CAMBRIDGE ASSOCIATES LLC

GLOBAL MARKET COMMENTARY

DOES THE "BUCK" STOP HERE?

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Does the "Buck" Stop Here?

If you don't have anything nice to say, then don't say anything at all. – Everyone's Mother

Unfortunately, it seems no one has anything "nice" to say about the U.S. dollar (US$) these days, including its usual defender, the U.S. Treasury. Indeed, participants at the recent IMF/G7 meeting of finance ministers and central bankers heeded their mothers' polite advice, with not a single reference to the US$ in the conference communiqué, despite the greenback's tumble following the U.S. Federal Reserve's decision on September 18 to cut its Federal funds rate a larger-than-expected 50 basis points (bps). Since then the US$ has hit multi-decade lows on several measures, and now stands in uncharted territory at post-1973 lows on a nominal trade-weighted basis against the "major" currencies, having fallen more than 10% over the past 12 months, its fastest rate of decline since March 2004 (Table A).

We, however, have plenty to say about the US$ and, unfortunately, most of it is not "nice." In short, we expect continued dollar weakness in the years ahead, especially *vis-à-vis* Asian currencies, as the US$ slowly transitions from *the* reserve currency of the global financial system to *a* reserve currency among others. While the potential for a dangerous "run on the dollar" does exist, we believe the coming transition will be gradual in nature (although by no means gentle), and will include brief bouts of renewed dollar strength. Such a rebound in the dollar may be on the horizon, although attempting to provide near-term currency forecasts is always a fool's errand, especially in the current environment, as so many variables are in flux, and the overall outlook for the global economy remains murky.

A Brief Review of How We Got to this Point

Dollar weakness is nothing new; the greenback has depreciated over the past five years under the heavy burden of a bloated U.S. current account deficit. From its recent peak in February 2002, the US$ has fallen 33.8% in nominal trade-weighted terms (29.6% in real terms) versus the seven "major" developed currencies, while falling 21.5% against a broad index of currencies in real trade-weighted terms (the truest measure of overall currency movement)[1] (Table B).

During the mid-1990s, foreign capital flooded into the United States (both in terms of equity portfolio flows into the stock market and foreign direct investments), helping to drive an investment-led "technology boom," but also creating economic imbalances in the U.S. economy as businesses and consumers spent heavily and saved little. Such inflows drove the dollar up nearly 50% from its lows in 1995, helping to erode the competitiveness of U.S. exports, while the current account (approximately the difference

[1] The U.S. Federal Reserve calculates nominal and real (inflation-adjusted) trade-weighted indices of the US$ to measure overall movements in the currency. The Broad Index consists of the currencies of 26 "important" U.S. trading partners. The "Major" and the Other Important Trading Partners (OITP) indices are subsets of the Broad Index. The Major Index includes seven of the most traded international currencies including the euro, and currencies from Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom. The OITP Index consists of 19 currencies of mostly emerging markets economies, including those of Argentina, Brazil, Chile, China, Colombia, Hong Kong, India, Indonesia, Israel, Korea, Malaysia, Mexico, the Philippines, Russia, Saudi Arabia, Singapore, Taiwan, Thailand, and Venezuela.

between what the U.S. economy earns and spends) went from roughly balanced in 1991 to a then record of more than 4% in 2002 (a level previously unheard of for a developed economy).[2] In an attempt to avoid a deflationary bust after the bursting of the "tech bubble," the U.S. Federal Reserve slashed policy rates by 550 bps to a record low of 1% over 2001–03, sounding the death knell for the US$. U.S. interest rates fell well below those of other countries (save Japan), making U.S. fixed income securities less attractive at the same time that the ongoing bear market soured foreign investors' appetite for U.S. equities. While the economy recovered after 2002, the US$ did not. The current account deficit worsened as U.S. households continued to spend beyond their means on the back of rising house prices, fueled by an unusually low interest rate and loose credit environment. Standing at 4% of GDP in 2002, the current account deficit ballooned to a peak of more than 6% of GDP by 2006, a troubling weight for an already strained currency.

However, the dollar's decline since early 2002 has not been a straight line. The "buck" rallied sharply over 2005 (wrong-footing many investors convinced the currency could never rise) as the Federal Reserve embarked on a tightening campaign, giving U.S. assets a sizeable interest rate differential relative to other fixed income markets, while U.S. growth, buoyed by the housing market, largely outperformed the European and Japanese economies. While the dollar held flat for most of 2006, the greenback resumed its downturn in early 2007 when the U.S. economy began to show signs of weakness, with nervousness over dubious U.S. mortgages and related credit excesses increasing investor aversion (both private and "official") to US$-denominated assets. Following the Fed's decision to cut policy rates in mid-September, a market consensus quickly developed that U.S. policymakers prioritized reviving the economy at the expense of increased inflation and a weakening dollar, and the dollar's decline rapidly accelerated.

Yet, while the headlines focus on the sharp fall of the US$ to record lows on a nominal basis, this masks a sharp divergence between currencies. The fact of the matter is that while the US$ has plummeted, it has done so mainly versus European currencies and has yet to undergo a sharp revaluation against the Japanese yen or emerging markets currencies; the OITP Index has only fallen 10% in real terms since the beginning of 2002, while the yen has rallied only 14% versus the dollar, compared to the 63% and 43% rise in the euro and pound, respectively, not to mention the 68% rise in the Canadian dollar. Tables C and D put these movements into perspective.

This asymmetrical adjustment of the dollar is critical to understanding how the U.S. economy has supported such a glaring current account imbalance in the face of a depreciating currency, especially given that the OITP and Japan account for more than 57% of U.S. trade.[3] In short, many emerging markets economies have implicitly (if not explicitly) pegged their currencies to the US$ to pursue mercantilist goals,

[2] Economies that have an insufficient level of saving to support investment/consumption must continue to attract sufficient capital to run a *capital* account surplus, or support their deficit through debt financing. Ever-widening current account deficits can raise the debt-servicing burden to onerous levels, as economies must export an increasingly larger share of domestically generated income to offshore creditors. Massive current account imbalances mean that the surplus countries hold an ever-growing share of their wealth in the assets of deficit countries. This is what has occurred in the United States, with about two-thirds of the world's net savings going to finance the current account deficit. History has shown that currencies of countries with large current account deficits eventually depreciate, as foreign creditors become weary of accepting additional assets, necessitating a lower currency to make both assets and exports more attractive to help fund saving short falls.

[3] As defined by the Federal Reserve's trade-weighted calculations.

thereby linking their economies and monetary polices to those of the United States. It is this tenuous relationship that is slowly showing signs of breaking down, and will drive the next leg of US$ depreciation.

"Bretton Woods II" and the "Impossible Trinity"

There has been no shortage of academic debate surrounding the ability of the U.S. economy to fund an ever-increasing current account deficit, with a host of explanations and rationales proffered.[4] Although controversial in its conclusions, the so-called "Bretton Woods II" framework describes the unofficial arrangement seemingly in place since 2001 between the United States and central banks in the developing world (notably from oil-producing countries and Asian exporters) that either outright peg their currencies to the US$ and/or recycle their ample foreign currency reserves into US$-denominated assets to help maintain low, pseudo-fixed exchange rates.[5] This relationship has also been characterized as a "bonds for goods" vendor-financing scheme, whereby exporting countries purchase US$-assets (mostly fixed income securities) with the proceeds of their export earnings, which helps keep U.S. interest rates lower than would normally be the case. Lower interest rates help fuel U.S. consumption, which in turn benefits exporting countries by keeping their economies humming and citizens employed. Many have argued that so long as both sides benefit from this arrangement, the U.S. current account deficit is sustainable.

Yet this arrangement, like all Faustian pacts, carries with it a steep price; namely, the United States sinks further into external debt, while exporting countries face a rapid accumulation of assets denominated in a depreciating currency and the surrender of independent monetary policy. When business cycles are in sync (such as following the global recession in 2001), economies can share similar monetary policies. However, as business cycles diverge, a one-size-fits-all monetary policy simply creates economic distortions. Call it the dark side of "decoupling"; as the Federal Reserve moves to cut rates to support a flagging U.S. economy, sticky exchange rates force still robust emerging markets to run overly stimulative monetary policies. In time, this can result in overheating economies and asset bubbles, the same sins that have punished emerging markets in the past. As such, most emerging markets need to *raise* interest rates, not lower them. Already we are seeing an increase in inflation across the developing world (Table E) and cost pressures on the rise in Asia, not to mention the formation of a massive speculative bubble in Chinese equities, which may soon engulf emerging Asian equities in general. Indeed, those economies tied to the US$ have come face-to-face with what Morgan Stanley's Stephen Jen calls the "trilemma" of the "impossible trinity"—an economy cannot simultaneously maintain an open capital account, independent monetary policy, and a de facto pegged

[4] Indeed, it was argued that the U.S. current account did not reflect inadequate U.S. savings (which is the conventional interpretation) but deficient consumption in the rest of the world (i.e., Europe and Japan) and that a U.S. current account deficit was necessary to prevent the global economy from falling into recession. The "global savings glut" theory, proposed by then Fed Governor (now Fed Chairman) Ben Bernanke, held that the current account deficit was the result of "excess savings" in the rest of the world and a lack of attractive investment opportunities outside the United States. In other words, the central concern is not a swollen current account deficit, but rather, an overwhelming capital account surplus!

[5] "Bretton Woods II" was conceptualized in 2003 by three economists at Deutsche Bank (Michael Dooley, David Folkerts-Landau, and Peter Garber). The name references the international monetary arrangement in place after World War II until 1973, whereby all currencies were pegged to the US$, which itself was pegged to gold at $35 an ounce. In contrast to its namesake, Bretton Woods II is not a ratified global monetary policy agreement, but simply a theory.

exchange rate; two of these objectives can be achieved, but not all three. The price for an open capital account *and* monetary independence is a floating currency.[6]

Emerging economies seem to have grown weary of the costs associated with Bretton Woods II (foregone domestic investment in favor of building US$ reserves and the inflationary consequences of "sterilizing" such reserves), and have taken action. Central banks across the developing world have either tightened monetary policy and/or allowed their currencies to appreciate versus the US$; the real OITP Index is strengthening at its fastest annual pace arguably since the late 1980s, especially among Asian currencies. The Chinese *renminbi* has appreciated 10% since its move to a currency basket in 2005, while Singapore has also announced a higher trading band for the S$. Among the Middle East oil exporters, Kuwait has abandoned its US$ peg in favor of a currency basket (albeit still dollar-heavy), while Saudi Arabia (which also pegs to the US$) did not lower its domestic interest rates following the Fed rate cut. There is now open talk of revaluations in the Middle East, given their income (US$) and spending (European and Asian goods) mismatch.

In addition, emerging markets governments have been actively pursuing "reserve diversification," mainly by allocating new reserves across a broader spectrum of currencies (notably the euro and the pound) rather than selling current US$ holdings. The past year has seen the establishment of several "sovereign wealth funds" with the objective of investing "excess" reserves across asset classes and markets in search of higher returns.[7] Both of these trends have the potential to weigh heavily on the US$ in the years to come (as they implicitly involve moving away from US$-denominated fixed income securities) and reflect a growing unease with the current status quo. Combined with a growing acceptance that appreciating currencies are needed to combat domestic inflationary forces, we are clearly seeing a fraying of the Bretton Woods II framework, which over time will be abandoned in favor of domestic demand-oriented policies (instead of using foreign reserves to support U.S. consumption). The real test will be to see how confident emerging markets remain in the face of a full-fledged U.S. recession; however, the wheels have now been set in motion and will not easily be sent into reverse.

Yet how does Japan fit into all of this? While not explicitly pegged to the US$, the Japanese yen has failed to appreciate as sharply as other developed currencies due to both government intervention and structural factors. Japanese authorities intervened heavily in the foreign exchange markets over 2002–04 to stem the yen's rise, ostensibly to support the then weakening economy, especially as the yen approached the psychologically important level of ¥100/US$. While the interventions have stopped (with the Japanese having been net sellers of U.S. Treasuries on average since 2005), the yen has steadily fallen until just recently, as Japanese households have been forced by a decade of zero-interest rates to take their savings overseas in search of yield. Japan has experienced persistent negative net financial outflows since 2004, due in part to the Japanese as well as other players (notably hedge funds) engaging in the "yen carry trade," in

[6] For example, China maintains a more-or-less fixed exchange rate and an independent (although ineffective) monetary policy, however, it has strict capital controls (the RMB is not freely convertible). Hong Kong, meanwhile, has a very open capital account and explicitly pegs the HK$ to the US$, although to do so, domestic monetary policy operates solely to maintain the dollar-peg; i.e., it follows the direction of the U.S. Federal Reserve.

[7] For further discussion, please see our June 2007 Market Commentary *Potential Implications of Foreign Exchange Reserve Diversification*.

which investors borrow yen to invest in assets denominated in higher-yielding currencies (notably the AU$, NZ$, even the US$, and £). While the Bank of Japan ended its zero interest rate policy in 2006 and has since raised policy rates by 50 bps, Japan remains mired in structural deflation and low interest rates, with the government reluctant to allow further interest rate increases as the economy (and exporters) benefit from a cheap yen. Indeed, many argue that the Japanese yen, not the Chinese RMB, is the most egregiously undervalued currency and in need of revaluation. After falling 20% from December 2004 to June 2007, the yen has snapped back to life recently (up 7% versus the US$). In the short term, a return to the ¥100/US$ is not out of the question—the yen could continue to rally as carry trades unwind and Japan could possibly even see foreign inflows, should real interest rate differentials in the United States (or elsewhere) turn negative, as they did over 2002–04. It remains to be seen whether Japanese officials would again intervene heavily to thwart such a rise. Over the long term, however, there remains ample scope for sustained yen strength, should Japanese savings ever decide to return home to a growing economy.

The Case for a Dollar Rebound

While sentiment on the dollar has turned decidedly negative (and for good reason), the markets may be getting ahead of themselves (as markets often do). Even as Fed rate cuts will continue to undermine the dollar's support from relative interest rate differentials (Table F), record net short positions on the dollar may be setting the currency up for a sharp rally, especially if the Fed were to halt its interest rate cuts and/or the economy began surprising on the upside. Even the pre-eminent "perma-bear" and respected market pundit Marc Faber recently commented that while "the U.S. dollar is a doomed currency in the long run … I am not sure that shorting the U.S. dollar heavily right now is the best strategy."

From a fundamental stance, the US$ has become relatively *undervalued* on certain measures, especially versus the European currencies that have borne the brunt of the adjustment so far. Although largely ignored by the press, the dollar's decline (coupled with strong global growth) has resulted in a substantial improvement in the U.S. current account, with the deficit shrinking from 6.3% of GDP in third quarter 2006 to 5.8% in second quarter 2007 (5.5% on an annualized basis). Exports are growing strongly and imports are slowing (Table G), putting U.S. trade on track to be a net contributor to U.S. GDP growth for the first time since 1995. Indeed, the rebound in U.S. GDP over the second and third quarters is largely attributed to net exports, while the recent growth in U.S. corporate profits is almost entirely attributable to overseas earnings, boosted by the dollar's decline. Perhaps this explains the curious silence from the Treasury department—was the G7 communiqué a subtle admission that a falling dollar, so long as it does not turn into a rout, is "good" for the United States, and arguably good for the global economy, as it allows the unwinding of the U.S. imbalances?

While the adjustments needed to bring the U.S. current account deficit to a more reasonable level are far from complete (and will entail further dollar weakness), a large current account deficit does not prevent the US$ from rallying, as it did in 2005, as well as during 2001–02, despite a U.S. recession. Indeed, the U.K. and Eurozone economies are showing signs of stress, and the knock-on effects of a slowing U.S. economy and tighter credit environment could prove to be the tipping point; with their currencies overvalued

and the dollar "oversold," it is not hard to imagine a bout of pound or euro weakness. Finally, despite concerns over the US$, U.S. government T-bills are still regarded as a safe haven amid times of crisis. Treasury data show that despite a massive and record exit from US$-denominated assets in August (as investors dumped equities and anything related to credit), foreigners and domestic investors alike still piled into T-bills amid the turmoil, causing the US$ to initially rise during the credit crunch. It was not until after the dust settled a bit and central banks began to intervene (i.e., the coast was getting clear) that the greenback resumed its downward path. Therefore, further turmoil in the financial markets could well see a flight to safety, which would benefit the US$.

The Course Going Forward

Yet despite the prospects of rebound in the dollar, it is unlikely that the "buck" stops here—the secular outlook for the US$ is negative. In the near term, the road ahead will most likely be bumpy, as it was during the 1985–95 cycle, which saw the dollar precipitously decline 30% in real terms compared to the Broad Index (40% versus the Major Index) over 1985–88, only to spend the following seven years in a volatile trading range, eventually trending 7% lower and bottoming in the summer of 1995 (Table B). As a crude proxy for possible further dollar weakness, assuming that emerging currencies bear the next leg of dollar weakness, the OITP Index has another 20% to fall to reach the current level of the Major Index. This is in line with most econometric predictions that another 20% to 30% decline in the dollar is needed to correct the current account imbalances. However, it is far from clear how the U.S. or global economy will hold up in the months ahead, and given that currencies tend to overshoot (both on the upside and down), we may only be midway through a declining dollar cycle, with anything possible in the interim.

From a long-term perspective, important changes are afoot. Bridgewater Associates recently compared the current environment to that of 1971, commenting that we are seeing the "gradual breakdown of the Dollar System." We would agree, and at the hazard of making blanket long-term predictions, suggest that the US$ is in the slow process of transforming from *the* world's reserve currency to *a* reserve currency among others. Table H shows how the world is currently geared toward dollars, via trade invoicing and reserves. While the U.S. economy only accounts for 28% of "global" GDP and 25% of global trade, the US$ composes 59% of trade invoicing, as many commodities and goods are priced and paid for in U.S. dollars. Compounding this effect is the fact that roughly 66% of global currency reserves are held in US$ assets; therefore, the US$ holds a much larger role than the U.S. economy's weight would suggest. However, should the emerging world truly develop its own demand dynamic (and the US$ continue to depreciate), we should eventually see some sort of "de-dollarization." Clearly this transition has the potential to provide long-term support for European and Asian currencies, given that the "rest of the world" accounts for nearly 70% of global GDP, but non-dollar currencies account for only 40% of invoicing and global reserves. Is it really that unfathomable to envision goods priced in Chinese RMB in the future, especially if China grows into the consumption-driven paradise that most investors dream of, and moves from a global "price taker" to a "price maker" (as it already is for some raw commodities)? Such changes (which admittedly will unfold slowly over time) would have a lasting impact on asset fund flows and asset prices.

But Isn't a "Dollar Crisis" Coming?

In a sense, we are in the middle of one right now. The potential for a nasty dénouement to the current US$-centric currency regime is higher now than it has been in a long time, and therefore the risk of a catastrophic collapse in the value of the dollar cannot be dismissed. Non-U.S. investors own roughly half of the outstanding U.S. Treasury debt, not to mention large amounts of private corporate debt, agency credits, and equities (Tables I and J). With the U.S. economy slowly leaning toward recession and policymakers seemingly tolerant of currency weakness, foreign creditors (both private investors and central banks) may decide to bolt for the door, creating a rout reminiscent of a classic emerging markets crisis. As we commented in August, although all market participants would lose from such a development, it might still be entirely rational for individual participants to dump their depreciating US$ assets—the classic "prisoner's dilemma." However, this *is not* our expected outcome. Just as the heads of the world's financial powers gathered at the Plaza Hotel in New York in 1985 to orchestrate an orderly devaluation of the dollar (with Japan then playing China's role today), so it is feasible that a concerted effort to support the dollar could be arranged, should market actions get out of hand.

Implications for Investors

While we would never place undying faith in the ability of global policymakers to solve a crisis, the truth is that expectations of a "financial nuclear winter" are not likely to come to pass, although having some canned goods and blankets in the fallout shelter may be in order. In practice, this means investing in sovereign bonds across currencies to provide adequate deflation protection[8] as well as in real assets and inflation-linked bonds to hedge against unexpected inflation, as the prospects of loose monetary policy from the Fed (if not other central banks) combined with a falling US$ (which drives commodity and import prices higher) could very well spark a sustained rise in inflation.

A reasonable way to protect against a sustained decline in the US$ is to diversify across a wide set of non-dollar assets, something we have advocated in earnest since 2002, while since 2005 we have stressed strategically underweighting the United States in favor of Asia amid global equity portfolios, as a falling dollar should prove a tailwind for Asian currencies and equities, absent any short-term strains on economies from rapid currency appreciation.[9] However, investors should move gradually given the rising valuations and meteoric capital gains in emerging markets, particularly in Asia. While such equity diversification provides exposure to emerging markets currencies, which should be the beneficiaries of a secular decline in the US$, investors should consider the potential for currency volatility in the portfolio to be high. This may especially be the case going forward. As long-repressed currencies are allowed to float more freely, the foreign exchange markets are likely in for a wild ride.

[8] An additional consideration in a US$ collapse scenario would be that U.S. Treasury bonds may not fulfill their portfolio insurance role because bond yields would *rise* as foreign creditors dump US$ assets.
[9] Please see our November 2005 Market Commentary *Increasing Strategic Equity Allocations to Asia* and our 2006 papers *Cutting Strategic Allocations to U.S. Equity* and *Investing in Asia*.

What about gold? Surely no discussion of a collapsing monetary regime is complete without mentioning Keynes' "barbarous relic." To its disciples, gold is the ultimate hedge against currency devaluation; the anti-fiat currency. As can be seen in Table K, gold acts as the "mirror" image of the US$, exhibiting a strong negative correlation, although it is not always as perfectly negatively correlated as claimed. However, gold's recent surge certainly reflects nervousness over the fate of the US$, with prices climbing toward $800 an ounce, levels last seen during the precious metals mania of the early 1980s.

We maintain our agnostic view toward the metal.[10] Timing is everything with gold, and while now may seem like the time, there is plenty of "hot" money chasing precious metals (gold uncharacteristically tumbled alongside every other risky asset during the credit crunch) and if a US$-counter rally is on the horizon, a more opportune time for buying gold may present itself. While gold *can* be used as both a currency and inflation hedge, the significant opportunity costs involved in holding a non-cash-flow-generating asset and the difficulties in timing entry and exit points make gold an unattractive hedge in our opinion. Investors can hedge against inflation by investing in a range of real assets that have higher expected long-term returns and can also protect against a decline in the US$ through exposure to other currencies that might be expected to appreciate relative to the greenback over the long term. In the event of wholesale devaluation by the world's major central banks, presumably hard assets of all sorts would experience substantial appreciation, while investors would incur substantially lower opportunity cost for holding such assets for hedging purposes. But certainly, further dollar weakness will benefit gold, and holding bullion may be attractive to those who disagree with our view that an outright dollar collapse can be avoided.

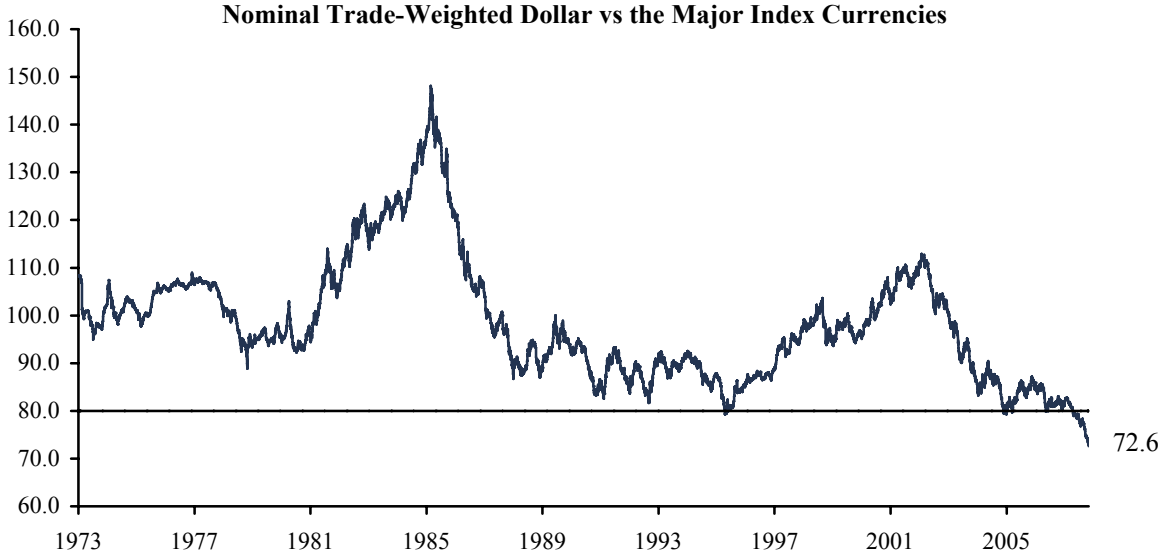
[10] For further discussion, please see our March 2006 Market Commentary *Gold: Barbarous Relic No More?*

Table A

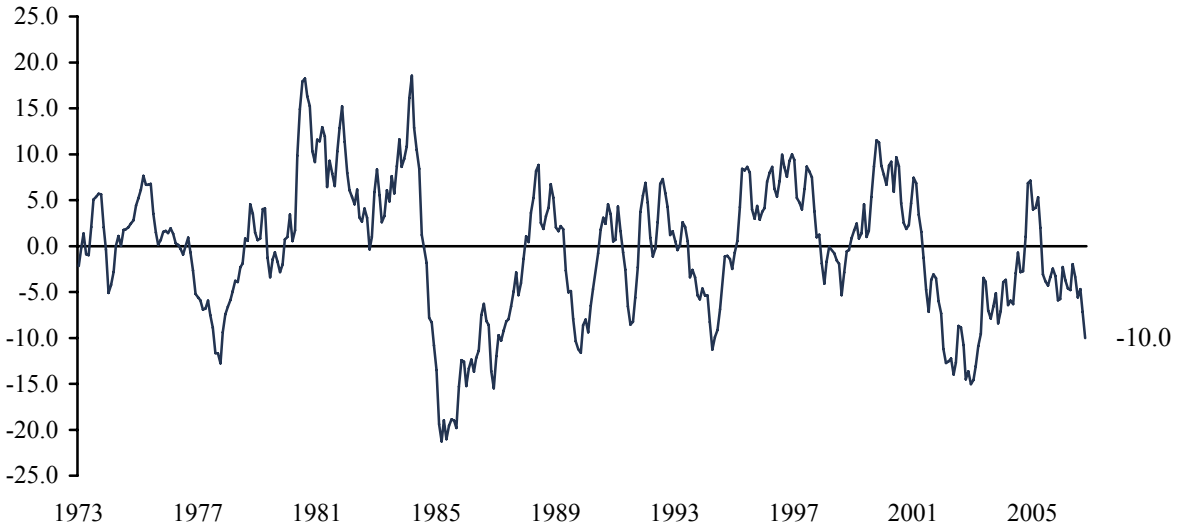
U.S. DOLLAR INDEX

January 2, 1973 – October 31, 2007

Nominal Trade-Weighted Dollar vs the Major Index Currencies



Nominal Major Index Rolling 12-Month Percent Change



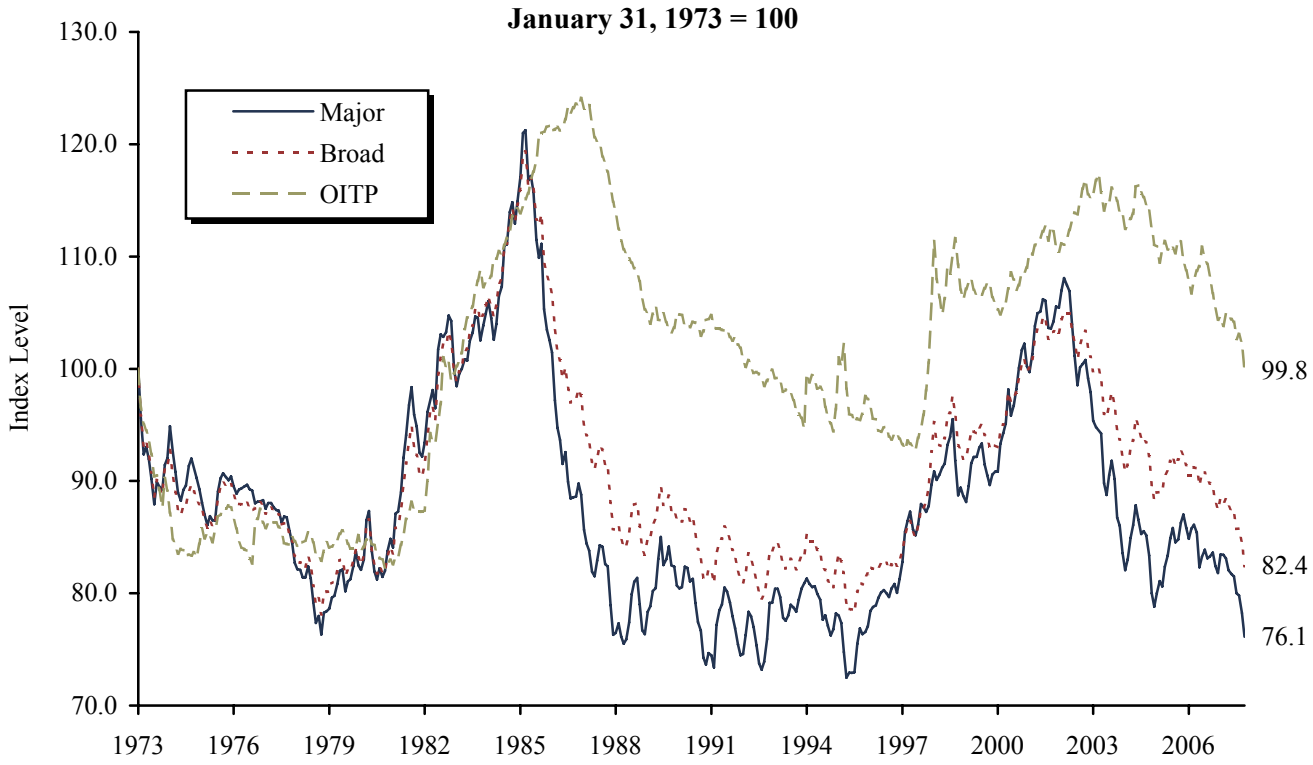
Source: Federal Reserve Board.

Notes: Year-over-year change in the Major Index is based on month-end data. The U.S. Federal Reserve calculates trade-weighted indices of the US$ to measure overall movements in the currency. The Major Index includes seven of the most traded international currencies including the euro, and currencies from Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom.

Table B

REAL TRADE-WEIGHTED VALUE OF THE U.S. DOLLAR

January 31, 1973 – October 31, 2007



Percent Change of U.S. Dollar Cycles

Nominal Major Index	1973–78	1978–85	1985–95	1995–2002	2002–07
	-15.0	56.4	-44.2	39.4	-33.8
Real Major Index	1973–78	1978–85	1985–95	1995–2002	2002–07
	-23.7	58.9	-40.2	49.1	-29.6
Real Broad Index	1973–78	1978–85	1985–95	1995–2002	2002–07
	-21.9	52.7	-34.3	34.0	-21.5
Real OITP Index	1973–80	1980–87	1987–97	1997–2003	2003–07
	-17.7	50.8	-25.3	26.5	-15.0

Source: Federal Reserve Board.

Notes: All indices rebased to January 1973 at 100. Cycles based on peak-to-trough changes in monthly index levels of each year. The U.S. Federal Reserve calculates nominal and real (inflation-adjusted) trade-weighted indices of the US$ to measure overall movements in the currency. The Broad Index consists of the currencies of 26 "important" U.S. trading partners. The "Major" and the "OITP" (Other Important Trading Partners) indices are subsets of the Broad Index. The Major Index includes seven of the most traded international currencies including the euro, and currencies from Australia, Canada, Japan, Sweden, Switzerland, and the United Kingdom. The OITP Index consists of 19 currencies of mostly emerging market economies, including those of Argentina, Brazil, Chile, China, Colombia, Hong Kong, India, Indonesia, Israel, Korea, Malaysia, Mexico, the Philippines, Russia, Saudi Arabia, Singapore, Taiwan, Thailand, and Venezuela.

Table C

CURRENCY RETURNS OF THE BROAD TRADE-WEIGHTED DOLLAR INDEX

As of October 31, 2007

	Trade Weight	In U.S. Dollar Terms (%) One Month	Three Months	12 Months	Since 12/31/2007
Major Index	**51.80**				
Australian Dollar	1.21	4.86	9.65	20.39	82.00
Canadian Dollar	16.52	4.62	12.42	17.97	68.07
Euro	17.58	1.73	5.69	13.35	62.48
Japanese Yen	9.49	-0.23	3.28	1.62	13.68
Swedish Krona	1.10	1.70	5.92	13.52	64.90
Swiss Franc	1.38	0.79	3.83	7.32	43.25
U.K. Sterling	4.52	1.96	2.23	8.92	42.73
OITP Index	**48.20**				
Argentine Peso	0.48	0.00	-0.87	-1.83	-68.24
Brazilian Real	2.10	5.77	7.50	22.89	32.81
Chilean Peso	0.69	3.60	5.81	6.35	33.97
Chinese Renminbi	15.10	0.58	1.47	5.57	10.90
Colombian Peso	0.46	1.66	-1.44	16.03	14.42
Hong Kong Dollar	1.94	0.23	0.97	0.38	0.61
Indian Rupee	1.26	1.33	2.69	14.51	22.62
Indonesian Rupiah	0.89	0.53	1.41	0.17	14.32
Israeli Shekel	1.04	1.43	8.76	7.93	11.39
Malaysian Ringgit	2.10	2.17	3.58	9.52	13.94
Mexican Peso	9.63	2.16	2.23	0.54	-14.34
Philippine Peso	0.73	3.14	3.80	14.10	18.13
Russian Rouble	1.0	0.87	3.59	8.23	23.59
Saudi Riyal	0.83	0.01	0.25	0.24	0.25
Singapore Dollar	1.91	2.46	4.74	7.48	27.45
South Korean Won	3.65	1.60	2.07	4.61	45.83
Taiwanese Dollar	2.50	0.73	1.26	2.65	7.99
Thai Baht	1.40	0.85	-0.62	8.05	30.15
Venezuelan Bolivar	0.49	0.00	0.00	36.12	-64.72

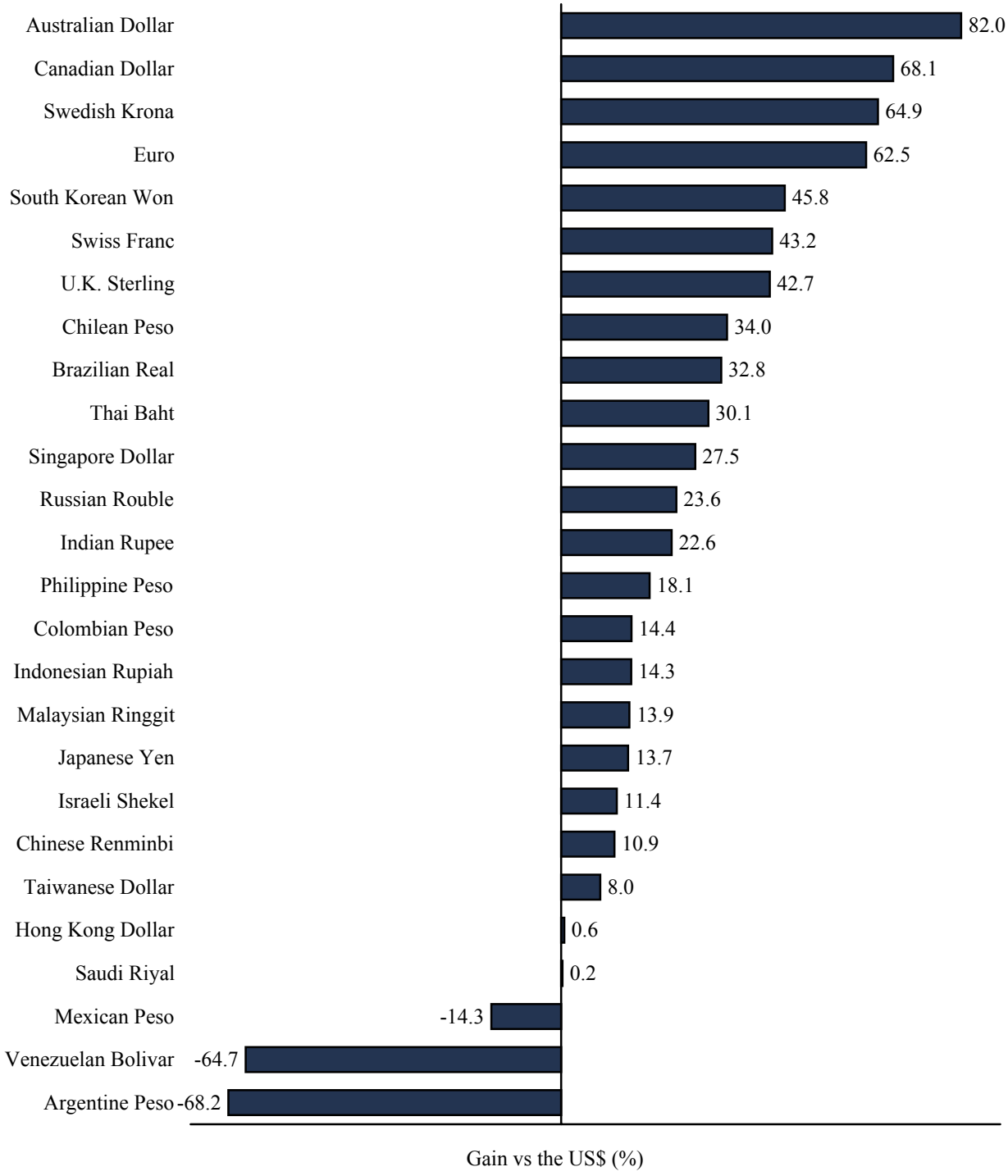
Sources: Federal Reserve and Thomson Datastream.

Note: Trade weights based on Federal Reserve calculation for the Broad Trade-Weighted Index.

Table D

COMPARATIVE CURRENCY PERFORMANCE VS THE U.S. DOLLAR

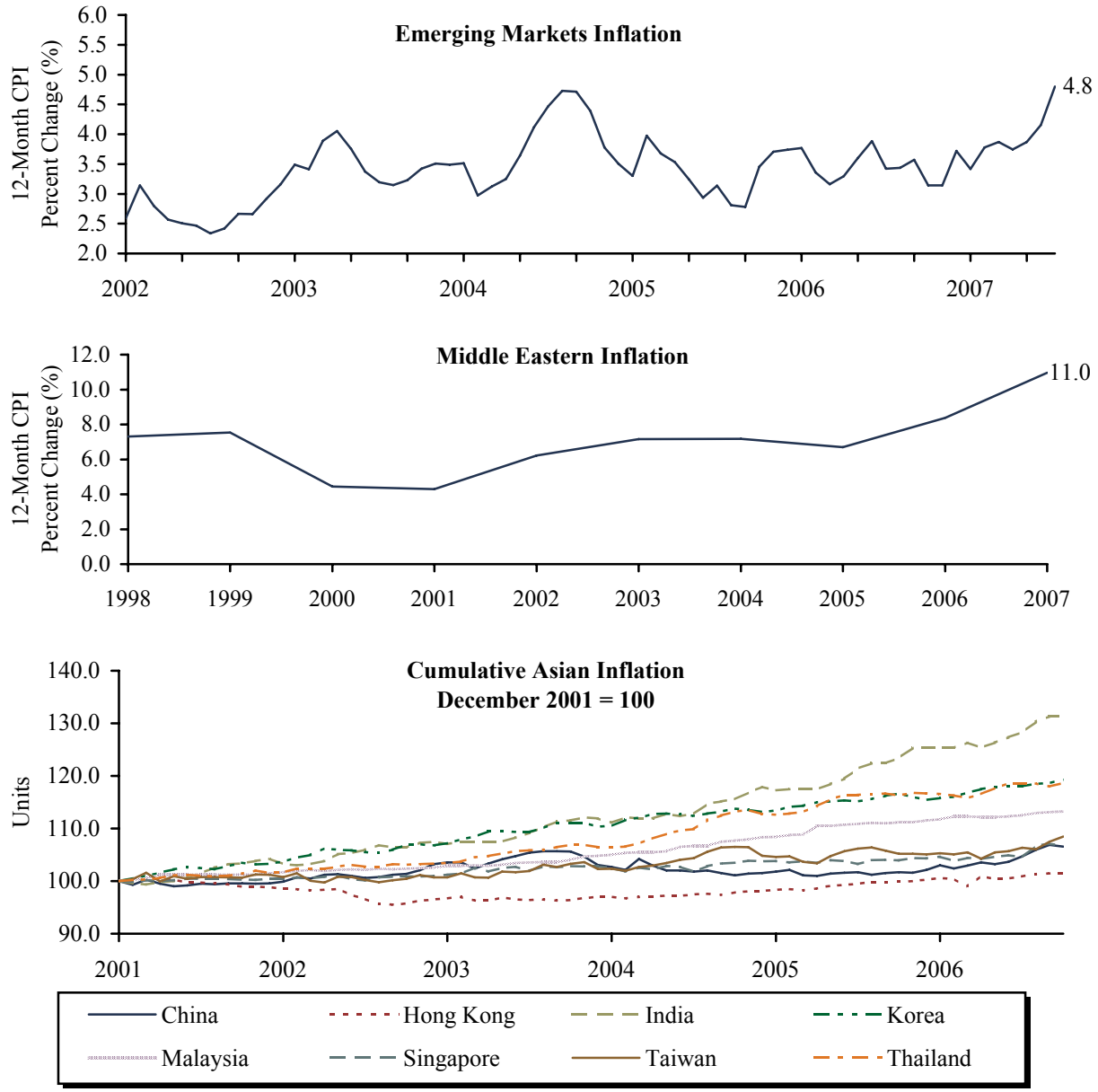
December 31, 2001 – October, 31 2007



Source: Thomson Datastream.

Table E

RISING EMERGING MARKETS INFLATION



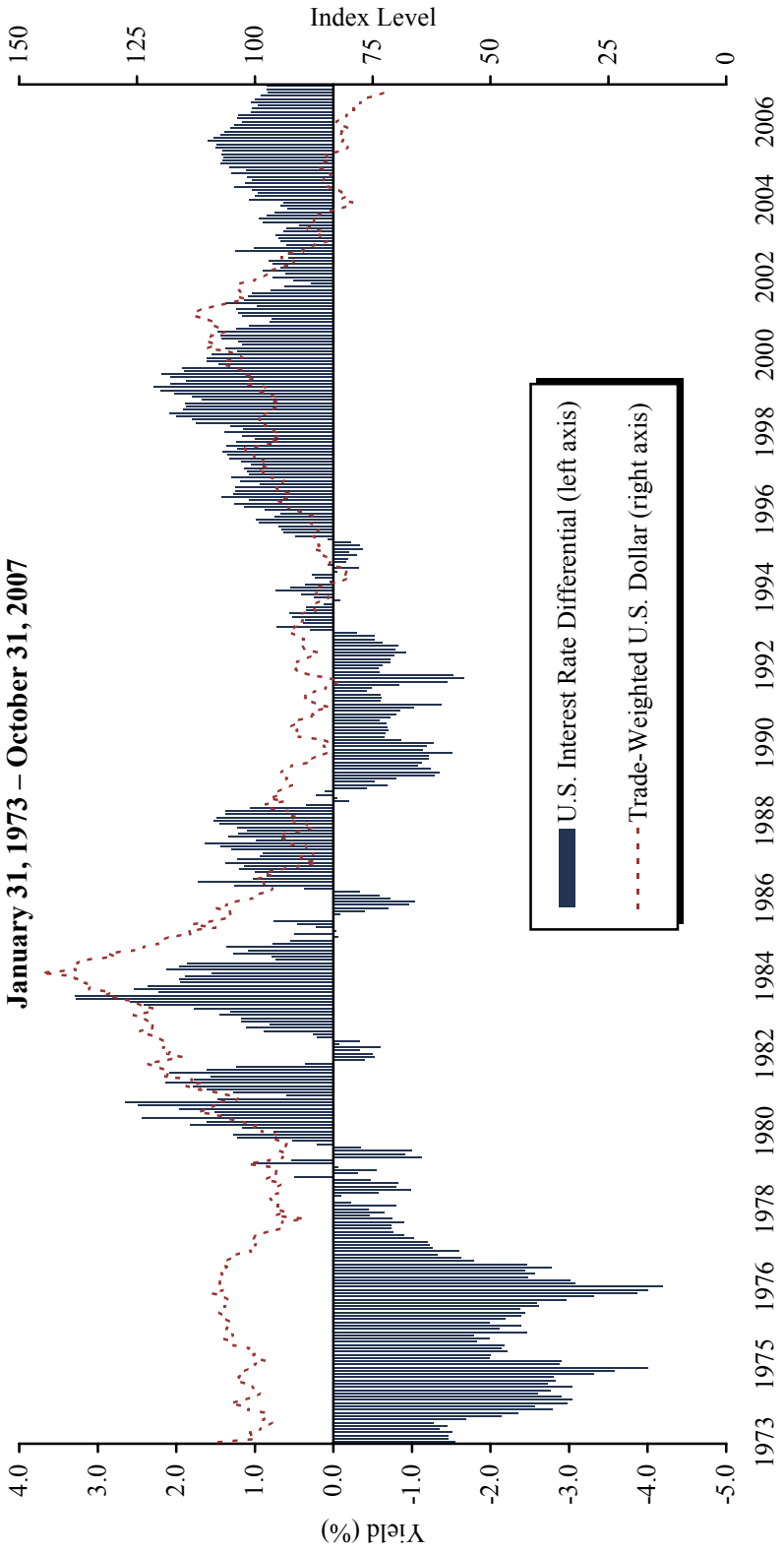
Sources: IMF and Thomson Datastream.

Notes: Emerging markets inflation is based on IMF definition and covers the following countries: Brazil, Bulgaria, Chile, China, Estonia, Hong Kong, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Poland, Singapore, South Africa, Taiwan, and Thailand. Middle Eastern inflation is shown using annual data and based on IMF definition, covering the following countires: Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, and Yemen. Asian inflation is provided by Datastream.

Table F

U.S. INTEREST RATE DIFFERENTIAL

January 31, 1973 – October 31, 2007



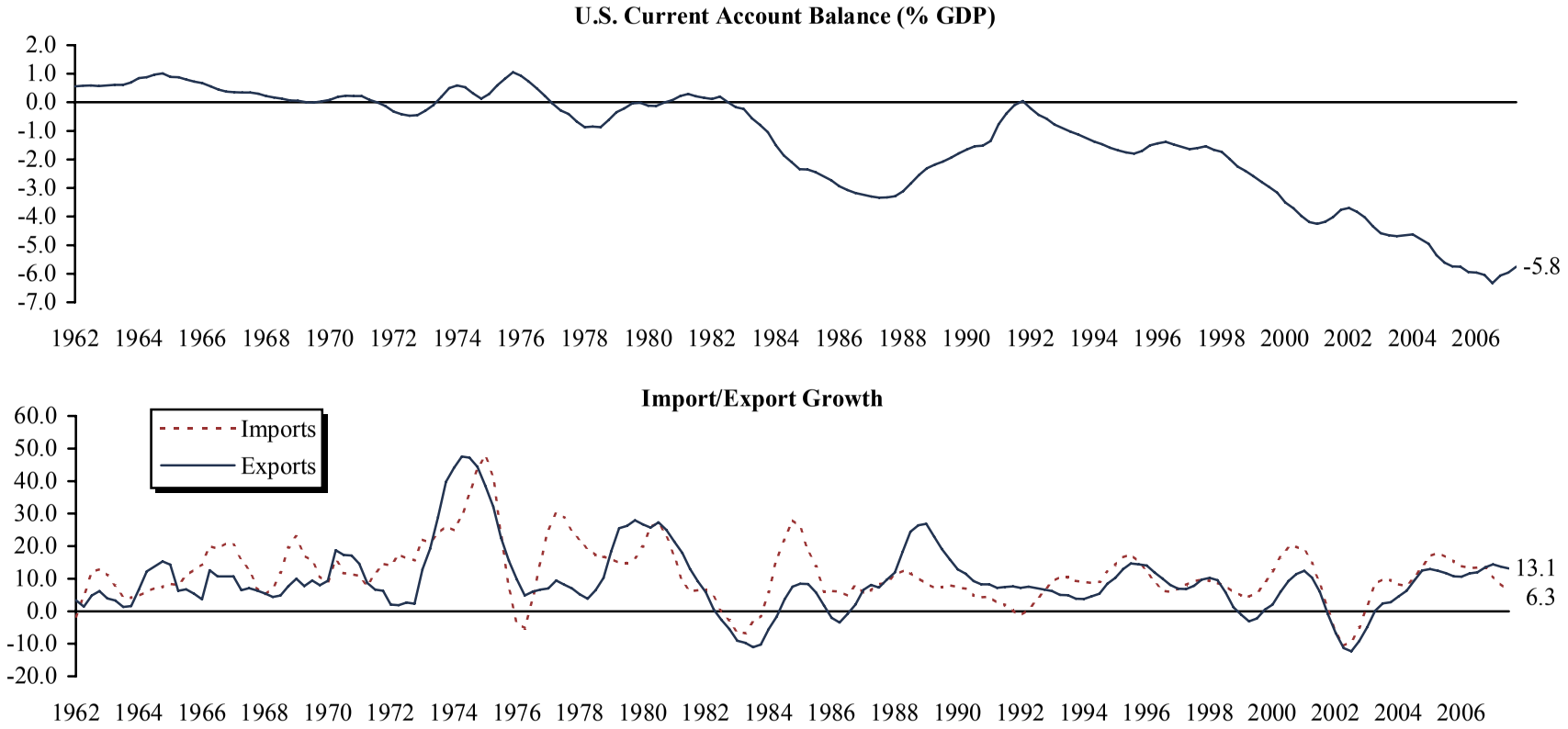
Sources: Global Financial Data, Federal Reserve, and Thomson Datastream.

Notes: Trade-Weighted U.S. Dollar Index is the nominal trade-weighted dollar versus the major currencies. U.S. interest rate differential is calculated as the difference between ten-year U.S. Treasury yields and the average of the ten-year yields on U.K. Eurozone and Japanese government bonds. Ten-year German bund yields used as proxy for Eurozone before 1997.

Table G

U.S. CURRENT ACCOUNT

January 1, 1962 – June 30, 2007

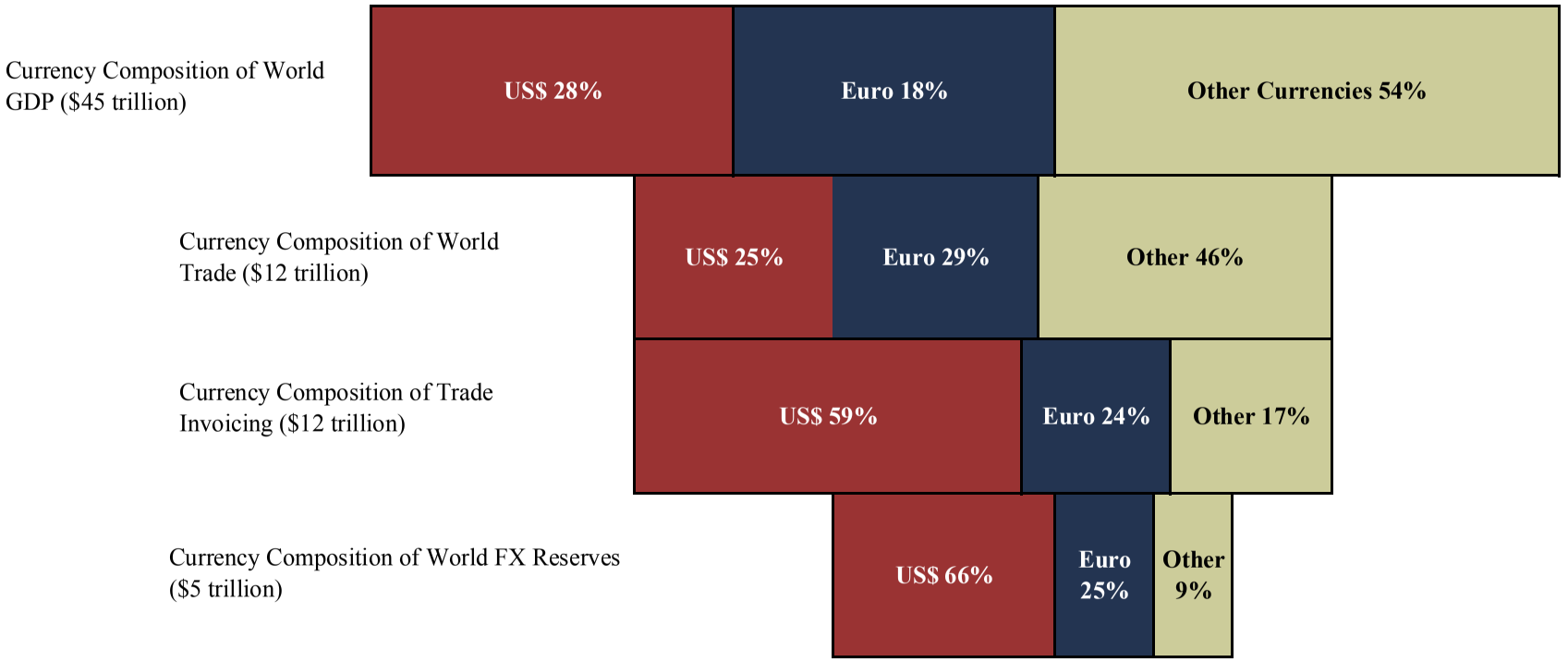


Source: Thomson Datastream.

Notes: Data for U.S. current account balance are based on the previous rolling four quarters relative to nominal GDP. Import/export growth is year-over-year based on previous four quarters of trade.

Table H

THE U.S. DOLLAR AS THE GLOBAL RESERVE CURRENCY



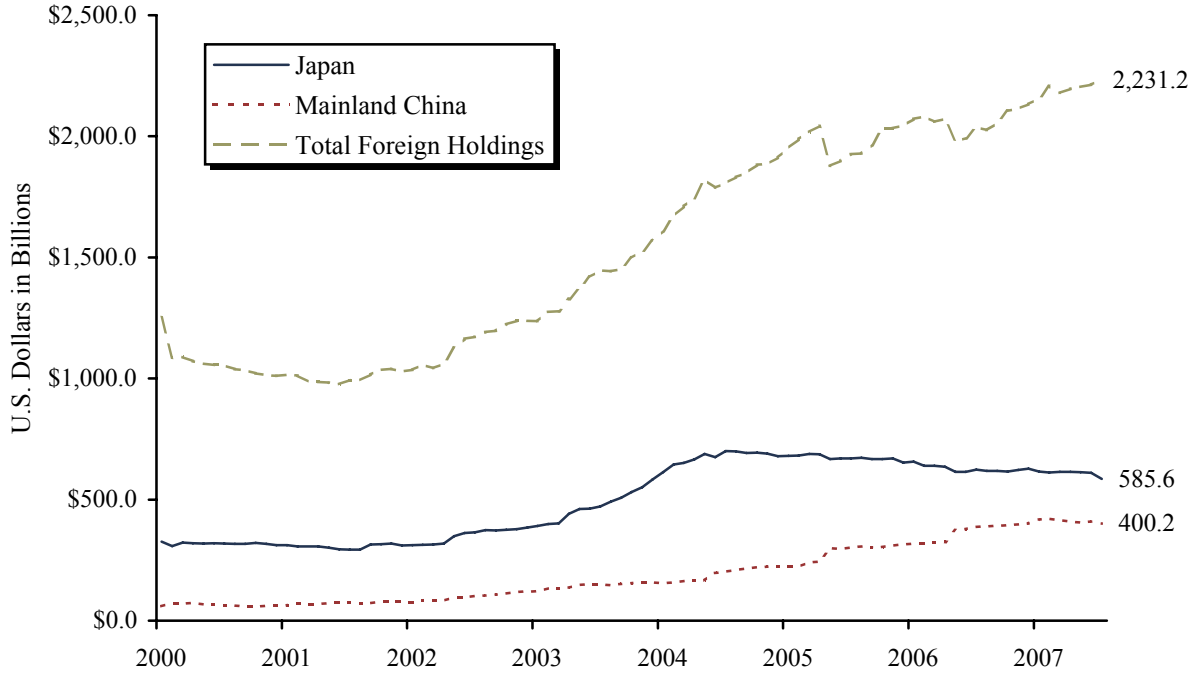
Sources: Euromoney, Independent Strategy, International Monetary Fund, and World Trade Organization.

Note: Figures are estimates based on 2005–06 data.

Table I

FOREIGN HOLDINGS OF U.S. TREASURY SECURITIES

February 29, 2000 – August 31, 2007



Percentage of Total U.S. Treasury Securities (%)

	2000	2001	2002	2003	2004	2005	2006	2007
Japan	10.7	10.7	11.8	15.4	17.5	16.1	14.4	13.1
Mainland China	2.0	2.6	3.7	4.4	5.7	7.4	9.2	8.9
Total Foreign Holdings	34.2	35.0	38.6	42.6	47.8	48.8	48.9	49.8

Percentage of Total Foreign-Held Treasury Securities (%)

	2000	2001	2002	2003	2004	2005	2006	2007
Japan	31.3	30.6	30.5	36.2	36.6	32.9	29.4	26.2
Mainland China	5.9	7.6	9.6	10.4	11.8	15.2	18.8	17.9

Annual Growth in Holdings (%)

	2000	2001	2002	2003	2004	2005	2006	2007
Japan	-2.5	0.1	18.9	45.7	25.3	-2.9	-7.1	-6.0
Mainland China	1.5	30.3	50.6	34.3	40.2	39.1	28.4	0.6
Total Foreign Holdings	-18.9	2.5	19.1	23.0	23.8	7.9	4.0	5.5
Total U.S. Treasury Securities	-7.8	0.0	8.0	11.5	10.3	5.6	3.8	3.6

Source: U.S. Department of Treasury.

Notes: Estimated foreign holdings of U.S. Treasury marketable bills, bonds, and notes reported under the Treasury International Capital reporting system are based on annual surveys of foreign holdings of U.S. securities and on monthly data. Percentage growth figure for 2000 reflects changes in holdings from February 29, 2000 through December 31, 2000. All other annual data are as of December 31. Data for 2007 are as of August 31.

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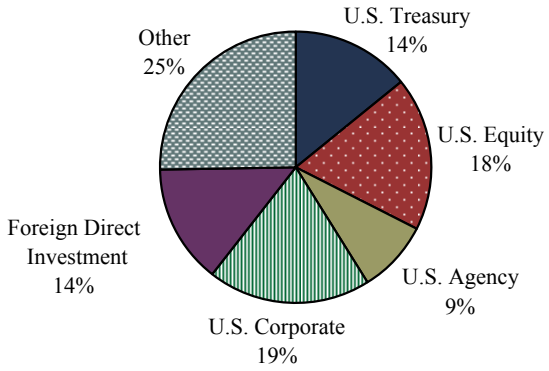
Table J

FOREIGN OWNERSHIP OF U.S. ASSETS

($ Billions)

Breakdown of Ownership:	2002	2003	2004	2005	2006	2007
U.S. Treasury Securities:						
Foreign Ownership	$1,285.5	$1,513.5	$1,813.6	$1,984.4	$2,115.0	$2,184.8
Total Assets	$3,609.8	$4,008.2	$4,370.7	$4,678.0	$4,861.7	$4,904.0
% Foreign Owned	*35.6*	*37.8*	*41.5*	*42.4*	*43.5*	*44.6*
U.S. Equity Securities:						
Foreign Ownership	$1,221.6	$1,674.6	$1,904.6	$2,039.1	$2,456.5	$2,797.6
Total Assets	$11,900.5	$15,618.5	$17,389.3	$18,509.0	$20,905.9	$22,218.7
% Foreign Owned	*10.3*	*10.7*	*11.0*	*11.0*	*11.8*	*12.6*
U.S. Agency Securities:						
Foreign Ownership	$648.0	$653.1	$778.3	$954.6	$1,190.9	$1,313.8
Total Assets	$5,536.3	$5,952.9	$6,090.0	$6,179.7	$6,519.7	$6,796.3
% Foreign Owned	*11.7*	*11.0*	*12.8*	*15.4*	*18.3*	*19.3*
U.S. Corporate Bonds:						
Foreign Ownership	$1,539.4	$1,722.4	$2,061.5	$2,286.6	$2,764.6	$2,989.6
Total Assets	$6,193.0	$6,976.5	$7,845.0	$8,597.9	$9,746.3	$10,276.2
% Foreign Owned	*24.9*	*24.7*	*26.3*	*26.6*	*28.4*	*29.1*
Capital Market Totals:						
Foreign Ownership	$4,694.5	$5,563.6	$6,558.0	$7,264.7	$8,527.0	$9,285.8
Total Assets	$27,239.6	$32,556.1	$35,695.0	$37,964.6	$42,033.6	$44,195.2
% Foreign Owned	*17.2*	*17.1*	*18.4*	*19.1*	*20.3*	*21.0*
Total Foreign Ownership:						
U.S. Treasury	$1,285.5	$1,513.5	$1,813.6	$1,984.4	$2,115.0	$2,184.8
U.S. Equity	$1,221.6	$1,674.6	$1,904.6	$2,039.1	$2,456.5	$2,797.6
U.S. Agency	$648.0	$653.1	$778.3	$954.6	$1,190.9	$1,313.8
U.S. Corporate	$1,539.4	$1,722.4	$2,061.5	$2,286.6	$2,764.6	$2,989.6
Foreign Direct Invmt	$1,500.0	$1,581.0	$1,742.2	$1,868.2	$2,099.4	$2,187.7
Other	$1,653.5	$1,447.6	$1,825.8	$2,969.7	$3,748.7	$3,892.4
Total	$7,848.0	$8,592.2	$10,126.0	$12,102.6	$14,375.1	$15,365.9

Distribution of Foreign Ownership of U.S. Assets
As of 6/30/2007



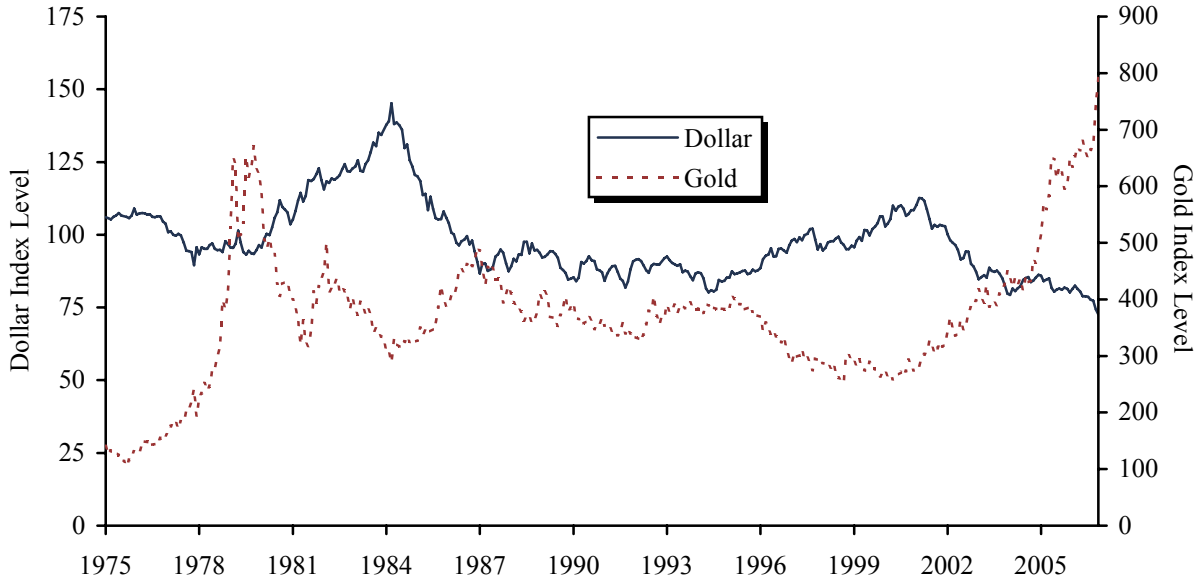
Source: The Federal Reserve Board.

Notes: Data represent amounts outstanding at end of period, not seasonally adjusted. The "other" category pertains to foreign ownership not specified in one of the five main areas. Total assets are based on securities that foreign investors typically invest in. For example, Agency totals only represent Freddie Mac and Fannie Mae securities and, therefore, do not include budget agencies and federally related mortgage pools. Data for 2007 are as of June 30.
587q

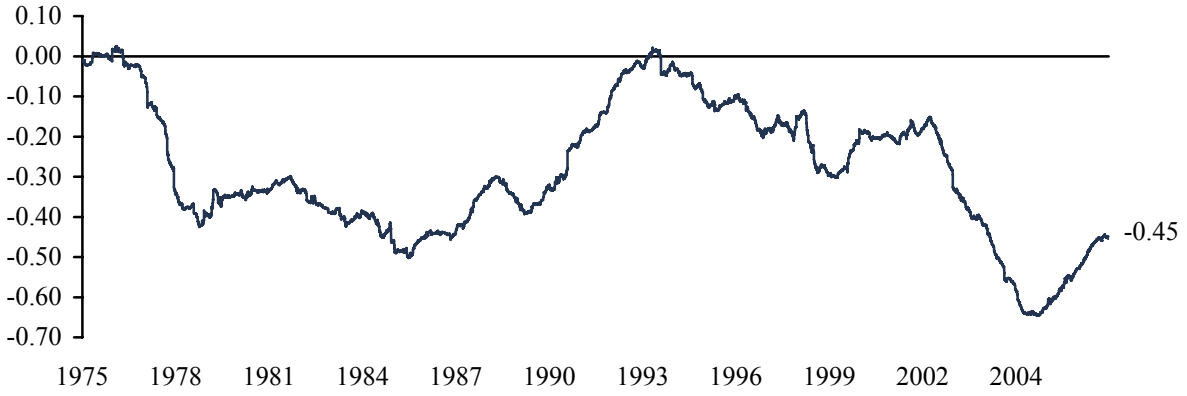
Table K

NOMINAL TRADE-WEIGHTED VALUE OF THE U.S. DOLLAR AND GOLD

January 31, 1976 – October 31, 2007



Three-Year Rolling Correlations



Sources: Federal Reserve Board and Thomson Datastream.

Notes: U.S. dollar based on the nominal trade-weighted Major Index. Correlations based on daily data based on a 252-day trading year.