisis countries is the fact that its currency has been declining recently.

The other issue to consider is whether the risks of investing in the U.S. can rise, thus precipitating a movement away from U.S. investments. For instance, a renewed asset price drop – stocks or real estate – could bring about a rush to the door by investors. The risks of U.S. investments could also increase because foreign investors have too much exposure to U.S. securities or the U.S. is relying too much on foreigners to finance its total debt. In the former case, risk increases for investors because they are not diversified enough, and they may want to diversify by buying fewer U.S. securities. In the latter case, the U.S. is not borrowing from a diversified pool of lenders. If investors move away from the U.S., this can lead to a self-fulfilling prophecy. A few investors selling their assets can quickly bring down asset prices and further a flight out of U.S. assets.

It seems that many global investors are still diversified. In 2003, the largest share, 27.9%, of net new purchases of U.S. assets by foreigners went to stocks and bonds (BEA, 2004b). Further, increases in the share of U.S. stocks in international portfolios are in line with the growing relative importance of the U.S. stock market in global financial markets (Mann, 2004). However, China, for instance, who is a large creditor of the U.S., may be heavily concentrated in U.S. assets. According to the People’s Bank of China (2004), Chinese official reserves amounted to $361 billion in September 2003. Around the same time, it was estimated that China held about $122 billion in U.S. treasuries (Seattle Times, 2003), or about one-third of all official reserves.

As international investors may hold a growing share of their assets in U.S. treasuries, the U.S. may also be relying too heavily on foreigners to finance its government debt. Overseas investors held a near-record 7.7% of all financial assets in the U.S. (figure 3). They held more than 10% of all outstanding stock in the U.S. and a record 37.2% of all treasury securities held by the public.

The federal government was the primary U.S. recipient of overseas investments (figure 4). While overseas investors purchased on average 12.7% of treasury securities in the 1970s, this share grew to 63.2% in the 1990s, and to more than 70% since then.
Table 2
Select Financial Crisis Countries and their Current Account Balances

<table>
<thead>
<tr>
<th>Country name and date of crisis</th>
<th>Current account balance in year prior to crisis</th>
<th>Current account balance in year of crisis</th>
<th>Current account balance in year after crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina – 2001</td>
<td>-3.1</td>
<td>-1.5</td>
<td>3.1</td>
</tr>
<tr>
<td>Finland – 1992</td>
<td>-4.7</td>
<td>-1.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Korea – 1997</td>
<td>-4.4</td>
<td>-1.7</td>
<td>12.7</td>
</tr>
<tr>
<td>Malaysia – 1997</td>
<td>-4.4</td>
<td>-5.9</td>
<td>13.2</td>
</tr>
<tr>
<td>Mexico – 1995</td>
<td>-7.0</td>
<td>-0.1</td>
<td>-0.7</td>
</tr>
<tr>
<td>Spain – 1993</td>
<td>-3.7</td>
<td>-1.2</td>
<td>-1.3</td>
</tr>
<tr>
<td>Sweden – 1992</td>
<td>-3.5</td>
<td>-2.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Thailand – 1997</td>
<td>-8.1</td>
<td>-2.0</td>
<td>12.7</td>
</tr>
<tr>
<td>Turkey – 1994</td>
<td>-3.6</td>
<td>2.0</td>
<td>-1.4</td>
</tr>
<tr>
<td>Venezuela – 1994</td>
<td>-3.3</td>
<td>4.3</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Notes: All figures are in percent. Source is International Monetary Fund, International Financial Statistics.
Figure 3: Foreign Holdings of Domestic Assets, as Share of Domestic Assets, 1952 to 2003

Source: Board of Governors, Federal Reserve System, Flow of Funds Accounts of the United States.
Figure 4: Treasury Security Issues Relative to GDP and Their Share Purchased by Rest of the World (ROW), 1973 to 2003

Source: Bureau of Economic Analysis, National Income and Product Accounts; Board of Governors, Federal Reserve System, Flow of Funds Accounts of the United States.
There is, however, a qualitative difference between the 1990s and the past few years. Treasury security issues relative to GDP were less in the 1990s than in the 1980s as budget deficits shrank, while they grew again since 2000. Hence foreigners are financing a growing share of the government’s increasing deficits (figure 4).

In effect, the federal government, running large budget deficits, has benefited from the willingness of foreigners to finance its deficits. Higher budget deficits are not compensated for by more private savings (Gale and Orszag, 2003), i.e. capital inflows cover the savings shortfall and keep interest rates low. Since 1973, foreigners invested about 47% of the net capital inflow in U.S. treasury securities. Assuming that they will continue on this path, foreign investors will finance more than 70% of the expected deficits from 2004 to 2009. As a result, 45% of outstanding federal debt would be held by foreign investors in 2009. At the same time, though, structural deficits reduce the long-term growth prospects (Orszag et al., 2004). At some point, global investors will likely see the concentration of international lenders to the U.S. government in combination with large structural deficits as too high as increasing investments are made in an asset whose growth prospects are dimming.

IV. Policy Options

There are essentially three policy options to forego the possibility that international investors will force the necessary adjustments by moving out the U.S. investments, with either a financial crisis or a prolonged period of slow growth as a result. The policy options include a return to fiscal responsibility, so that the U.S. government has to become less reliant on foreign investors. Second, the Administration should engage in negotiations with the Chinese government in order to achieve a sensible revaluation of the Chinese yuan. Third, as further international trade negotiations are considered, the U.S. should take the lead to promote the development of domestic institutions that could help to boost domestic growth in emerging economies. These institutions include broader civil liberties, including worker rights and the rule of law, progressive taxation and an effective tax revenue collection system, and a strong local banking system. Enacting these policies could help to boost domestic demand and thus economic growth in emerging economies.

First and foremost, the U.S. must return to a path of fiscal responsibility. If structural deficits are reduced, e.g. by reversing tax cuts for high-income earners, national savings should improve. With improved national savings, the U.S. has to borrow less money overseas, releasing pressures on the dollar and thus helping to shrink the trade deficit and with it the current account deficit.

The experience of the 1990s does not necessarily support this argument (Blecker, 1999c). As government deficits shrank, the trade deficit grew. An important aspect, though, was the fact that the dollar appreciated at the time due to the faster growth rate of the U.S. compared to the rest of the world, and due to the fact that international investors sought a safe have in the wake of financial crisis.
Consequently, the second policy focus should be on engaging trading partner countries that have so far kept their exchange rates fixed with the dollar, particularly China, to revalue their exchange rates. An appreciation of the Chinese yuan, for instance, could boost exports to China.

Further declines of the dollar may not be enough to reduce the trade deficit to manageable levels. Mann (1999) estimates that an immediate depreciation of 25% in 1999 would have helped to reduce the current account deficit to below 2% of GDP for some time, before slower growth elsewhere and the net interest payments would have raised it again. Hence, a dollar depreciation alone will not lead to a sustainable path for the U.S. current account deficit if the U.S. grows faster than its trading partner countries.

This suggests that the U.S. will have to grow slower than its trading partners to bring the trade deficit to sustainable levels. Clearly, U.S. growth could plummet leading to a shrinking, possibly even positive current account balance, as was the case in a few crisis countries (table 2). However, the price for this adjustment would be sharply lower living standards. For instance, Blecker (1999c:12) estimated that national income would have had to fall by about 6% to reduce the current account balance by half in 1999. Alternatively, the U.S. could grow slower than its trading partner countries if growth elsewhere accelerates. Policymakers can consider three options to promote growth in our trading partner countries: Fiscal, monetary and structural policies, i.e. measures that change an economy’s institutional design.

That is why the third policy option for the U.S. is to raise the growth prospects of emerging economies. This could be achieved by focusing on the development of pro-growth domestic economic institutions in emerging economies when new trade agreements are negotiated.

Engaging in pro-growth fiscal or monetary policies is difficult for many emerging economies. Revenues from income taxation are often fairly low due to inefficient tax collection, large informal sectors, and unevenly distributed income. Second, tax cuts or more spending will likely raise deficits, if only for temporarily. Deficits are often seen as a sign of economic weakness by global investors, which could lead to higher interest rates, defeating the intent of expansionary policies (Blecker, 1999b). Similarly, expansionary monetary policies can be self-defeating if they result in increased capital outflows, which ultimately would force a reversal of such policies.

As fiscal and monetary policies are less successful than they used to be, the focus falls on structural policies. Structural policies can help to boost domestic economic growth by allocating available economic resources more efficiently, enhancing productivity growth. To improve demand growth at the same time, redistributive policies could be implemented that will allow a larger increase in demand for each dollar spent.

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3 The focus here is on emerging markets since they constitute a growing share of U.S. trade.
4 The same is not necessarily true for industrialized country, where contractionary macro economic policies have reduced growth. To foster growth in Europe and elsewhere will likely require coordinated stimulative fiscal and monetary policies, such as to avoid capital flight (Blecker, 1999b).
Furthering structural changes could be made an integral part of new trade agreements. For instance, new trade agreements could link market access to the development of domestic institutions in emerging economies. One such institution would be a more efficient local banking system. This would better serve borrowers, who have the largest needs for loans. However, emerging economies have pinned their hopes on foreign participation. Most of the benefits from this development have been concentrated among clients, who were already well served, e.g. multinational corporations, large domestic corporations, and high net worth individuals. Local banks are supposed to serve the remaining market segments, but if they serve a growing number of small clients, their costs rise. To reduce expenses, local banks often curtail costly operations, e.g. rural branch offices, small business loans, and mortgages for low and moderate income households. To counter this trend, public support could be granted to local banks for banking services, where they are scarce. Public support can come in the form of tax free status, e.g. credit unions in the U.S., public ownership and thus public guarantees for loans, e.g. public savings banks in Germany, or office space for postal savings unions, e.g. postal savings unions in Japan.

Another institution could be a progressive and efficient tax system. If a government can raise more revenues and do so in a more progressive manner, it has more resources available for public investments and for a social safety net, without restricting demand unnecessarily. Many tax systems in industrializing countries are substantially less progressive than those in industrialized economies. A shift from consumption to income taxation would increase their progressivity. Further, the efficiency of tax collection can be enhanced through the use of modern information technology systems, better trained and better paid public tax officials, and through adequate resources for auditing and prosecution of suspected tax fraud. With a more progressive and efficient tax system the potential for productivity growth would be enhanced, while consumption growth would also be smoothed thanks to fewer income fluctuations.

In addition, civil liberties and political rights, including worker rights and the rule of law, could be boosted. The allocation of government resources depends on the relative political powers of different groups in society. Countries with stronger civil liberties and political rights, including, for example, the right to join a union and bargain collectively, tend to exhibit faster productivity growth as well as more economic stability. The reason for this is that resources at the firm level, but also in the public sector are more equitably distributed than in countries with fewer civil liberties. In economies, where civil liberties are stronger, a balance of interests is more likely, resulting in more stable investment growth and more equitable income growth, especially supported by a greater involvement of workers in the allocation of resources through unions, but also through more redistributive policies at the government level.

The point is that broader civil liberties and political rights, especially better worker rights will likely strengthen supply and demand growth. They will help to strengthen supply growth due to faster productivity growth as a result, for example, of more funding for public education. Also, they will support demand growth because of a
more equal distribution of income, for instance through a strong social safety net or more progressive taxation.

V. Conclusion

The U.S. current account deficit has climbed to record new highs in recent years. In 2003, the current account deficit came close to 5% of GDP. How much longer can this last? Current account deficits between 4 and 5% tend to be seen as unsustainable. Other industrialized countries, such as Sweden and Finland in 1991 and Korea in 1996, had current account deficits in this range in the year prior to their financial crises.

The U.S. may be able to sustain higher current account deficits than other countries because the dollar serves as reserve currency of the world. However, growing current account deficits will ultimately put a strain on economic resources since the net interest payments to serve the U.S.’ external debt will rise, and exceed 2% of GDP within the next decade. As a growing share of resources will be dedicated to serving the international debt, consumption, investment, and ultimately growth may suffer.

At the same time that the U.S. external imbalances have approached unsustainable levels, the federal government has incurred large structural deficits. Foreign investors have been financing an ever increasing share of the federal government’s debt. By the end of 2003, close to 40% of outstanding treasury securities were held by foreigners. At the same time, these deficits hamper the long-term growth prospects. At some point, global investors will likely see the concentration of international lenders to the U.S. government in combination with large structural deficits as too high since increasing investments are made in a country whose growth prospects are dimming.

This leads to three policy options. First, fiscal responsibility needs to be restored to reduce the long-term structural deficits, such that the long-term growth outlook is not further put in jeopardy. Second, the U.S. should engage in negotiations with China to revalue the Chinese yuan, thus boosting U.S. exports. Third, particular attention should be paid to developing domestic institutions in emerging economies that could strengthen growth. Such institutions include broader civil liberties and political rights, public support for local banks, and progressive taxation as well as an efficient tax collection system.

As U.S. external imbalances are approaching and likely exceeding levels that most observers consider sustainable, international economic policy choices must become an integral part of the U.S. domestic policy agenda, not just an afterthought.
Technical Appendix:

To project the net international investment position, a simple dynamic model is used (Blecker, 1999c). The current account balance in period $t$, $CAB_t$, is described as:

$$CAB_t = TB_t \cdot GDP_t + INVINC_t$$  \hspace{1cm} (1)

where $TB_t$ is the assumed ratio of the trade balance to GDP, $GDP_t$ is the nominal gross domestic product, and $INVINC_t$ is the net investment income in period $t$.

Following Blecker’s (1999c) analysis, gold and direct investments are separated to arrive at net financial investment. The net international financial investment position, $NETFIN_t$, is assumed to change at an amount equal to the current account balance:

$$NETFIN_t = NETFIN_{t-1} + CAB_t$$ \hspace{1cm} (2)

Investment income is the sum of interest income earned on financial assets and on direct investment held abroad by U.S. residents minus the income paid to foreign residents for financial assets and direct investment held in the U.S.:

$$INVINC_t = FININC_t + DIRINC_t$$ \hspace{1cm} (3)

Where $FININC_t$ is the net income earned or paid on net financial assets, and $DIRINC_t$ is the net income earned or paid on net direct investment positions.

Financial income is calculated by assuming a fixed interest rate, $INT_t$, that holds for both assets held in the U.S. and assets held overseas. This assumed interest rate is applied to financial assets in the following manner:

$$FININC_t = INT_t \cdot 0.5 \cdot (NETFIN_t + NETFIN_{t-1})$$ \hspace{1cm} (4)

And lastly, the net international investment position is the sum of net financial investment, gold and direct investment.

$$NETINV_t = NETFIN_t + GOLD_t + NETDIR_t$$ \hspace{1cm} (5)

The model takes the available data through the end of 2003 (BEA, 2004a, 2004b, 2004c). For the subsequent years, the following assumptions are made. Nominal gross domestic product is assumed to grow at an annual rate of 5%, which is slightly higher than the average rate assumed by the Congressional Budget Office (2004) for the next ten years. The trade deficit is assumed to decline to 3% of GDP in 2004 and 2003 and remain at 3% for the subsequent years. A sensitivity analysis assumes a decline to 4% and 2%, respectively, is provided in the text. Further, the interest rate on financial investments is set equal 4.25%, which is consistent with historical averages (Blecker, 1999c). Net direct investment is held constant at 2% of GDP. The rate of return on direct investment in the U.S. is set equal 9.0% and 3% for direct investments abroad.
References:


Congressional Budget Office (CBO), 2004b, Current Budget Projections, Washington, D.C.: CBO.

Dow Jones Newswire (DJN), 2002, Dollar is Expected to Consolidate or Rebound Slightly this Week, May 27, 2002.


