Current Account Imbalances: Some Key Issues for the Major Industrialized Economies

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- *In recent years, the resurgence of sizable current account imbalances in the major economies, particularly the U.S. deficit, has led to renewed academic and public discussions about their sustainability.*

- *By themselves, current account imbalances (deficits or surpluses) are neither good nor bad. They simply reflect the outcome of relative cyclical and structural factors in domestic and foreign economies.*

- *Over the second half of the 1990s, the much faster increase in U.S. productivity compared with that of other major economies has been an important factor shaping the evolution of current account balances in major economies. More recently, however, a key element behind the further widening in the U.S. current account deficit has been the loosening in the U.S. fiscal stance.*

- *The experience of recent decades suggests that deficits similar to those that currently exist do not usually last for long and can sometimes unwind in the context of relatively abrupt exchange rate movements. Still, the current episode is unique in a number of respects. For instance, it reflects in part the relatively favourable U.S. productivity performance, which (if sustained) could reduce the likelihood of an abrupt adjustment. Moreover, some believe that the capacity of the United States to finance its current account deficit has increased over time.*

- *The sizable but orderly depreciation of the U.S. dollar on a real effective basis since the beginning of 2002 will contribute to some reduction in external imbalances among major economies.*

T here have been renewed academic and public discussions in recent years about growing external imbalances among major economies, particularly the U.S. current account deficit. In that context, one of the main objectives of this article is to show that current account balances are simply the outcome of various relative structural and cyclical forces between trading partners. The first section of this article is a review of the underlying determinants of the changes in current account positions among the three largest industrial economies (the United States, Japan, and the euro area)[1] since the mid-1990s.

In the second section, possible risks to macroeconomic and financial stability that might stem from large current account deficits and the associated buildup of international liabilities are discussed. We review a range of outside assessments by the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF), and in the academic literature, of current external imbalances, as well as the international historical experience (notably in the 1980s) with external imbalances that are similar to those that currently exist. Evidence indicates that large deficits in industrialized countries do not usually persist for long and that their unwinding generally involves a significant currency depreciation and a slowing in the growth of domestic demand. The parallels that can be drawn with recent developments in exchange markets and U.S. economic activity make this article particularly topical.

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1. The United States, Japan, and the euro area are collectively referred to as the "G-3."

Recent Current Account Developments in the G-3

A key feature of current account developments in the major economies since the mid-1990s is that the U.S. deficit has more than tripled. It rose from 1.5 per cent of GDP in 1997 (its approximate average value over the previous two decades) to 4.6 per cent in 2002 (Table 1).[2] At the same time, while a sizable surplus position was maintained in Japan, and to a lesser extent in the euro area, other economies, particularly certain developing countries, experienced a substantial shift from a deficit to a surplus position. The newly industrialized Asian economies[3] also witnessed a sizable increase in their surplus positions in recent years. Consequently, the combined Japanese-euro area surplus, which more

than offset the U.S. deficit in 1997, accounted for less than 40 per cent of the U.S. deficit by 2002. While not the focus of this article, this development underscores the growing importance of emerging economies on the global economic scene.[4]

A key feature of current account developments in the major economies since the mid-1990s is that the U.S. deficit has more than tripled.

Valuable insights into the evolution of current account balances can be gained by examining their underlying determinants. In this regard, current account balances can be analyzed by considering two different perspectives, which are consistent and mutually reinforcing: (1) a domestic perspective based on savings and investment, and (2) an international perspective based on trade flows in goods and services.[5]

Savings-investment perspective

From the basic national accounts identities, we can show that current account balances reflect the difference between domestic savings and investment.[6] Indeed, international financial integration and mobility

Table 1

Global Current Account Balances

US$ billions

	1997	1998	1999	2000	2001	2002	Changes between 1997 and 2002
United States[a]	-128.4 (-1.5)	-203.8 (-2.3)	-292.9 (-3.2)	-410.3 (-4.2)	-393.7 (-3.9)	-480.9 (-4.6)	-352.5 -3.1 [b]
Euro area[a c]	98.2 (1.5)	62.5 (0.9)	29.0 (0.4)	-28.7 (-0.5)	11.8 (0.2)	61.2 (0.9)	-37.0 -0.6 [b]
Japan[a]	96.6 (2.2)	119.1 (3.0)	114.5 (2.6)	119.6 (2.5)	87.8 (2.1)	112.7 (2.8)	+16.1 +0.6 [b]
Canada[a]	-8.2 (-1.3)	-7.7 (-1.2)	1.7 (0.3)	20.7 (2.9)	17.3 (2.4)	14.9 (2.0)	+23.1 +3.3 [b]
Newly industrialized Asian economies	8.5	66.8	60.1	43.5	54.6	68.0	+59.5
Other advanced economies	22.0	3.7	-7.2	20.7	31.3	37.5	+15.5
Developing countries	-55.6	-82.6	-9.6	67.8	25.9	74.0	+129.6
Countries in transition	-25.3	-29.5	-2.4	25.1	12.8	9.9	+35.2
Total[d]	7.8	-71.6	-106.8	-141.6	-152.2	-102.8	-110.6

a. The figures in brackets are the current account balances as a percentage of nominal GDP. More details about the classification of countries into major groups (e.g., advanced, developing, or in transition) can be found in the statistical appendix of the IMF *World Economic Outlook.*
b. Figures are expressed in percentage points.
c. Calculated as the sum of the balances of individual euro-area countries
d. Reflects errors, omissions, and asymmetries in balance-of-payments statistics on the current accounts. Excludes data for international organizations and some countries.
Source: IMF

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2. The Box on p. 13 outlines the disparate data sources and measurement errors that complicate the analysis of current account balances and international investment positions. These caveats must be kept in mind where discrepancies are found between conceptually equivalent statistics such as those reported in the tables and figures in this article.

3. Hong Kong SAR, South Korea, Singapore, and Taiwan, Province of China.

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4. Although it is a major trading nation, Canada's current account balance is relatively small (an average surplus of about US$16 billion since 2000). Consequently, Canada has not contributed significantly to global external imbalances.

5. Current account balances fundamentally reflect domestic savings and investment conditions. However, international forces have a bearing on domestic conditions, notably through their influence on interest rates and exchange rates.

6. Consider the following concepts:
$$GNDY = GNP + NCT$$
$$GNP = GDP + NY$$
$$GDP = C + I + G + X - M$$
where GNP is gross national product
GDP is gross domestic product
$GNDY$ is the gross national disposable income
C is consumer expenditure
I is business investment and residential construction
G is government purchases of goods and services
X is export of goods and services
M is import of goods and services
NY is net income from abroad
NCT is net current transfers
T is government tax receipts.
The current account balance *(CAB)* is:
$$CAB = X - M + NY + NCT$$
$$= (GNDY - T - C) + (T - G) - I$$
$$= \text{Private savings} + \text{Government savings} - \text{Investment}.$$

The Global Current Account Discrepancy and Other Statistical Problems

As highlighted by the IMF (2002c), various measurement errors complicate the analysis of current account imbalances and the balance of payments more generally. A comparison of Tables 1, 2, and 4 shows that there can be significant discrepancies not only between balances for the current account and the financial and capital account (balance-of-payments data), but also between measures of domestic savings relative to investment (national accounts data). Yet, in theory, all of these measures should give the same results.

At the global level, these statistical problems add up to sizable discrepancies. While the world current account should, in principle, be in balance, the IMF estimates that it reached a deficit of US$103 billion in 2002. This suggests that some countries' reported current account deficits might be exaggerated, or the current account surpluses of others might be underestimated. This raises the question of how much of the observed current account imbalances are simply the result of measurement errors.

There are also problems with the measurement of international investment positions. In this regard, Warnock and Cleaver (2002) argue that the U.S. debtor position, which has grown rapidly in recent years, has been overstated because U.S. holdings of foreign securities are underestimated, while foreign holdings of U.S. securities are overestimated.

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of capital allow a deficit in savings relative to investment in one economy to be "financed" by surplus savings in foreign economies, which contributes to an efficient worldwide allocation of resources.[7]

As can be seen from Table 2, domestic investment was systematically larger than domestic savings in the United States over the 1997–2002 period. As a result, the United States has been a net borrower of foreign savings. In contrast, the euro-area and Japanese economies are both significant net lenders to the rest of the world. Although investment (as a proportion of GDP) is larger in the euro area and Japan than in the United States, the proportion of savings is also much greater.

In part as a result of forward-looking expectations, global productivity developments had many economic and financial repercussions in the United States and the rest of the world, notably on investment and savings. In particular, there was a substantial upward shift in U.S. labour-productivity growth relative to the previous two decades (Table 3). In contrast, labour-productivity growth continued its downward trend in both Japan and the euro area. As a result, the U.S. productivity performance shifted from well below that of Japan and the euro area to well above them (the so-called "U.S. productivity miracle").

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Between 1997 and 2000, the foreign-borrowing needs of the United States increased markedly, reflecting mainly a substantial rise in the proportion of investment in GDP. The much more pronounced rise in U.S. investment compared with other industrialized economies resulted in large part from the significant and sustained rise in U.S. productivity since the mid-1990s, which raised longer-term prospects for potential growth in the U.S. economy. The capital-stock adjustment to this higher perceived growth rate for trend output (i.e., a shift to a higher capital-labour ratio), along with a higher rate of depreciation of the capital stock (i.e., a shift in the composition of capital towards short-lived assets such as computer equipment) led to a substantial growth in U.S. business investment.

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7. Shifts in the "world" real interest rates help to equalize savings and investment at the global level. For instance, when investment is larger (smaller) than savings, this puts upward (downward) pressure on real interest rates, which induces savings to increase (decrease) and investment to decrease (increase).

Table 2

Savings – Investment Balances in the G-3

	1997	1998	1999	2000	2001	2002	Changes between 1997 and 2002 (percentage points)
United States							
Savings – Investment balance	-1.8	-1.9	-2.6	-2.7	-2.6	-3.6	-1.8
Gross savings							
Total	18.1	18.8	18.4	18.4	16.5	15.0	-3.1
Public	1.9	3.1	3.8	4.4	2.6	-0.2	-2.1
Private	16.2	15.7	14.6	14.0	13.9	15.2	-1.0
Gross investment							
Total	19.9	20.7	20.9	21.1	19.1	18.6	-1.3
Public	3.2	3.2	3.3	3.3	3.3	3.4	+0.2
Private	16.7	17.5	17.6	17.9	15.7	15.3	-1.4
Japan							
Savings – Investment balance	2.2	2.9	2.5	2.5	2.1	2.8	+0.6
Gross savings							
Total	30.8	29.7	28.4	28.7	27.7	26.5	-4.3
Public	5.1	3.8	2.4	1.8	3.5	1.0	-4.1
Private	25.7	25.9	26.0	26.9	24.1	25.5	-0.2
Gross investment							
Total	28.6	26.8	25.9	26.2	25.6	23.7	-4.9
Public	7.6	7.4	7.8	6.9	6.6	6.3	-1.3
Private	21.0	19.3	18.1	19.3	19.0	17.4	-3.6
Euro area							
Savings – Investment balance	0.9	0.1	-0.1	-0.9	-0.4	0.6	-0.3
Gross savings							
Total	21.3	21.2	21.2	21.1	20.6	20.7	-0.6
Public	0.1	0.8	1.9	2.3	1.7	1.8	+1.7
Private	21.2	20.3	19.3	18.8	18.9	18.8	-2.4
Gross investment							
Total	20.3	21.0	21.3	22.0	21.0	20.0	-0.3
Public	2.7	2.7	2.8	2.8	2.9	2.8	+0.1
Private	17.7	18.3	18.5	19.2	18.1	17.2	-0.5

Source: IMF

Table 3

Labour Productivity in the Business Sector

Average annual growth rate*

	1976–86	1987–95	1996–2002
United States	1.0	1.1	2.2
Japan	2.8	2.2	1.3
Euro area	2.1	2.1	0.9
Canada	0.9	1.2	1.7

* Based on real output per employed person in the business sector
Source: OECD

Moreover, the sharp rise in U.S. stock market prices (up to 2000), which reflected in part the improved longer-term prospects for potential growth in the U.S., led to a significant reduction in the cost of equity financing, which provided further impetus to business investment.[8]

In the second half of the 1990s, U.S. fiscal consolidation, helped by stronger real growth in U.S. GDP, led to a marked rise in public savings. However, there was a concurrent reduction in U.S. private savings (households and corporations), apparently reflecting in part the sharp increase in net wealth (owing mainly to rises in equity and housing prices)[9] and increased consumption in anticipation of higher future income, reflecting improved longer-term prospects for potential growth.[10] Although there was a rise in U.S. overall savings, it was not sufficient to finance the increase in investment.

In more recent years, the greater foreign borrowing by the United States has stemmed from a significant decline in public savings. Although there was a sharp retrenchment in U.S. investment in 2001 and 2002, reflecting in part an adjustment to the over-investment that took place during the late 1990s, particularly in the information and communication technology industries, there was an even more pronounced easing in the U.S. fiscal stance that substantially reduced the amount of public savings. The decline in overall savings was attenuated, however, by a significant pickup in private savings. This apparently reflected, in part, some unwinding of the earlier wealth effect, owing to

8. According to an empirical analysis conducted by the OECD (2001), other factors, such as the pickup in output growth (the traditional "accelerator effect") and the ongoing decline in the relative prices of capital goods, also explain the acceleration in U.S. business investment during the second half of the 1990s.

9. The OECD reported that net wealth of U.S households rose by about 160 percentage points relative to their disposable income between the end of 1994 and the end of 1999. The large accumulation of wealth had major implications for U.S. household savings, because wealthier households tend to spend more on goods and services (see IMF 2002a). In their empirical study, de Serres and Pelgrin (2002) argue that "Ricardian equivalence" could explain a large part of the decline in U.S. private savings in the second half of the 1990s. Ricardian equivalence suggests that expectations of lower taxes in the future (which could have been the case when fiscal consolidation took place) would have reduced the savings rate of households and businesses.

10. As argued by Obstfeld and Rogoff (1994, 1996), the intertemporal approach views the current account balance as the outcome of forward-looking dynamic savings and investment decisions. According to the permanent-income hypothesis, household consumption is based on the discounted value of expected future income (as opposed to current income alone). As a result, a permanent (country-specific) increase in productivity leads to a current account deficit so that agents can smooth consumption over their lifetime. This implies that a deficit represents expectations about high future growth relative to other countries.

the sharp decline in stock market prices and a concomi-
tant reassessment of future income expectations.

Elsewhere, the relative stability of the net lending
position of Japan and the euro area over the 1997–2002
period masked different underlying trends in overall
savings and investment. In the euro area, savings and
investment rates, which are close to the average for
advanced economies, were relatively steady. In con-
trast, Japanese investment and savings rates declined
from exceptionally high levels. Indeed, the decline in
Japanese investment mainly seems to be a convergence
to more normal levels following the huge over-invest-
ment that took place in the late 1980s, when the Japa-
nese asset-price bubble substantially lowered the cost
of capital.

A closer examination reveals that public savings in the
euro area increased significantly as a result of the fis-
cal consolidation that was required by the Maastricht
Treaty before the adoption of the common currency in
January 1999. However, an offsetting shift in private
savings likely reflected, in part, wealth effects and
demographic trends.[11] In contrast, there was a large
reduction in public savings in Japan, reflecting the
impact on public finances of weak economic activity
and the adoption of discrete fiscal measures to sustain
aggregate demand.[12]

Trade-flow perspective

Current account balances can also be examined
directly by considering the evolution of exports and
imports of goods and services (Table 4).[13] In this

Table 4

Current Account Balances in the G-3

Per cent of nominal GDP

	Total	Total excluding oil imports	Goods	Services	Income	Current transfers
United States						
1997	-1.5	-0.7	-2.4	1.1	0.2	-0.5
1998	-2.3	-1.8	-2.8	1.0	0.1	-0.6
1999	-3.1	-2.4	-3.7	0.9	0.2	-0.5
2000	-4.2	-3.0	-4.6	0.8	0.2	-0.6
2001	-3.9	-2.9	-4.2	0.7	0.1	-0.5
2002	-4.6	-3.6	-4.6	0.6	–	-0.6
Japan						
1997	2.3	3.0	2.4	-1.3	1.4	-0.2
1998	3.0	3.5	3.1	-1.3	1.4	-0.2
1999	2.6	3.3	2.8	-1.2	1.3	-0.3
2000	2.5	3.5	2.5	-1.0	1.3	-0.2
2001	2.1	3.0	1.7	-1.1	1.7	-0.2
2002	2.8	3.9	2.4	-1.1	1.7	-0.1
Euro area*						
1997	1.0	2.1	2.0	–	-0.3	-0.7
1998	0.4	1.1	1.8	0.1	-0.5	-0.8
1999	-0.4	0.6	1.2	-0.3	-0.6	-0.7
2000	-1.0	0.8	0.5	-0.3	-0.4	-0.8
2001	-0.2	1.4	1.1	–	-0.5	-0.7
2002	0.9	2.4	1.8	0.2	-0.4	-0.7

* Corrected for reporting discrepancies in intra-area transactions
Source: OECD

regard, we will highlight in our analysis two main
forces shaping the trade flows of goods and services.[14]
First is the income effect, whereby a country's demand
for imports is positively related to its income. Similarly,
export demand is positively related to foreign income.
Thus, changes in the relative cyclical position (domes-
tic versus foreign real GDP) will be a key determinant
in shaping the evolution of the current account bal-
ance. Second is the relative price effect, whereby a
country's demand for imports and, similarly, its
demand for exports, depends on the price of domestic
goods and services compared with the price of foreign
goods and services, adjusted for transportation costs
and converted to the local currency. If domestic goods

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11. OECD (2003b) estimates show that household net wealth (as a per cent of
disposable income) in the three major economies of the euro area increased
substantially between the end of 1994 and the end of 1999 (161 percentage
points in France, 38 percentage points in Germany, and 29 percentage points
in Italy). De Serres and Pelgrin (2002) also estimate that the aging of the popu-
lation in the major euro-area countries has reduced the savings rate signifi-
cantly (this impact is much greater in Japan but is absent in the United States).
According to the life-cycle hypothesis, an increase in the old age dependency
ratio (i.e., the population over 64 years relative to the population between the
ages of 20 and 64 years) results in a decline in the savings rate as an increasing
share of the population is drawing down financial assets to sustain its con-
sumption.

12. Note that, in Table 2, the general government balance will be reflected in
the difference between gross public savings and gross public investment.
However, our discussion of the changes over time focuses on gross public
savings, owing to the relative stability of gross public investment.

13. Apart from trade in goods and services, the current account balance also
covers transfers, as well as receipts from, and payments of income to, foreign-
ers. Transfers typically include official grants and private remittances, while
income covers mainly investment income (receipts on country-owned assets
abroad and payments on foreign-owned assets in the country). Those compo-
nents are not covered explicitly in our analysis, since they are responsible for
only a small portion of the overall movement in G-3 current account balances.

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14. Our analysis of the nominal current account balance focuses on the deter-
minants of the real trade flows. This approach has been commonly used by
the IMF and the OECD, and is consistent with studies such as those of Clarida
and Prendergast (1999) and Kandil and Greene (2002). Nevertheless, changes
in terms of trade (i.e., the price of exports relative to the price of imports) can
have a significant impact on the evolution of current account balances. For
instance, a rise in the price of commodities (e.g., world oil prices) will contri-
bute to raise the current account balance of oil-exporting countries, but will
have the opposite effect on oil-importing countries.

and services become less expensive compared with foreign goods and services, for example, then domestic demand will shift away from imported goods and services towards those produced domestically. This would also increase foreign demand for the home country's now relatively less expensive exports. This is the concept of the competitiveness of a country relative to its trading partners, which is usually measured by a trade-weighted real effective exchange rate.[15]

Charts 1 to 3 allow us to better understand the historical relationships among current account balances, the relative cyclical position, and the real effective exchange rate in the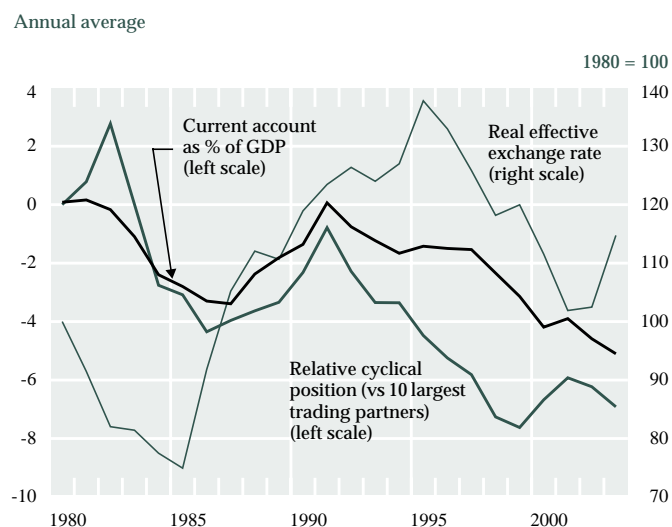 G-3 economies.[16] In this light, we can see that the marked widening in the U.S. current account deficit since the early 1990s reflects, in part, faster GDP growth in the United States compared with that of its major trading partners. Moreover, the adverse lagged impact of the sharp real appreciation of the U.S. dollar (by almost 50 per cent in real effective terms between April 1995 and February 2002) on the real trade balance also contributed to the widening in the U.S. current account deficit in more recent years. According to IMF estimates (2002d), the widening of the U.S. current account deficit over the 1995–2001 period (by about 3.5 percentage points relative to nominal GDP) is explained mainly by the appreciation of the U.S. dollar, which accounts for 2 percentage points of the widening, and to a lesser extent by the shift in the relative cyclical position, which accounts for 1 percentage point.

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15. Lafrance (1988) and Lafrance and St-Amant (1999) reviewed the concept of competitiveness and the construction of various cost- and price-based measures. A depreciation (appreciation) in the real effective exchange rate represents an improvement (deterioration) in the competitive position of an economy. It is also important to note that the impact of these shifts in relative prices on real trade flow of imports and exports usually operates with some lags, depending in part on the duration of prior contractual agreements.

16. Our analysis is based on the IMF index of the trade-weighted real effective exchange rate, which is the ratio of the unit labour costs of the home country to those of 20 of its trading partners, converted to the home currency. For illustrative purposes, the index has been inverted such that a decline (rise) in the index reflects a real appreciation (depreciation) of the currency, which should lead over time to a decline (rise) in the current account balance (i.e., higher [lower] real imports and lower [higher] real exports). Similarly, we have constructed a trade-weighted measure of relative cyclical positions that is based on the ratio of real GDP in the home country relative to that of its 10 largest trading partners. A decline (rise) in the index reflects a faster (slower) rate of growth in the home country relative to its major trading partners, which should lead to a decline (rise) in the current account balance (i.e., a larger [smaller] rise in real imports compared to real exports).

Not only has U.S. real GDP been growing relatively faster than those of its major trading partners, but an asymmetry in income elasticity between U.S. imports and exports has exacerbated the adverse impact on the U.S. current account balance. Indeed, even if the U.S. economy were growing at the same rate as the rest of the world, the U.S. current account would still tend to deteriorate, because there is apparently a much larger income elasticity of U.S. imports relative to U.S. exports. Estimates of income elasticities for U.S. imports have typically been between 1.5 and 2.5, while those for U.S. exports have been closer to 1.0. As reported in Mann (1999), this has been a consistent feature of the empirical literature of the post-war period.

Chart 1

Determinants of Trade Flow in the United States

Annual average

Note: For 2003, we show the average monthly value (up to November) for the real effective exchange rate. As well, the current account and relative cyclical position are based on IMF projections (2003). (See footnote 16 for a detailed description of the index.)
Source: IMF and OECD

Chart 2

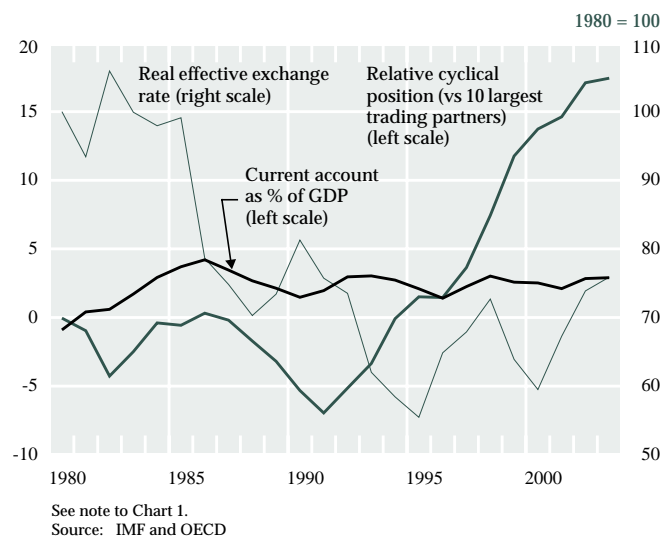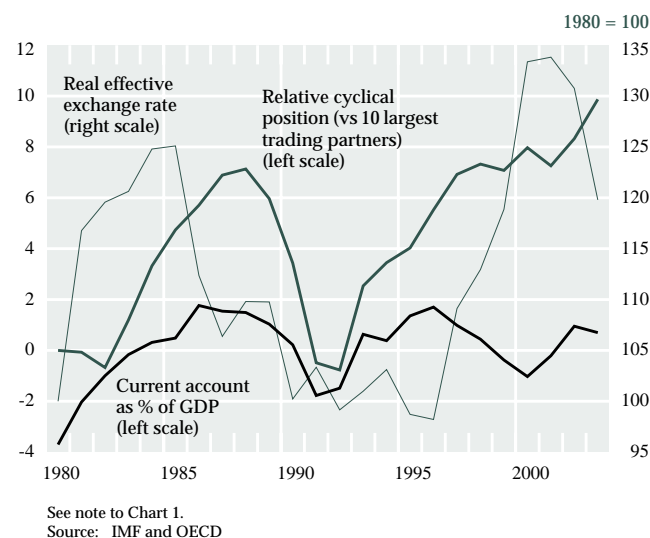**Determinants of Trade Flow in Japan**

Annual average

See note to Chart 1.
Source: IMF and OECD

Chart 3

Determinants of Trade Flow in the Euro Area

Annual average

See note to Chart 1.
Source: IMF and OECD

In contrast to the U.S. economy, the relative cyclical positions of both Japan and the euro area have weakened markedly since the early 1990s, as growth in those countries fell considerably behind that of the United States, which tended to improve their current account balances in more recent years. In the euro area, this was reinforced by the significant deprecia-

tion of the euro between February 1996 and October 2000 (by about 30 per cent). In Japan's case, however, the exchange rate probably played a modest role, since it has remained relatively flat over the past several years. Nevertheless, the above-mentioned positive influences on the current account balances of both the euro area and Japan have been offset to some extent by the adverse impact of higher world oil prices in recent years.[17]

Possible Implications for Macro-economic and Financial Stability

While external imbalances in the major economies have been growing in recent years, some commentators have expressed concerns about the sustainability of the U.S. current account deficit. A major concern is the possibility that a sudden shift in expectations (particularly regarding the relatively more favourable U.S. prospects for longer-term productivity compared with those of other economies) could lead to abrupt changes in foreign exchange and financial markets, and ultimately cause disruptive changes in the macro-economy. As argued by the IMF (2003), Mann (2002), and McKinnon (2001), the adverse balance-sheet effects of a sharp U.S.-dollar depreciation would fall mainly on the rest of the world, because most U.S. foreign liabilities are denominated in U.S. dollars.

However, recent developments have been benign. Despite some downward revisions to U.S. prospects for return on capital in recent years, the U.S.-dollar depreciation since the beginning of 2002, though significant, has so far taken place in an orderly fashion, and without substantial adverse effects on U.S. interest rates. In this regard, movements in official reserves from foreign authorities (notably in Asia) have provided support for the U.S. dollar. Such capital flows have become an increasingly important source of "financing" for the U.S. current account deficit.[18]

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17. While the average price for West Texas Intermediate crude oil was about US$18 in the 1997–99 period, it jumped to an average of about US$27.5 in the 2000–2002 period, which represents an increase of over 50 per cent. In this regard, the figures shown in the column "Total current account balance, excluding oil imports" in Table 4 are more consistent with developments in the relative cyclical position and the real exchange rate. It is also likely that structural changes over the past decade or so (namely, greater integration with other Asian economies, which involved outsourcing of production) have led to a decline in Japanese export performance.

18. Though negligible in 2001, foreign official reserve flows accounted for almost 20 per cent of the net capital inflows into the United States in 2002. Over the first three quarters of 2003, their share rose to almost 35 per cent of net inflows.

In this context, the next section examines some potential implications for macroeconomic and financial stability stemming from external imbalances, notably by reviewing lessons from the international experience.

What does history tell us?

In principle, a current account deficit could be sustained as long as the stream of earnings from the investment financed by foreign savings covered the financing cost (i.e., interest payments and dividends).[19] In this regard, the Canadian experience shows that a country can run a sizable current account deficit for an extended period. Indeed, Canada recorded current account deficits throughout most of its history. Between 1870 and the early 1910s, Canada's current account deficit averaged about 7 per cent and reached a peak of close to 18 per cent of GDP before World War I (Powell 1997; Urquhart 1993).[20]

Since the 1970s, large current account deficits have generally not been sustained for long . . . . Nevertheless, some commentators remain confident that U.S. current account deficits and the associated buildup of external liabilities could be sustained well into the future.

More comprehensive reviews of the international experience among industrial countries by Freund (2000) and the IMF (2002c), however, show that, since the 1970s, large current account deficits have generally not been sustained for long. A typical current account reversal begins when the deficit is about 5 per cent of GDP and is associated with a combination of slower real GDP growth and a significant depreciation of the real effective exchange rate (interest rates are also

found to rise noticeably in the years preceding the reversal).

A number of useful parallels can be drawn between the current situation and that of the mid-1980s.[21] These parallels support the view that large external imbalances can be resolved gradually without a significant adverse impact on financial stability or the macroeconomy. Exchange rate movements can be significant, however. For example, as can be seen from Chart 1, the marked widening in the U.S. current account deficit in the 1982–87 period (to about 3.5 per cent of GDP) coincided with much faster aggregate demand growth in the United States compared with that of its major trading partners. The adverse lagged impact on real trade of the sharp real appreciation of the U.S. dollar (by about 50 per cent in real effective terms between July 1980 and March 1985) also contributed to the widening in the U.S. current account deficit. Subsequently, the gradual elimination of the U.S. current account deficit between 1987 and 1991 was helped by a relatively sharper slowing in U.S. real GDP growth compared with that of its major trading partners.[22] Moreover, the substantial real effective depreciation of the U.S. dollar that began in March 1985 played a key role in the external adjustment process.

International investment positions and the role of exchange rates

Another way to evaluate the sustainability of current account imbalances is to consider the path of the associated buildup of net external assets or liabilities (as a ratio to GDP). As can be seen from Chart 4, the capital inflows that have been the counterpart to persistent U.S. current account deficits have cumulated into a sizable net international liability position.[23] In contrast, Japanese current account surpluses have translated

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19. A more detailed discussion of what constitutes a sustainable external position can be found in Bank of Canada (1985) and IMF (2002b). Some of the medium-term issues covered in those studies include the importance of considering the source of the current account imbalance (i.e., changes in domestic savings versus changes in domestic investment and their sustainability), as well as the composition of external liabilities.

20. This was associated with substantial foreign direct investment in the resource sector of the Canadian economy and in railway construction to open up the western part of the country.

21. One should note that U.S. trade patterns are now significantly different from those of the 1980s. In particular, Mexico, South Korea, Singapore, China, and Hong Kong SAR have become much more important trading partners for the United States.
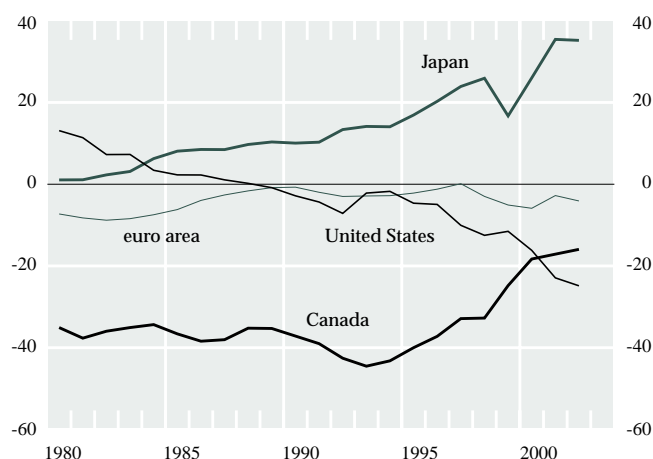
22. In 1991, the U.S. current account balance was also boosted by large one-time transfers from allies who shared some of the costs related to the Gulf War.

23. Net international investment positions also reflect changes in the valuation of exchange rates. In this regard, Tille (2003) shows that 30 per cent of the deterioration in the U.S. net investment position between 1999 and 2001 is accounted for by changes in the value of U.S. foreign assets, owing to the U.S.-dollar appreciation. As a result, the author believes that the U.S. net international investment position is less worrisome than if it reflected only current account imbalances.

Chart 4

Net International Investment Positions

Market values at year-end, as a per cent of GDP*

*   International investment positions reflect not only the accumulation of current account balances but also exchange rate and other market valuations. For instance, the sharp decline in the Japanese international net asset position between the end of 1998 and the end of 1999 (despite a continued current account surplus) reflected mainly the adverse impact on asset valuations (largely denominated in U.S. dollars) of the sizable appreciation of the Japanese yen vis-à-vis the U.S. dollar and the increase in liabilities stemming from the gain in Japanese stock prices.

Source: IMF up to 2001, except for the euro-area data, which are taken from the European Central Bank *Monthly Bulletin* and, prior to 1997, from Fagan et al. (2001). For 2002, figures are from the U.S. Bureau of Economic Analysis, the Japanese Ministry of Finance, and the European Central Bank.

into a relatively large net international asset position. Looking forward, most forecasts imply that Japanese net assets and U.S. net liabilities will continue to rise sharply over coming years, to reach unprecedented levels.[24]

Yet, the U.S. net liability position cannot grow indefinitely. A number of conditions need to be satisfied to achieve a sustainable external position. In particular, the net liability position (as a ratio to GDP) has to stabilize at a level that is acceptable to both borrowers and lenders. In this regard, Obstfeld and Rogoff (2000) argue that even if the United States has the means to repay its liabilities, "home bias" in asset holdings suggests that the rest of the world's willingness to absorb U.S. liabilities is limited. The authors also point out that the current U.S. net international liability position (25 per cent of GDP at the end of 2002) is extremely high by historical standards. For instance, at the end of the nineteenth century, when the United States was

an emerging giant, its net international liability position never exceeded 26 per cent. Long-term sustainability also implies that a country with net foreign liabilities must have a trade surplus in goods and services in steady state to finance the stream of interest and dividend payments. As a result, it is clear that significant adjustments to external imbalances in the major economies will eventually need to take place.

Nevertheless, some commentators remain confident that U.S. current account deficits and the associated buildup of external liabilities could be sustained well into the future. Cooper (2001) argues that the proportion of foreign savings invested in the United States is much lower than the weight of the U.S. economy in world GDP. Greenspan (2003) and McKinnon (2001) also point to the special role played by the U.S. dollar in the world economy. In this regard, the Chairman of the U.S. Federal Reserve Board, Alan Greenspan, has argued that the ability of the United States to finance its external deficit in a reserve currency has increased its capability to incur foreign debt relative to most other countries. He also suggested that globalization (namely, reduced costs and increased reach of international financial intermediation) has, over time, improved the U.S. capacity for raising debt. As a result, comparisons with earlier episodes might be misleading.

Over the medium term, a number of structural factors could contribute to the narrowing of external imbalances among the United States, Japan, and the euro area, as well as other countries. The OECD (2001), for example, has argued that there could be a convergence in productivity growth rates between the main economies, a narrowing of the difference between income elasticities of U.S. imports and exports,[25] and favourable demographic developments. Nevertheless, the extent of the contribution of those factors remains uncertain. For instance, over the next 20 years or so, the old age dependency ratio is expected to rise more rapidly in Japan and Europe than in the United States, such that savings could fall somewhat more in Japan and Europe as larger shares of their populations reach retirement age. However, aging is also expected to reduce investment spending because of the associated lower growth of the labour force. As a result, the net expected effect of aging on external imbalances is ambiguous. Similarly, a relatively large improvement

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24. Canada's net international liability position (as a per cent of GDP), which in the past has been larger than that of the United States, has declined considerably since its peak in 1993.

25. The IMF (2001b) has suggested that the estimated income elasticities of U.S. exports and imports converged somewhat in the 1990s, and that this convergence could continue into the future.

in the productivity performance of U.S. trading partners would be required to reduce the U.S. current account deficit significantly.[26]

Regardless of the role played by structural factors, there is a broad consensus that part of the adjustment of global external imbalances will come through changes in real exchange rates.

Yet, regardless of the role played by structural factors, there is a broad consensus that part of the adjustment of global external imbalances will come through changes in real exchange rates.[27] In this regard, some of the major international organizations and economic commentators believe that a further significant real effective depreciation of the U.S. dollar is required to help achieve a sustainable U.S. external position (Table 5).[28] It should be noted, however, that the U.S. dollar does not have to depreciate by the same amount against all currencies. The more it depreciates against one currency, the less it needs to depreciate against others. Indeed, in order to provide sustainable external positions in all countries, it cannot be true

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26. IMF simulation results (2002a) suggest that if annual productivity growth in the rest of the industrialized countries were to increase relative to that of the United States by 0.5 percentage points, the U.S. current account deficit could be reduced by almost $100 billion after five years. An extrapolation of this rule of thumb suggests that the elimination of the U.S. current account deficit over that period, based solely on relative growth performance, would require a very large sustained improvement—about 2.5 percentage points per year—in the rate of productivity of U.S. industrialized trading partners.

27. Several empirical studies (such as Lane and Milesi-Ferretti 2000, 2002; Gagnon 1996; Faruqee 1995) have provided estimates of a positive long-run relation between net international investment positions and the real exchange rate, whereby debtor countries tend to have more depreciated real exchange rates that enable them to run trade surpluses to service their external liabilities (creditor countries, which can sustain a deficit in their balance of trade equal to their foreign investment income, tend to have more appreciated real exchange rates).

28. As discussed in footnote 23, a depreciation of the U.S. dollar would not only contribute to a stabilization of the U.S. net external liability position through a more favourable current account dynamic, but also directly through valuation changes to U.S. foreign assets. By themselves, valuation adjustments related to the U.S.-dollar depreciation during 2002 (by about 7 per cent on the basis of the IMF nominal effective exchange rate index) have reduced the U.S. net external liability position (as a per cent of GDP) by about 2 percentage points. A much larger exchange rate valuation adjustment would be expected for 2003, given the more pronounced U.S.-dollar depreciation during that year.

Table 5

Effective Depreciation in the U.S. Dollar "Required" to Achieve a Sustainable External Position

Per cent[a]

	Original estimates	Adjusted for more recent exchange rate developments[b]
IMF	20	18
OECD	up to 30	up to 13
Mann	25	18
Obstfeld and Rogoff	12 to 45	6 to 39

a. Defined in real terms for the IMF (2003) and Obstfeld and Rogoff (2000) and in nominal terms for the OECD (2001) and Mann (1999)

b. Adjustments attempt to capture the changes in the value of the U.S.-dollar exchange rate that have taken place since these studies were completed (based on data for the month of November 2003).

that the U.S. dollar would depreciate by the same amount against all countries' currencies.[29]

Conclusion

The development of current account imbalances in the major economies can mainly be explained by a combination of structural and cyclical factors. In particular, growing imbalances have reflected in large part the relatively favourable U.S. productivity performance as well as the relatively easier U.S. fiscal stance.

As argued by commentators such as the IMF and the OECD, sound macroeconomic and structural policies would facilitate the required long-term adjustments to achieve sustainable external balances and to help maintain financial stability. Such policies should include further structural reforms that would raise potential growth and make regions outside the United States more attractive locations for investment. Strong domestic demand outside the United States would boost demand for U.S. goods and services, thereby helping to reduce external imbalances. As well, fiscal consolidation in the United States would be helpful.

However, most commentators agree that further significant adjustments to the real exchange rate will be necessary over the medium term to achieve sustainable external positions (i.e., a stabilization of net international investment positions in relation to GDP). While part of this adjustment will be against the Japanese yen and the euro, the currencies of other major U.S. trading partners may be affected as well. As long as this is accomplished in an orderly fashion, there is no reason to believe that global financial stability would be compromised.

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29. Real exchange rate movements can take place not only through changes in nominal exchange rates, but also through differential inflation rates.

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