

Causes and Consequences of the Buildup in Global Liquidity

Testifying before the Senate Banking Committee on February 16, Federal Reserve Chairman Alan Greenspan expressed surprise that long-term interest rates were lower at that moment than they had been when the central bank began a tightening campaign that has more than doubled its short-term policy rate. Noting similar declines in long rates in Europe and other parts of the world, he said, “for the moment, the broadly unanticipated behavior of world bond markets remains a conundrum.”

Viewed from a more disinterested perspective, however, this “conundrum” might be seen as a predictable outcome of the extraordinary buildup in global liquidity in recent years. During this period, an unprecedented increase in the availability of funding has spurred escalating amounts of leveraged speculation in the form of carry trades, where the effect of borrowing short-term at low rates is to drive down rates on the higher-yielding, long-term assets in which the funds are invested.

Expanding liquidity is also reflected in two other characteristics of current market conditions that Greenspan mentioned: narrowed risk premiums and eased credit standards. In fact, what was surprising about the chairman’s testimony was his silence on the subject of liquidity, which is, after all, what central banks create and curb in their quest for price stability.

By contrast, the Managing Director and staff of the Bank for International Settlements argued in their 2004 *Annual Report* that a direct link exists between accommodative monetary policies in the G-3 countries (the U.S., the euro-area and Japan) and mounting liquidity in global financial markets. The report points to quantitative measures such as the monetary base, broad money and credit to the private sector – all of which have expanded rapidly since 1999 in a large group of countries – as clear evidence of exceptional liquidity growth over the last five years.

Moreover, the BIS’ 2003 *Annual Report* specifically criticized the Fed for creating a situation in which a potential U.S. downturn could be more severe due to the domestic debt build-up encouraged by monetary ease. Echoing other observers, the BIS noted the exceptional increase in household debt relative to disposable income in America and other advanced economies – and it warned that such imbalances might damage these countries’ financial systems. In addition, the central bankers organization suggested that monetary authorities’ conventional focus on price stability was a factor in the debt buildup because policymakers failed to reckon with a shift in inflationary pressures from goods to asset markets.

The risks that current levels of liquidity now pose for the global economy include rising inflation, recurring asset bubbles and growing financial imbalances – all of which, as they unwind, could generate significant waves of instability. But, as the BIS warns, it is not only the G-3 countries that confront these risks. Much of the rest of the world faces the possibility of spillover effects attributable in part to the dominant status of the G-3 currencies. In addition, investors’ aggressive search for yield has channeled a rising volume of capital to countries with higher interest rate differentials than the G-3, thus creating excess liquidity in these nations as well. At the same time, emerging economies’ accumulation of large international reserve holdings “provides a feedback mechanism” through which those countries’ policies “can affect the G-3.”

This edition of *Capital Flows Monitor* is the first of a two-part series that examines these risks to the global economy. Drawing on BIS and International Monetary Fund publications, Part One focuses on policy decisions and investment trends during 2003 and 2004 that led to the exceptional buildup in liquidity that has not yet begun to dissipate.

In this edition, *CFM* describes monetary policy actions and market responses in the G-3 and emerging economies, a buildup in foreign exchange reserves, and the link between low interest rates and rising speculation in external and domestic markets. In addition, the report analyzes the implications of a global merry-go-round of increasingly large and volatile capital flows driven by excess liquidity, current account imbalances and unstable relationships between the three major international currencies.

To set the stage for this story of a global economy increasingly strained by inappropriate policies and out-of-control financial markets, we begin with a brief assessment of the U.S. international investment position, a primary marker of America's status as the world's dominant importer of both goods and capital.¹

The U.S. International Investment Position

When Wall Street crashed in October 1987, U.S. residents still owned more assets abroad than foreigners owned here. In other words, the U.S. international investment position was still positive, as it had been since World War I. But the increased borrowing required to finance growing trade deficits had already taken a toll on America's once strong creditor position. By 1989, the U.S. became a net debtor nation and its external (i.e., foreign) debt continued to mount throughout the 1990s. At year-end 1996, the net debt reached a record \$548 billion (with assets at market values). One year later, it crossed the \$1 trillion threshold – equivalent to 13 percent of gross domestic product – and by the end of 1998 rose to \$1.5 trillion or 18 percent of GDP.

The most recent Bureau of Economic Analysis release with detailed data on the U.S. international investment position shows that the gap between U.S.-owned assets abroad and foreign-owned assets in the U.S. widened from -\$2.55 trillion at the end of 2002 to -\$2.65 trillion at yearend 2003. During 2003, new

financial flows for U.S. investment abroad (\$283.4 billion) and foreign investment here (\$829.2 billion) both rose from the previous year and the difference between inflows and outflows was also higher. However, America's net debtor position did not appear to grow as much as it did in past years due to the effects of dollar depreciation. With the decline in the dollar giving a significant boost to the value of U.S.-owned foreign assets, America's net debtor position deepened by a comparatively modest -\$97.6 billion (Tables 1 and 2).

In addition, even though it grew in absolute terms, America's external debt shrank as a share of GDP – from 24.3 percent in 2002 to 24.1 percent in 2003 – due to rising U.S. output in 2003 and extensive valuation adjustments (discussed in Appendix 1). Nevertheless, the net financial inflow amounted to \$1.5 billion a day before these adjustments. More important, the ostensibly small change in the net investment position and the decline in external debt-GDP ratio both tended to understate growing U.S. vulnerability to a loss of confidence by foreign investors.

Private financial flows to and from the U.S. increased in 2003 despite a weakened dollar – in part because continued easing by monetary authorities fueled an expansion in global liquidity that encouraged borrowing and lending for carry trades. At the same time, dollar depreciation helped to further accelerate foreign official investment. During 2003, foreign central banks and government agencies bought an additional \$248.6 billion of U.S. financial assets – nearly double the previous record in 1996 – thus accounting for 30.0 percent of net new foreign investment and 14.0 percent of total foreign holdings. In 2004, foreign official holdings continued to rise as Asian economies purchased dollars to prevent the appreciation of their currencies and a resulting loss of export competitiveness.²

Table 1: U.S. International Investment Position, Year-end 2002 -2003¹

Net Creditor/Debtor (-) Position 2002		Net Creditor/Debtor (-) Position 2003		Change: 2002-2003		
				Financial Flows	Valuation Adjustments ²	Total Change
\$US billions	As Pct. GDP ³	\$US billions	As Pct. GDP ³	\$US billions	\$US billions	\$US billions
-\$2,553.4	24.3	-\$2,651.0	24.1	-545.8	448.1	-97.6

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*

¹ Direct investment positions at market value

² Includes price changes, exchange rate changes, changes in coverage, statistical discrepancies and other adjustments to the value of the assets

³ GDP in current dollars

**Table 2: Selected Components of U.S. International Investment Position,
Year-end 2002-2003 (\$US billions)**

	2002	2003	Change 2002-2003		
			Financial Flow	Valuation Adjustment	Total Change
U.S.-owned assets abroad	6,613.3	7,864.0	283.4	967.2	1,250.6
U.S. government assets	243.9	268.4	-2.0	26.5	24.5
Official reserve assets	158.6	183.6	-1.5	26.5	25.0
Other assets	85.3	84.8	-0.5	0.0	-0.5
U.S. private assets	6,369.4	7,595.6	285.4	940.8	1,226.2
Direct investment abroad	2,039.8	2,730.3	173.8	516.7	690.5
Foreign securities	1,846.9	2,474.4	72.3	555.1	627.5
Bonds	501.8	502.1	-28.1	28.4	0.4
Corporate stocks	1,345.1	1,972.2	100.4	526.7	627.1
Non-bank claims	908.0	614.7	28.9	-322.3	-293.4
Claims reported by banks	1,574.7	1,776.3	10.4	191.1	201.5
Foreign-owned assets in the U.S.	9,166.7	10,515.0	829.2	519.1	1,348.2
Foreign official assets	1,212.7	1,474.2	248.6	12.8	261.4
U.S. Treasury securities	796.4	956.7	169.7	-9.5	160.2
Other U.S. assets	416.3	517.5	78.9	22.3	101.2
Other foreign held assets	7,954.0	9,040.8	580.6	506.2	1,086.8
Direct investment	2,025.3	2,435.5	39.9	370.3	410.2
U.S. Treasury securities	457.7	542.5	113.4	-28.5	84.9
Other U.S. securities	2,786.6	3,391.1	251.0	353.4	604.4
Corporate and other bonds	1,600.4	1,853.0	213.7	38.8	252.5
Corporate stocks	1,186.2	1,538.1	37.3	314.6	351.9
U.S. non-bank liabilities	864.6	466.5	84.0	-482.1	-398.1
U.S. liabilities reported by banks	1,518.4	1,887.2	75.6	293.1	368.7
U.S. currency	301.3	317.9	16.6	—	16.6

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*.

NOTE: 2002 figures are revised; 2003 figures are preliminary. Valuation adjustments include changes in prices, exchange rates, coverage, statistical discrepancies, and other adjustments to the value of assets. Direct investment is at market value. Numbers may not add up due to rounding.

* * *

Even though America's net debtor position grew by a smaller amount in 2003 than in preceding years, the U.S. capital account surplus still posed growing risks – notably in the escalation in gross foreign portfolio holdings of U.S. assets. Foreign investors' total holdings of marketable instruments – U.S. Treasury securities, stocks, bonds and bank liabilities – rose to \$6.78 trillion, or 62 percent of U.S. GDP at yearend 2003. Because these investments are readily bought and sold in the uniquely deep U.S. financial markets, even a small runoff in foreign holdings – perhaps precipitated by a shift of confidence in U.S. growth prospects – would inevitably exert upward pressure on U.S. interest rates.

If there were significant withdrawals of foreign investment, finding offsetting sources of funding could be difficult. While large capital inflows helped finance U.S. residents' buildup of investments abroad over the

last two decades, it is by no means clear that these holdings would serve as an effective cushion against sales of foreign-held U.S. assets. Even though foreign sales would drive up U.S. interest rates, dollar depreciation might discourage the repatriation of U.S. foreign portfolio investments. And direct investments abroad – the largest component of U.S. foreign investment and the least liquid – are unlikely sources of offsetting inflows.³

Finally, the virtual absence of international reserves on the U.S. balance sheet underscores America's vulnerability if capital inflows – public or private – drop below levels needed to finance its current account deficit. The assumption that the dollar's central role would never diminish – and thus assure continuous financing and the ability to incur external debt in our own currency – is less certain now. Should inflows fall below the level required to support the current account gap, the Federal Reserve most likely would permit interest rates to rise in order

to increase domestic saving and re-attract foreign funds while attempting to provide enough liquidity to stave off a recession. Given the risks in this scenario, new measures are obviously needed to address U.S. vulnerability.

Global Liquidity and G-3 Monetary Policies

During 2003 and the first half of 2004, the G-3 conducted generally accommodative monetary policies, with the U.S. embarking on a relatively modest tightening over the remainder of 2004. There were, however, important variations in the countries' monetary strategies and in the ways their economies and policies influenced and were affected by capital flows.

U.S. Monetary Developments. Prior to the spring of 2004, the Federal Reserve was primarily concerned with the threat of deflation and maintained a nominal federal funds rate of one percent from June 2003 to June 30, 2004 (the real rate remained in negative territory throughout this period). The central bank held its policy rate at this unusually low level by generating a continuous stream of liquidity. At the same time, its liquidity-creation was amplified by massive net inflows of foreign savings that supplied over 20 percent of total lending in U.S. credit markets in 2003 and over 30 percent in the first three quarters of 2004.

Because of this support – and because most foreign inflows are not invested in bank deposits and do not affect bank-centered monetary aggregates – base money grew at a moderate pace relative to increases in total credit and the Fed's balance sheet registered a modest 6.9 percent of GDP at the end of March 2004. Meanwhile, annual growth in household debt averaged more than 10 percent, annual increases in the debt of domestic nonfinancial sectors grew twice as fast as GDP and the outstanding debt of these sectors rose to 199.2 percent of GDP from 190.4 percent in 2001.

During this period, fiscal ease lifted the pace of federal government borrowing by more than 11 percent. But even if government debt had remained unchanged, the widening gap between growth rates for output and private-sector debt would have suggested a classically overheated economy, with substantial inflationary potential generated by credit expansion.

As with the stock market bubble in the low-inflation 1990s, signs of this potential tended to show up in asset markets rather than the behavior of consumer prices. Sizable U.S. trade deficits with low-

wage and weak-currency exporting countries helped hold down a wide range of goods prices. Meanwhile, real excess demand manifested itself in rising asset prices, particularly for residential housing. With mortgage debt increasing by an annual rate of over 12.0 percent in 2002-03, home prices continued to inflate at an unprecedented pace.⁴

While U.S. credit growth was clearly excessive in this period, the uneven nature of domestic financial flows helped perpetuate the jobless nature of the recovery. With a dominant share of those flows going into home mortgages, residential construction flourished and enjoyed significant gains in job creation. At the same time, the rising tide of mortgage refinancing and equity loans that bolstered consumption tended to undermine employment growth outside the housing sector because borrowers spent such a large share of the proceeds on imports.

Moreover, while corporations took advantage of low interest rates to borrow at longer maturities, pay down short-term debt and buy back stocks,⁵ aggregate corporate debt outstanding was not reduced in 2002-2003 as it had been in 1991-1992. Unlike the earlier period, net issuance of stocks was negative throughout the recent recovery, as corporations avoided selling new equity to fund debt payments. Although corporations borrowed less, the high debt levels they incurred during the boom continued to inhibit new investment and a rebound in capacity utilization.

These elevated debt levels also underscore the BIS' warnings about financial and nonfinancial corporations' vulnerability in the event of a downturn. While the BIS reports do not spell out specific threat scenarios, the data on housing finance illustrate the problem.

Residential mortgages now account for over 30 percent of credit market debt for all U.S. nonfinancial sectors and almost all types of financial institutions hold mortgage loans. If and when long rates rise, they will lower the price of mortgage paper and put downward pressure on housing values. If home prices fall as they did in the early 1990s in the U.S., Japan and Scandinavia, both financial institutions and homeowners would experience losses. The size of those potential losses would depend on how high interest rates rise and how much they impact housing markets.

In summary, the U.S. story is a one of rising liquidity and ongoing debt creation generously supported by capital inflows. Whether the debt overhang and dependence on foreign savings are the result of

market imperfections or inappropriate policy (or both) is a question the Fed has not addressed. Nor have central bankers in the richest countries publicly discussed whether quantity controls – widely employed in the past but now used mostly by emerging economies – might have helped moderate the flood of liquidity and balance credit flows. But these issues now appear critical for all monetary authorities as they attempt to shape policies that promote growth without exacerbating the buildup in debt.

Monetary Policy in Japan. In its efforts to end a decade of deflation triggered by the bursting of stock and real estate bubbles, Japan experimented with a variety of unconventional monetary tactics. As prices spiraled downward, Japanese monetary authorities anchored their policy rate virtually at zero and allowed both long- and short-term market rates to remain at historical lows. This strategy, however, had its limitations. The Bank of Japan (BoJ) was unable to reduce *ex post* real rates that were determined by the actual rate of deflation or to halt ongoing deflationary pressures. In other words, deflation continued to push the real rate below zero without stimulating recovery.

To supplement its interest rate strategy, the BoJ raised the target range for commercial banks' current account balances with the central bank. This quantitative strategy produced strong growth in the monetary base. But Japan's broader monetary aggregates only rose moderately and outstanding credit fell continuously from the beginning of 2001 through the first quarter of 2004.

Recognizing that its monetary transmission mechanism was impaired, the BoJ initiated yet another experimental strategy. To directly counter the effects of collapsed equity and property values that had so damaged Japan's financial system, the central bank bought stocks held by banks and expanded its holdings of asset-backed securities. But this strategy may also turn out to have drawbacks. As the BIS notes, substantial increases in the BoJ's balance sheet – from 18 percent of GDP in 1997 to 25 percent by April 2004 – eventually will require the monetary authority to sell off assets in more normal times.

At the moment, it appears unlikely that prospective sales of these assets could produce positive results. But it is also possible that the BoJ's expanded holdings could allow it to implement a classical open market countercyclical policy to curb market excesses in the future.

In retrospect, it is clear that the central bank's earlier strategies were not sufficiently restrictive as the

bubble economy inflated. One possible reason is the declining efficacy of quantitative strategies designed to curb only bank credit in an economy where nonbank financial intermediaries play a growing role in credit creation. If, instead, the Bank of Japan had been able to sell off the kind of surplus assets it now holds and thereby moderate inflating stock and real-estate prices, its efforts to rein in excesses might have met with far more success in the early 1990s.

In any event, the BIS' criticism of the run-up in BoJ assets fails to acknowledge the role reserve accumulation has played in inflating the central bank's balance sheet. As a result, the BIS discussion completely overlooks the fact that BoJ's potential reduction of its international holdings poses a far greater threat to global stability than does the prospective sell-off of domestic assets in its portfolio.

Monetary Policy in the Euro-area. From 2002 through 2004, the European Central Bank (ECB) appeared to adopt a generally stimulative policy position. However, the BIS argues that the Bank's accommodative stance was in fact constrained by the two-pillar strategy that governs and limits its maneuverability. Eurozone core inflation – the first pillar – hovered at the upper bound (two percent) of the Bank's price stability range while growth in broad money pushed the increase in monetary aggregates – the second pillar – over its 4.5 percent ceiling.

Constrained by these indicators, the ECB's policy rate remained unchanged but at twice the level of its U.S. counterpart. This interest differential helped stimulate cross-border carry trades that pushed up the euro's value. By early 2003, euro appreciation was pulling in a volume of capital flows that clearly would drive up credit expansion, housing prices and the growth of the broader aggregates. Moreover, a large share of inflows was invested in government securities and thus helped fund a more stimulative fiscal policy.

Appreciation did not appear to put downward pressure on prices, however, as low-cost imports from emerging economies increased at only a modest pace relative to the U.S. and rising oil prices exposed euro-area countries to inflationary pressures. Meanwhile, the ECB did not view a strengthening euro as justification for lower rates.

Nor did it view regional disparities – near deflation in Germany and rising home prices elsewhere – as reasons to move rates up or down. The BIS suggests that strong M3 growth in the euro-area since 2001 may have been one reason that ECB policy was not more proactive. But that seems a rather thin

excuse for the Bank's passivity in the face of cross cutting pressures that eventually led to a European downturn. In any event, the ECB consistently ignored developments in the current and capital accounts and its inaction and inflexibility left the eurozone susceptible to recession.

Capital Flows, Reserve Accumulations and Monetary Responses in Emerging Economies: As memories of the global financial crises of 1997-1998 dim, emerging economies have once again become the target of large inflows that the BIS characterizes as "mostly" speculative. In its 2004 annual report, the BIS discusses policies that some of these countries are using to counter the problems associated with such flows. In a number of cases, central banks limit the conversion of foreign into domestic currency and either allow or encourage outflows of foreign currency. Others engage in intervention and thereby accumulate reserves.

Emerging economies stockpile reserves in order to prevent appreciation of their currencies and maintain competitiveness. But large reserve accumulations also expose central banks to possible losses from changes in interest or exchange rates. In addition, they have the potential to generate excess capacity in the domestic economy and accelerate growth in money and credit if not fully sterilized by the sale of government bonds or central banks' own bills.

In some countries, however, such assets are not available in sufficient volume to sterilize reserves. And even when sterilization operations are effective, they lead to increases in base money that raise the lending capacity of commercial banks. Moreover, as the BIS notes, the recent surge of inflows and reserve accumulations has facilitated the growth of household debt and created the potential for overheated real estate markets in emerging economies (especially in central and eastern European countries, Russia, Korea and Thailand), thus creating the kinds of challenges familiar to central banks in advanced economies.

Developing countries have responded to these problems by using a variety of regulatory and tax strategies. Faced with an increase in base money and a rising demand for credit, for example, China's central bank responded by using quantity controls. It raised reserve requirements by one-and-a-half percentage points in the final quarter of 2003 and first quarter of 2004, raised interest rates on its discounting and lending facilities and employed "window guidance" to dampen excessive lending. Other emerging-market nations imposed a range of fiscal and monetary

restrictions that include: higher capital gains taxes on sales of multiple residential properties; ceilings on loan-to-value ratios for mortgage loans; limits on or penalties for aggressive credit card marketing; credit ceilings based on the borrower's income; increased loan provisioning by credit card issuers; and requirements that borrowers repay a mandatory portion of their credit card debt.

The BIS says market discipline would be preferable to these targeted regulatory restrictions and more effective in strengthening the financial system. But it acknowledges that developing countries' use of such tools may be warranted because of market imperfections – especially in economies that are vulnerable to speculators. And it notes that similar restrictions still exist in some advanced economies and their use was widespread only a few decades ago.

The Buildup in Foreign Exchange Reserves

In the aftermath of the synchronous global downturn of 2001, the G-3 countries began to pump up liquidity and the accumulation of foreign exchange reserves accelerated. Worldwide, outstanding official reserves had more than doubled between 1990 through 1998; over the next five years they rose by an additional 84 percent to total \$3.01 trillion by the end of 2003. Most of the growth was due to a six-fold increase in the reserves of developing countries, whose share of total holdings jumped from 39.0 percent in 1990 to 63.3 percent at yearend 2003 (Table 3).

Indeed, the data in Table 3 actually understate the erosion in the share of global reserves of developed countries other than Japan. At yearend 2003, Japan held \$652.8 billion or 21.7 percent of global reserves and accounted for 59.2 percent of all industrial countries' reserves. Its aggressive intervention in 2003 raised its holdings by \$201.3 billion, with additional acquisitions amounting to \$114.7 billion in the first quarter of 2004 (Table 4).

Meanwhile, China's acquisitions of reserve assets also escalated in 2003 (by \$116.8 billion), bringing its total holdings to \$404.3 billion and the combined reserves of Asia's developing countries to \$1.21 trillion. By the end of the year, these countries and Japan accounted for 62.8 percent of global reserves – a level that reflects the growth in their current account surpluses.

The rise in Asian reserves also mirrors the decline in Europe's share and the drop in reserves of Middle Eastern oil exporters as well. Calculated as a residual, the combined reserves of all oil and non-oil

**Table 3: Outstanding Official Foreign Exchange Reserves
(current \$US billions and percent of total)**

	1990		1996		1998		2000		2003	
	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.
Total reserves	790.0	100	1,517.8	100	1,636.1	100	1,908.7	100	3,010.0	100
Industrial countries	481.7	61.0	707.0	46.6	690.4	42.2	774.8	40.6	1,103.6	36.7
Developing countries	308.3	39.0	810.8	53.4	945.7	57.8	1,133.9	59.4	1,906.4	63.3
Dollar reserves	432.0	54.7	1,041.5	68.6	1,144.6	70.0	1,450.5	76.0	2,082.2	69.2
Non-dollar reserves	357.0	45.3	476.3	31.4	491.5	30.0	458.2	24.0	928.7	30.8

SOURCE: Bank for International Settlements, *Annual Report*, various issues.**Table 4: Annual Changes in Official Foreign Exchange Reserves of Selected Countries
(billions of dollars at current exchange rates)**

	1998	1999	2000	2001	2002	2003	Outstanding at 12/31/03	Pct. of Total
	Total	27.2	138.0	155.0	112.3	351.9	616.6	3,010.9
Industrial countries	-32.8	52.1	54.7	3.0	108.0	215.8	1,103.6	36.7
United States	5.2	-3.8	-0.9	-2.3	4.8	5.9	39.7	1.3
Euro area	-32.9	-39.2	-9.4	-10.7	7.9	-27.8	188.0	6.2
Japan	-4.7	74.5	69.5	40.5	63.7	201.3	652.8	21.7
Asia	62.8	79.0	52.5	76.0	173.8	263.9	1,208.1	40.1
China	5.1	9.7	10.9	46.6	74.2	116.8	403.3	13.4
Hong Kong SAR	-3.2	6.6	11.3	3.6	0.7	6.7	118.6	3.9
India	2.6	5.0	5.3	8.0	21.7	30.6	97.6	3.2
Korea	32.3	21.7	22.2	6.6	18.3	33.7	154.5	5.1
Singapore	3.5	1.9	3.4	-4.8	6.5	13.6	95.0	3.2
Taiwan, China	6.8	15.9	0.5	15.5	39.4	45.0	206.6	6.9
Latin America	-9.8	-8.8	2.1	-0.3	4.2	30.6	170.7	5.7
Argentina	2.3	1.6	-1.7	-9.9	-4.1	2.7	13.1	0.4
Brazil	-8.2	-7.8	-2.3	3.2	1.7	11.7	49.1	1.6
Chile	-2.0	-1.1	0.5	-0.6	0.8	0.4	15.2	0.5
Mexico	3.3	-0.5	4.2	9.2	5.5	7.8	57.7	1.9
Central and Eastern Europe	6.6	1.7	19.1	12.7	36.3	51.3	197.4	6.6

SOURCE: Bank for International Settlements, *74th Annual Report*, 2004.

exporting countries in the Middle East and Africa at yearend 2003 (\$330.2 billion) were only 10.9 percent of the global total, a significant decline from the region's share in previous years. While rising oil prices have obviously increased OPEC revenues, it is unclear where those earnings have been spent or invested.

The Shifting Investment Patterns of Middle Eastern Oil Exporters. Most foreign exchange reserves are invested in securities issued by governments, agencies and other official entities in advanced economies. But

some countries prefer to hold their reserves as deposits in banks.⁶ And recently, this preference has grown more pronounced. In the first quarter of 2004, the deposit liabilities of BIS reporting banks to official monetary authorities rose by \$58.5 billion (the largest quarterly increase since late 1999), boosting central banks' aggregate deposits to \$636 billion. But OPEC revenues were not part of the first-quarter increase.

Indeed, as the BIS notes in its December *Quarterly Review*, the co-movement of oil prices and OPEC surpluses has become less predictable. In the past, OPEC countries regularly channeled oil revenues into

deposits with international banks. Since the second quarter of 2002, however, the real net stock of deposits held by BIS reporting banks for OPEC members has risen by only three percent, despite sizeable increases in oil prices.⁷

Meanwhile, the currency composition of OPEC's international bank deposits has shifted noticeably. Between the third quarter of 2001 and the second quarter of 2004, U.S. dollar-denominated deposits slipped from 75 percent to 61.5 percent of total deposits by OPEC countries. Over the same period, the share of euro deposits rose from 12.0 to 20.0 percent.

The BIS suggests that interest rate differentials favoring the euro over the dollar precipitated this change.⁸ But interest rate differentials among the G-3 countries do not explain why BIS reporting banks are receiving a smaller share of OPEC revenues than in the past.

It is, of course, possible that OPEC countries are spending more of their income and saving less. But it is also possible that the prevalence of low interest rates has motivated major oil exporters to open a direct channel for investing their surpluses. In the second

quarter of 2004, for example, banks in Saudi Arabia withdrew \$4.9 billion in euro-denominated deposits held at banks in Germany, the U.K. and offshore centers – a move suggesting that Saudi banks (and perhaps other OPEC banks) may have joined in the search for yield by investing in or lending directly to emerging market economies.

The International Banking Market in 2004

The Surge in First Quarter Activity: One highly visible indication of the buildup in global liquidity that began in 2002 is the extraordinary level of international banking activity in the first quarter of 2004. During this three-month period, cross-border bank loans totaled \$1.23 trillion – more than the entire amount in 2003 (\$1.08 trillion) and almost as much as the \$1.34 trillion recorded in the peak year of 1997 (Table 5). BIS and IMF assessments of this surge emphasize the ongoing search for yield, interest rate differentials, carry trade transactions and the primary role of financial speculation, as discussed in Appendix 2.

**Table 5: Cross-border and Foreign Currency Claims of BIS Reporting Banks
(Exchange rate adjusted changes in amounts outstanding; \$US billions)**

	1997	1998	1999	2000	2001	2002	2003	Q1 2004	Q2 2004	Stocks at 6/30/04	
										\$ Amount	Pct. of Total
On Advanced Economies ¹	1,056.5	564.7	475.7	1,126.4	804.4	315.1	459.0	344.5	11.2	4,771.6	27.5
Europe ²	—	—	550.4	389.1	368.7	117.4	157.3	151.4	32.4	2,174.1	12.5
Japan	—	—	-252.4	-12.0	-23.3	4.1	38.4	0.1	20.4	200.2	1.2
United States	—	—	173.7	309.0	236.6	153.1	179.6	87.3	-41.1	1,557.1	9.0
Offshore Centers	199.5	-172.3	-101.6	51.5	55.3	18.9	100.0	41.6	30.7	702.9	4.1
Emerging Economies	76.7	-78.9	-68.0	-7.9	-23.3	-16.5	5.1	23.9	1.1	574.5	3.3
Unallocated ³	1.1	-33.9	-20.0	51.5	23.0	-2.2	-18.7	-4.5	-3.1	44.6	0.2
Total	1,333.6	279.5	286.1	1,221.5	859.4	740.1	1,076.4	1,232.5	239.8	17,341.4	100.0
Of which:											
Interbank Claims ⁴	911.4	31.9	-17.1	932.7	417.3	425.0	531.0	826.9	200.0	11,247.8	64.9
Claims on Nonbanks	222.9	-26.7	303.3	288.8	442.1	315.2	545.4	405.5	39.8	6,093.6	35.1
Denominated In: ⁵											
U.S. dollar	456.2	88.4	33.2	513.0	423.7	320.4	500.3	562.8	37.8	6,922.2	39.9
Euro	284.0	137.1	459.4	456.6	439.3	453.3	502.9	400.9	82.8	6,381.1	36.8
Yen	172.5	-37.2	-199.2	94.6	-65.3	-42.3	-50.5	-1.9	49.4	820.7	4.7
Other ⁶	138.0	-78.6	-7.2	158.3	61.7	8.7	123.7	270.7	69.8	3,217.4	18.6
Memo item:											
Local claims ⁷	—	—	—	—	—	44.5	415.2	187.5	35.1	2,527.1	14.6

SOURCE: *BIS Quarterly Review*, February 2000; August 2000; December 2001, March 2003.

¹ Data for 1999-2001 include all borrowers. Data for 2002-2004 include only non-bank borrowers. Comparable data for 1997 and 1998 are not available.

² Data for 1999 include all of Europe. After 1999, data are for euro area only.

³ Includes claims on international institutions.

⁴ Cross-border claims on banks in all currencies and local claims on banks domiciled in reporting countries in foreign currencies. Includes claims on own offices. Data for 1997 and 1998 exclude debt securities under claims for both banks and nonbanks.

⁵ Data for 1997 and 1998 include only the currency composition of external bank lending of industrial reporting countries.

⁶ Includes unallocated currencies.

⁷ Foreign currency claims on residents of the country in which the reporting bank is domiciled.

YEN-LENDING RESUMES

Renewed carry trade activity was associated with another unusual development during the second quarter of 2004: Japanese banks resumed yen-denominated inter-bank lending. As the currency data in Table 5 shows, yen-denominated lending burgeoned during the buildup of yen/dollar carry trades in 1997; it then contracted sharply in the aftermath of the 1998 crisis, when those positions were unwound. After recovering in 2000, it retreated again in subsequent years.

The recent renewal of yen lending occurred around the same time the Bank of Japan stopped accumulating reserves and Japanese borrowing in the international debt securities market expanded by \$11 billion (mostly denominated in yen). These developments may not have been a mere coincidence.

The BoJ's huge acquisition of U.S. assets (\$316 billion from January 2003 through March 2004) and consequent swelling of its balance sheet exposed the central bank to persistent criticism. As a result, the BoJ may have chosen a different variation on the same theme – by reviving the yen/dollar carry trade that so successfully depressed the yen's value in 1997 and 1998. With U.S. interest rates expected to rise, the central bank could have seen that strategy as an attractive alternative to intervention – or rather, an alternative form of intervention seemingly conducted under private rather than public auspices.

Both the BIS and IMF argue that increased speculation made the financial sector more vulnerable to unexpected shifts in economic activity or interest rates. As the IMF pointed out in its September *Global*

Financial Stability Report (GFSR), carry trades clearly contribute to herding and magnify the risk of “disproportionate price movements” and shrinking market liquidity in the event positions have to be reversed. The Fund also noted that investors might harbor overly optimistic assumptions about the ease of exiting carry trades, implying that the spectacular losses associated with unwinding yen/dollar trade positions in 1998 had been forgotten.

The Contraction in Activity in the Second Quarter: In any event, investors were forced to exit carry trades in the face of expected interest rate increases that prompted a sell-off in global bond markets in late April and early May. During this period, the Federal Reserve clearly signaled that it intended to raise rates, and both the BIS and IMF credit the Fed for preventing the kind of disruptions that an unexpected policy

shift might have caused.

But the unwinding and de-leveraging of carry trades did, in fact, have a dramatic impact on activity in international banking markets during the second

INTERNATIONAL BANK LENDING TO EMERGING MARKETS

As a group, emerging economies experienced a net inflow of \$4.4 billion from BIS reporting banks in the second quarter of 2004. While small, this figure provides a sharp contrast to flows of the preceding half-decade. Since 1998, net inflows to emerging economies have been negative in every year except 2002 (when the repatriation of their external deposits was greater than the run-off in claims on these countries). Despite the modest second-quarter reversal of this trend, emerging economies remained net creditors to BIS reporting banks at the end of June 2004, with an excess of deposits over loans amounting to \$244.2 billion (Table 6).⁹

While these flows data illustrate some of the gross inequities of the global system, it is important to remember that emerging economies are net creditors only to the powerful but limited universe of banks that are BIS reporting institutions. If capital-market borrowing is taken into account, emerging economies' access to financial resources appears substantially stronger. Indeed, at midyear 2004, the combined value of outstanding international debt securities issued by these countries totaled \$676.2 billion, or \$432.0 billion more than their net deposits abroad.

Nevertheless, many of these countries have invested their current account surpluses in securities – particularly government bonds – issued by advanced economies. Like a large portion of their deposits in external banks, these reserve holdings are savings used to finance economic activity in wealthy countries. And like the deposits, the reserves reduce the amount of public sector savings available for investment in developing nations' own economies.

Many of these countries appear to think that financing U.S. economic activity is justified because it supports America's ability to continue importing their goods. Moreover, some of the practitioners of this mercantilist approach peg their currencies to the dollar and engage in reserve accumulation as part of the strategy. But hewing to these methods has costs. A number of the smaller countries that have chosen this path have grown more rather than less dependent on external policies and market forces, much like protectorates in a colonial orbit. They have also become increasingly vulnerable to a range of risks associated with the unsustainable global system centered on the dollar and U.S. indebtedness.

Table 6: Cross-border Flows to Emerging Economies¹

	1998	1999	2000	2001	2002	2003	Q1 2004	Q2 2004	Stocks at 6/30/04	
									\$	Pct. of
									Amount	Total
Argentina ²	0.6	0.7	1.2	-5.8	-11.8	-8.5	-2.6	-1.1	20.0	1.8
Brazil	-10.2	-8.9	9.5	0.9	-11.2	-7.2	1.8	-4.0	81.2	7.4
Mexico	0.4	-4.0	-1.0	2.0	3.1	-0.7	7.5	0.6	71.8	6.5
China ²	-10.3	-17.1	-5.4	-3.5	-12.4	13.5	13.9	10.1	84.6	7.7
Indonesia ²	-14.1	-7.1	-3.6	-5.4	-6.0	-4.6	0.3	-0.9	28.1	2.5
Korea	-32.9	-5.0	-4.8	-0.2	8.2	-1.0	14.3	-8.5	82.7	7.5
Thailand ²	-28.9	-17.4	-7.8	-3.5	-5.0	-1.6	-1.0	-0.4	17.4	1.6
Russia ²	-6.1	-6.5	-6.6	1.3	3.6	12.1	3.4	-0.3	55.1	5.0
Turkey	2.8	5.9	11.3	-12.0	-2.8	5.3	4.1	3.4	51.4	4.7
South Africa ²	-0.6	-0.8	0.6	-0.4	-0.4	-1.2	-0.1	0.3	18.7	1.7
EU Accession Countries ³	—	5.2	7.5	6.3	9.2	20.9	3.9	6.7	129.3	11.7
OPEC Members										
Claims	—	-8.9	-11.5	-14.0	-9.9	-6.5	9.2	1.4	139.8	12.7
Liabilities	—	-19.4	37.7	-2.8	-8.8	-15.1	16.5	-2.4	287.3	21.3
<i>All Emerging Economies</i>										
Claims	-78.7	-68.0	-7.9	-23.3	-37.0	65.0	67.9	26.1	1,102.6	100.0
Liabilities ⁴	-17.3	32.6	140.1	23.1	-45.9	71.9	107.5	21.7	1,346.8	100.0
Net position ⁵									-244.2	

SOURCE: *BIS Quarterly Review*, March 2001; March 2002, March 2003, December 2004.

¹External on-balance sheet claims of banks in the BIS reporting area. An increase in claims represents an inflow to emerging economies. A decrease in claims represents an outflow.

²Net creditor countries at end of June 2004.

³Countries in accession negotiations with the European Union in 1999-2001: Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic and Slovenia. New EU countries after 2002 include the above minus Bulgaria and Romania

⁴Mostly deposits. An increase in liabilities represents an outflow from Emerging Economies. A decrease in liabilities represents an inflow.

⁵Total claims minus total liabilities.

quarter. Not only was growth muted, but U.S. dollar credit to nonbank borrowers also fell by \$42 billion – the largest outright decrease since BIS coverage of these transactions began. The BIS' September *Quarterly Report (QR)* attributes this drop to securities firms unwinding their repo positions between mid-March and mid-May, as yields on U.S. Treasuries widened by 100 basis points and made existing domestic carry trades unprofitable. Euro-denominated activity also weakened, with investors unwinding securities positions as bond yields rose.

The Outlook for Policy

Highly liquid international markets in 2003 and 2004 were clearly a boon to bond issuers in emerging market economies. But whether or not they contributed to sustainable growth in advanced countries and the global economy as a whole is less clear. In many respects, the answer will hinge on the massive volume of liquidity these markets provided the U.S.

In its September *GFSR*, the IMF reports that official financing flows to the U.S. rose from 1.2

percent of America's GDP in the years 1996-98 to 2.9 percent in the period from January 2003 through March 2004. In addition to helping finance U.S. current account deficits, the Fund contends, "the large official purchases of U.S. dollar-denominated bonds, in particular by Asian central banks, have provided a stabilizing influence in the bond and foreign exchange markets."¹⁰

The IMF acknowledges that these flows involve some risks for the U.S. – the main one being that countries with large holdings might change the currency composition of their reserves. If that happened, the Fund notes, it would not only undermine an increasingly important source of financing for U.S. deficits but also might be interpreted as a loss of confidence in the U.S. and thereby inhibit inflows of private capital, drive up interest rates and create disorderly and highly unstable market conditions.

In its assessment of this funding dynamic, the BIS clearly identifies reserve accumulations as a feedback mechanism through which the policies of emerging economies can affect the G-3. (As an

example, it cautiously states that huge purchases of U.S. dollar assets “may” have led to lower long-term interest rates in the U.S. than would otherwise be the case.) The BIS warns that continued expansionary policies by G-3 countries and the failure of non-G-3 countries to allow upward adjustments in nominal exchange rates will lead to an additional buildup in foreign exchange reserves and further rapid increases in global liquidity. As a result, existing financial imbalances will be exacerbated and the economies of industrial and developing countries alike will grow increasingly vulnerable to rising short-term interest rates.

According to the BIS, averting these outcomes will require either some combination of currency appreciation and capital controls on the part of non-G-3 countries (if they are to bear the brunt of adjustments) or tighter G-3 monetary policies. The central bankers organization also sees the need for a credible international framework to institute more flexibly determined exchange rates, as many have advocated since the crises of the 1990s. But such a framework presupposes agreement on macropolicy and, as the *BIS Annual Report* notes, “Asian countries...might be reluctant to accept appreciation of their currencies if they believed that the U.S. fiscal deficit and a low domestic saving rate were the crux of the many worrisome imbalances.”

If this assertion is accurate, it suggests that these countries want a continuation of the status quo free from responsibility to change their own policies. That stance is as impractical as it is shortsighted.

Even when the U.S. was running large fiscal surpluses in the late 1990s, it was clear that America could not continue to run current account deficits and raise its domestic saving rate. Deficits in the current account increase borrowing from the rest of the world that inevitably enlarges the debt of domestic sectors, public or private. And the expansion of domestic debt through inflows inevitably reduces the borrowers’ propensity and ability to save. The notion that America’s private sector can readily increase its savings without curbing consumption – including the purchase of imports – is increasingly unrealistic because of the constraints that accumulated debt loads have imposed on households and businesses.

In other words, U.S. adjustment by way of increased saving will cost other countries their market. For trading partners that have depended on exports to the U.S. to drive economic expansion, their share of adjustment will require a new emphasis on domestic demand-led growth. Such a shift is feasible in coun-

tries that run current account surpluses and have relatively low levels of external debt. However, most emerging economies do not enjoy those financial circumstances.

Alternatively, the U.S. could pursue a better path to adjustment by continuing to emphasize its own version of demand-led growth while carefully managing additional depreciation of the dollar. A weaker dollar will be necessary to moderate the capital inflows that augment domestic credit and expand U.S. external liabilities. And, while a declining greenback may improve the U.S. trade balance by raising prices of imports, it is unlikely that growth in other countries will be sufficiently large or policy adjustments sufficiently rapid to enable the U.S. to run a trade surplus even in the medium-term. Thus, policies that encourage investment and job-creation in the domestic economy are more likely to support sustainable growth by accelerating gains in disposable income. Broad-based income growth will provide the most effective spur to saving without the risk of an excessive slowdown in spending.

What monetary policies would support dollar depreciation in such a context? Low interest rates are certainly among them. But to avoid initiating a new cycle of excess-liquidity creation, the Fed would also need to impose quantity controls to moderate credit expansion. These controls should include prudent consumer credit limits, such as ceilings on loan-to-value ratios that increase with the size of the mortgage and restrictions on credit card issuance that help moderate borrowing relative to income. At a more fundamental level, asset-based reserve requirements should be extended to all financial institutions in order to help the central bank better manage credit creation and preempt sectoral bubbles.

In addition, countries should engage in a cooperative effort to restructure the international monetary and financial system so that dominance of the G-3 currencies does not continue to trap non-G-3 nations in export-led growth strategies. Under the present global framework, countries that do not issue one of the international currencies must earn them by exporting or incurring debt. But, as the U.S. experience illustrates, a country whose currency becomes the dominant vehicle for international trade and investment must itself fall into debt as it serves as the market in which others sell goods to acquire that currency. It is time to rethink the haphazard system that evolved after the collapse of the Bretton Woods monetary agreement and design a replacement that can promote stability and growth.

– Jane D’Arista

Appendix 1: The Impact of Valuation Effects on the U.S. International Investment Position

In 2003, changes in exchange rates and asset prices caused significant valuation adjustments that had a substantial impact on recorded levels of both U.S. and foreign investments. Over the course of the year, for example, inflows for foreign direct investment in the U.S. (\$39.9 billion) and net purchases of U.S. stocks by foreigners (\$37.3 billion) fell to the lowest levels since 1992. Nevertheless, rising equity prices increased the value of outstanding foreign holdings of these assets by \$370.3 billion and \$314.6 billion respectively (Table 2).

In the case of U.S. investors, outflows for net purchases of foreign stocks grew significantly (\$100.4 billion). But this increase paled in comparison to price (\$324.9 billion) and exchange rate (\$201.8 billion) appreciation, which helped produce a \$627.1 billion increase in the total value of U.S. holdings for the year. Similarly, the increase in the total value of U.S. direct investment abroad (\$690.5 billion) consisted largely of valuation adjustments (\$516.7 billion). Valuation adjustments for bonds held abroad were also positive for both U.S. and foreign investors in 2003 but less so than for equities (Table 2).¹¹

Another notable valuation adjustment in 2003 involved claims and liabilities of bank and nonbank accounts. In the course of organizing its international investment data, the Bureau of Economic Analysis reclassified securities brokers and dealers from the nonbank to bank category, thus causing nonbank claims and liabilities to register large negative valuations while changes in bank claims and liabilities rose substantially.

The BEA’s reclassification of nonbank securities brokers and dealers as banks also had a significant effect on net flows within these categories. The financial outflow attributable to U.S. banks and securities brokers (\$10.4 billion) was the smallest since 1994 while inflows (increased liabilities) reported by these institutions reflected a more complex pattern. As discussed in the section on market developments, the net inflow of \$75.6 billion included both substantial new borrowing by U.S. brokers and dealers from foreign sources and declines in borrowing by U.S. banks as well as outflows from foreign-owned banks in the U.S.

Appendix 2: Speculative Flows and Other Developments in the International Banking Market

U.S. dollar-denominated inter-bank claims – consisting mainly of inter-bank securities repurchase (repo) transactions – provided the major channel for speculative flows and substantially exceeded peak levels in previous years. The first-quarter increase in nonbank claims was also remarkable relative to past years. But this rise in these claims did not reflect a pick-up in corporate loan demand. For example, euro-denominated lending by nonbank entities largely reflected their investment in international debt securities of euro-area governments; between January and March, Germany, France, Italy and other countries issued a record \$76.4 billion of debt.

With investors aggressively searching for yield, developing countries gained unprecedented access to international bond markets and the larger emerging economies were able to reduce their dependence on bank loans by issuing international debt securities. The substantial (\$24.6 billion) net issuance of debt denominated in non-local currencies during the first quarter of 2004 prompted banks in the developing countries of issue to convert the inflow into a net outflow by depositing the foreign exchange offshore, thus recycling funds from investors in these bonds back into the external banking market.

Meanwhile, increased deposits by emerging-economy central banks helped push up the total funds supplied to international banks by developing-country depositors to \$107.5 billion in the January-March period. In addition, some monetary authorities in advanced economies also placed reserves with international banks and decreased their holdings with banks in national markets. But the largest increase in liabilities resulted from inter-bank placements – especially of dollar-denominated deposits – by banks in the national markets of advanced economies.

As for the recipients of this rising wave of deposits, financial institutions accounted for the majority of first-quarter borrowing in the nonbank category, with a substantial share of dollar-denominated loans booked to entities in London, the U.S. and the Cayman Islands. As the BIS notes, many hedge funds are domiciled in the Caymans and this was a quarter in which they received a record net inflow. In addition, new loans to nonbank financial institutions accounted for more than half of the quarter’s lending

to U.S. borrowers. A substantial portion of the \$83 billion loaned to these institutions funded proprietary trading operations at securities firms, according to the BIS' September *QR*.

Commenting on these types of flows, both the BIS and the IMF express concerns about “leveraged players” and their participation in carry trades. Such players include macro hedge funds, commodity trading advisors, institutional investors and the treasuries of nonfinancial corporations. Cross-border carry trades involve borrowing in a low-yielding currency (the U.S. dollar, yen and Swiss franc) and investing in a higher yielding currency (the euro, sterling, emerging market currencies and the Australian, Canadian and New Zealand dollars). Significant increases in the carry trade helped drive up activity in foreign exchange markets and played a major role in the depreciation of funding currencies and appreciation of investment currencies.

In addition, hedge funds and other leveraged investors engaged in carry trades in domestic markets, borrowing short-term (through repos, for example) at low interest rates and investing in longer-term assets (such as Treasury bonds) with higher yields. Supported by excess capital and ample liquidity, banks and securities houses also evinced a growing appetite for risk and yield by joining in the carry trade as well as expanding their proprietary trading activities.

But with the contraction in activity in the second quarter of 2004, new interbank claims dropped sharply and most of the minuscule (\$39.8 billion) amount of new nonbank credit in the quarter flowed to financial institutions in offshore centers. (Among other consequences, the inflow pushed up outstanding claims of nonbank borrowers in the Cayman Islands to \$221 billion – an amount equal to nine percent of total U.S. dollar-denominated claims on nonbank borrowers.)

At the same time, banks in the U.K. reduced their holdings of U.S. dollar-denominated international debt securities by \$14 billion – another record drop for any quarterly period since the beginning of BIS coverage. However, as long-term rates failed to rise in the wake of the Fed hiking its policy rate in June and August, carry trades resumed in the third quarter with investors seeking yield from emerging market assets.

Meanwhile, the positive inflow into emerging economies in the second quarter was largely attributable to increased lending to banks in the Asia-Pacific region. International banks also stepped up their lending to European emerging economies but large placements of deposits outside the region (primarily by

Russian banks) produced a net outflow from these countries.

By contrast, Latin America experienced outflows for the ninth consecutive quarter – a development that reflects both the ongoing shift in international bank lending to Asia and the decision by Argentina, Brazil and Mexico to borrow less from banks and more from global capital markets. As a result of these shifts, foreign banks' outstanding claims on Latin America dropped to \$450 billion, or 29 percent of their total claims on emerging economies. One year earlier, Latin American borrowers accounted for 35 percent of total foreign bank claims. Like most of the world's developing regions, Latin America as a whole was a net creditor to foreign banks at midyear 2004.¹²

Appendix 3: Developments in The International Debt Securities Market

Over the first three quarters of 2004, the amount of net issues in international debt securities markets (\$1.20 trillion) topped the totals for the comparable period in 2003 (\$1.01 trillion) and for all of 2002 (\$1.01 trillion). The increase was attributable to the strength of euro-area credit demand in the first two quarters and to consistent increases in borrowing by other advanced economies (except the U.S. and Japan) and developing countries (Table 7).

In the case of the U.S., borrowing has continued to decline since 2001, with a sharp drop in the second quarter of 2004. This downward trend is in large part the result of rising capital inflows into the U.S. and foreign preference for U.S. government, agency and corporate securities issued in the domestic market. But the dramatic second-quarter slide in international issuance owed as well to expectations of a change in U.S. monetary policy, which also prompted financial and nonfinancial issuers to de-leverage and slow activity in the domestic market.

With the decline in U.S. borrowing, the stock of outstanding international securities issued by U.S. residents fell to 25.4 percent of the total at the end of September — compared with 43.3 percent for the euro-area. U.S. dollar issuance also declined despite an increase in dollar borrowing by other countries (including eurozone nations). Meanwhile, the euro's share of net issuance remained strong throughout the first nine months, even as borrowing by European residents slowed in the third quarter.¹³ As a result, the share of total issues denominated in the U.S. dollar (41.7 percent) was only slightly larger than the share

denominated in euros (41.2 percent) at the end of the third quarter.

The dramatic drop in U.S. issuance from \$123.6 billion in the first quarter to \$6.8 billion in the second was primarily attributable to the setbacks experienced by Fannie Mae and Freddie Mac. Both of the large government-sponsored mortgage agencies aggressively expanded their international borrowing in the first quarter, then cut back subsequently as questions arose about their governance, accounting and financial management practices. In the third quarter, Freddie Mac's net international issuance was negative (-\$12 billion).

New borrowing by G-3 nonfinancial corporations remained sluggish despite favorable conditions throughout the period. The BIS suggests that higher rated firms did not need external funding and were continuing efforts to de-leverage. In addition, the upturn in commercial paper issuance during 2004 indicates that some of these firms preferred to borrow short-term. In any event, their subdued borrowing created opportunities for low-rated firms in developed economies – especially in Europe and in the telecommunications sector – to access international funding.

Moreover, favorable market conditions increased the share of international issues with fixed rates.

Emerging Markets Securities Issues: Favorable conditions also allowed emerging economies to maintain their recently regained access to international debt securities markets, permitted infrequent borrowers to float issues and extended the trend towards longer maturities. Although net new issues fell to \$14.5 billion in the third quarter from \$18.6 billion in the second, spreads narrowed for lower rated issuers as stable current-account and fiscal positions enabled higher rated borrowers to reduce their need for external funding (Table 7).

As in the international banking market, investors favored emerging market economies in the Asia-Pacific region. Almost \$4 billion of the \$6.4 billion borrowed by Asian entities in the third quarter were issues of financial institutions – especially public-sector entities in China and Korea. The Korean central government borrowed \$1 billion – primarily to provide a pricing reference for external debt issued by the private sector – and the Republic of the Philippines borrowed the remaining \$1.4 billion.

**Table 7: Selected Components of International Debt Securities Issues
(\$US billions)**

	1997	1998	1999	2000	2001	2002	2003	Q2 2004	Q3 2004 ¹	Stocks at 9/30/04	
										\$ Amount	Pct. of Total
Net issues of:											
Advanced Economies	437.3	573.7	1,164.0	1,156.7	1,261.4	944.5	1,365.3	321.1	293.3	11,408.8	89.3
U.S.	174.9	280.0	483.2	464.5	597.6	328.5	274.3	6.8	41.7	3,245.8	25.4
Euro area ²	251.6	210.9	516.2	558.0	551.2	479.1	768.7	216.1	139.2	5,531.2	43.3
Japan	-1.6	-17.4	2.4	-25.8	-10.1	-22.7	-1.0	11.0	0.7	282.5	2.2
Other advanced economies	12.4	100.2	162.2	160.0	122.7	159.6	323.3	87.2	111.7	2,349.3	18.4
Offshore centers	14.2	10.7	11.2	15.7	25.3	8.1	16.3	5.1	9.8	147.9	1.2
Emerging economies	88.6	41.4	40.9	42.1	45.4	36.9	67.4	18.6	14.5	694.3	5.4
International institutions	20.3	55.7	25.1	22.9	16.3	20.9	23.2	7.0	7.1	527.8	4.1
Total	560.4	681.4	1,241.2	1,237.3	1,348.3	1,010.4	1,472.3	351.9	324.6	12,778.7	100.0
Issued by:											
Financial institutions	353.6	370.1	867.4	796.4	959.6	832.4	1,188.2	285.9	295.8	9,469.1	74.1
Corporate issuers	120.4	133.2	152.7	172.5	171.7	55.1	94.9	11.3	10.5	1,517.6	11.9
Public sector ²	86.4	122.4	196.0	245.5	200.8	102.0	147.8	47.6	11.3	1,264.2	9.9
Denominated in:											
US dollar	329.0	410.7	546.3	609.2	652.6	418.4	468.6	56.1	63.8	5,326.2	41.7
Euro ⁴	134.9	223.8	600.8	470.6	597.3	522.8	833.8	221.3	199.4	5,268.4	41.2
Yen	32.0	-26.8	-11.5	37.7	15.7	-43.3	-4.3	15.5	4.4	612.7	4.8
Other currencies	64.4	73.7	105.5	120.2	81.8	112.5	174.1	58.9	56.9	1,571.4	12.3

SOURCE: *BIS Quarterly Review*, November 1999, August 2000, December 2001, September 2002, December 2004 and author's calculations for currency stocks.

¹Data for the third quarter of 2004 are partly estimated.

²Data for 1997 include all of Europe.

³Excludes international institutions. Beginning in 2002, excludes public financial institutions and public corporate issuers.

⁴Data for 1997 include all euro area currencies.

Financial institutions and sovereigns also accounted for the great majority of the \$6.1 billion of net new issues of emerging European countries. The Republic of Turkey was the most active issuer in the region, as a credit-rating upgrade and the prospect of EU membership improved its terms of borrowing.

After dipping slightly in the second quarter, Latin America's issuance turned positive in the third. The slowdown in the April-June period resulted from a region-wide decline in borrowing and increase in repayments – most importantly Brazil's decision to repay half of a maturing euro-bond out of foreign exchange reserves rather than refinance the entire amount. In the third quarter, Mexican and Brazilian financial institutions accounted for a large share of new issues and governments for the rest. The sovereign borrowers included Brazil and Mexico as well as less-frequent issuers like Jamaica, Uruguay, Colombia, Guatemala and El Salvador, who were able to take advantage of positive market conditions.

Perhaps the most beneficial aspect of the borrower-friendly market was investors' willingness to stretch out the maturity of emerging market issues. The average maturity peaked at 9.4 years in the first quarter and remained at or above 9.0 years over all three quarters.¹⁴ This represented a substantial jump over the average maturities of 7.8 years in 2003 and 7.2 years in 2002. Latin American governments experienced an especially notable rise in the average maturity of new issues from 12.1 years in 2003 to 16.5 years in the first three quarters of 2004.

Endnotes

1. For an expanded discussion, see "Assessing Balance of Payments Issues" in the December 17, 2003 edition of *Capital Flows Monitor*.
2. Reserve accumulation by these countries accounts for much of the increase in foreign exchange reserves in the 1990s. But private foreign investments in U.S. assets consist primarily of holdings by residents of advanced economies. The great majority of U.S. stocks (60.4 percent) and corporate and agency bonds (66.2 percent) are owned by Europeans. U.K. investors hold 17.5 percent of foreign-owned U.S. stocks followed by investors from Canada (12.5 percent), Japan (8.9 percent) and the Netherlands (7.7 percent). U.K. investors are also the largest holders of U.S. bonds (40.4 percent) with the next two largest individual-country investor groups – Japan (9.1 percent) and Canada (2.7 percent) – lagging far behind. It should be noted, however, that investments that originate in London or offshore centers in Asia or the Caribbean are not exclusively those of residents in those countries. Meanwhile, foreign holdings of U.S. investors are similarly concentrated. For example, 55.9 percent of their total equity holdings are European stocks – 22.8 percent in the U.K. – with an additional 11.8 percent in Japan. Europe also accounts for the largest share of U.S. holdings of foreign bonds (47.6 percent) but holdings of Canadian bonds (21.3 percent) are the largest for any individual country.
3. Even if overseas affiliates of U.S. companies repatriated their current profits, the amount of annual income from this source could not maintain the level of outstanding domestic credit in the event of a moderate slowdown in capital inflows or a significant outflow.
4. According to the Center for Economic and Policy Research, the rise in the Home Price Index exceeded the overall rate of inflation in the U.S. by more than 33 percentage points between the first quarter of 1995 and the first quarter of 2003. (CEPR, "An Analysis of the Harvard Center's Case Against the Housing Bubble," October 27, 2003.)
5. The corporate appetite for stock buybacks was fueled in part by a desire to continue augmenting executive compensation packages with stock options.
6. In its March 2003 *Quarterly Review*, the BIS estimated that about three percent of global holdings of U.S. dollar reserves are deposited in banks in the U.S. and an additional 12 percent in banks offshore.
7. In the second quarter of 2004, BIS reporting banks' net liabilities to these countries actually fell (see Table 6).
8. From April 2001 through June 2004, U.S. dollar short-term interest rates averaged 1.3 percentage points lower than comparable euro rates.
9. On a combined basis, the groups of nations and individual countries included in Table 6 account for \$780.1 billion or 70.8 percent of banks' total external claims on emerging economies. China, Korea, Brazil and Mexico are the largest borrowers while OPEC members continue to supply over one-fifth of total deposits. Individual countries with large holdings of external deposits include China (\$130.9 billion), Taiwan (\$72.9 billion), Russia (\$70.3 billion), Mexico (\$65.2 billion), Saudi Arabia (\$64.4 billion), Brazil (\$58.0 billion) and Korea (\$56.6 billion).
10. The IMF's assertion glosses over less favorable implications of the liquidity build-up while its data point tends to understate America's external imbalance. While the Fund focuses on flows of foreign official investment, the data on stocks actually provide a more telling indication of U.S. dependence on these sources (Table 2). At yearend 2003, outstanding foreign official assets were 13.4 percent and holdings of Treasury securities 8.7 percent of U.S. GDP. Moreover, the amount of Treasuries owned by official foreign investors was \$290 billion larger than the Federal Reserve's holdings. Indeed, the Bank of Japan's holdings of U.S. assets (\$765.5 billion) alone amounted to 6.7 percent of U.S. GDP and were almost as large as the Federal Reserve's total assets (\$788.0 billion) after the BoJ conducted its buying spree in 2003 and early 2004.
11. U.S. investors continued to be net sellers of foreign bonds (-\$28.1 billion) while foreign investors remained strong net buyers (\$213.7 billion).
12. During the second quarter of 2004, Argentina continued to experience the net run-off in loans that began in 2001, as it

modestly increased its deposits (by \$1.2 billion) in BIS reporting banks. Meanwhile, Venezuela witnessed a significant net outflow that included both a drop in claims and an increase in external deposits. A decline in foreign banks' claims on Brazil triggered an offsetting repatriation of deposits. Meanwhile, claims on Mexico still exceeded liabilities but the country's external bank deposits were the fourth largest among emerging market economies.

13. This slowdown – in part the result of reduced government borrowing as the year progressed and in part a reflection of increased issuance in domestic markets – was offset by greater use of the currency by non-EU issuers, including Australian financial institutions.
14. For sovereign borrowers, the average maturity was 12.2 years over the first three quarters of 2004

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