TD Bank Financial Group

TD Economics

Topic Paper

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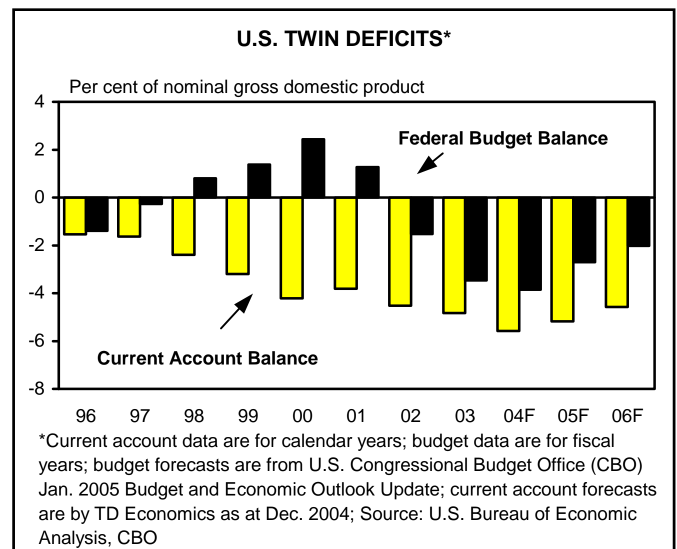
THREATS TO GLOBAL FINANCIAL STABILITY

While considerable attention is being paid to the foreign exchange risks posed by the U.S. current account deficit, there appears to be less awareness of the evidence that international financial markets may be mispricing other types of risk – a development that could threaten global financial stability in the future. Although the base case world economic outlook is for continued moderate economic growth, subdued inflation, low interest rates and rising corporate profits – all of which constitute a healthy backdrop for financial markets – the prolonged hyper-stimulative stance of monetary policy in many countries has created its own set of financial excesses.

The sustained low interest rate environment has dramatically increased global liquidity and may have led financial market participants to become overly leveraged and inadequately diversified, leaving them vulnerable to a sharp and unexpected increase in rates. Indeed, financial market participants have come to view the prevailing level of interest rates as normal, and this may be breeding a culture of complacency about the risks of some of the investment strategies being pursued. Moreover, risk is being increasingly transferred to a wider array of financial market participants – and, in many cases away from the institutions that are the most capable of managing it. Meanwhile, the rapid growth and development of new financial products and practices is making it harder to assess and monitor the risks being assumed by market participants.

These trends suggest that the international financial system may be more vulnerable to unexpected shocks than in the past. And, the developments are all the more unsettling because they have coincided with the emergence of a major global savings-investment imbalance – namely, the massive and unsustainably large U.S. current account deficit and the related dependence on foreign financing that it entails. While this savings imbalance poses a clear and present danger to foreign exchange markets, it also threatens the stability of the global financial system more broadly should the unwinding of the imbalance prove unexpectedly abrupt and lead to unanticipated interest rate swings.



*Current account data are for calendar years; budget data are for fiscal years; budget forecasts are from U.S. Congressional Budget Office (CBO) Jan. 2005 Budget and Economic Outlook Update; current account forecasts are by TD Economics as at Dec. 2004; Source: U.S. Bureau of Economic Analysis, CBO

This does not mean that a global financial crisis is inevitable. It is entirely possible, and indeed, quite likely, that a gradual reduction in financial liquidity through a series of central bank rate hikes will deflate many of the financial excesses. Similarly, a correction in the U.S. current account deficit may well unfold in an orderly fashion. Nevertheless, as these developments potentially threaten financial stability, they need to be monitored closely.

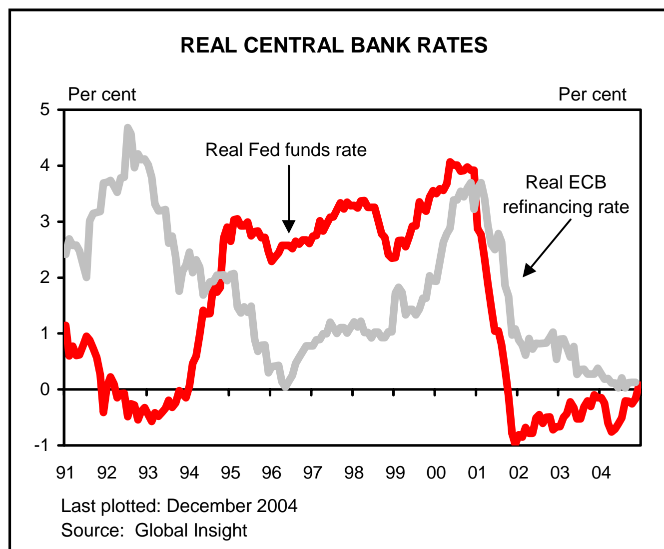
Monetary policy has been hyper stimulative globally

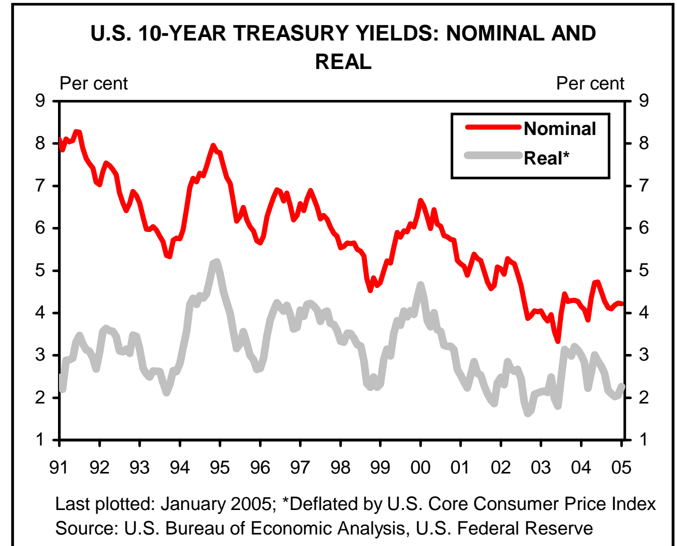
The principal source of the mispricing of global financial risk can be traced to the economic fallout from the collapse of the late 1990s technology bubble that prompted

central banks to lower interest rates aggressively. While the response by the monetary authorities was completely appropriate, the low short-term interest rate environment has been maintained for an extraordinary long time. For example, in the United States, the real fed funds rate (i.e. the nominal overnight rate less core inflation) was negative for more than three years, from October 2001 to November 2004. And, while it has recently climbed back into positive territory, it currently stands at roughly 0.3 per cent – dramatically below the 1.98 per cent average of the ten years prior to the 2001 downturn. Moreover, a negative or near-zero real fed funds rate typically occurs during recessions and the very early stages of an economic recovery, whereas the U.S. economy is currently in its fourth year of successive growth, which is traditionally well into the expansion phase of the business cycle.

The story is less pronounced, but much the same elsewhere. In inflation adjusted terms, the European Central Bank's refinancing rate and the Bank of Canada's overnight rate have both averaged roughly 0.5 per cent over the past three years compared to an average of 2.0 and 3.3 per cent, respectively, over the preceding 10 years. Meanwhile, the Bank of Japan has kept nominal short-term interest rates at zero during the past three years, which has meant a real overnight rate averaging close to 0.4 per cent due to the presence of deflation.

As one might expect, the extended period of minimal short-term borrowing costs led to a response by financial market participants. And, while the degree of monetary stimulus has raised concerns about overheating housing





markets in some countries, many other financial excesses have arisen from portfolio flows.

The quest for yield

The long-standing low level of rates at the short end of the yield curve has encouraged financial market participants to channel funds into riskier financial assets and to pursue riskier investment strategies in order to pick up modestly higher returns. This can be observed in several recent financial trends.

First, low short-term interest rates and steeply sloped yield curves have created a significant incentive for financial market participants to channel funds into longer-term financial assets, which inherently carry more risk. Moreover, some financial market participants have borrowed funds at the depressed short-term rates in order to invest them in higher yielding long term assets. As funds have flowed into long-term debt, prices of the debt rose and yields fell accordingly – contributing to historically low real government bond yields. To illustrate, although the U.S. economy grew by more than 4 per cent in 2004 and the Fed delivered 125 basis points of rate hikes, the after-inflation yield on 10-year U.S. Treasuries at the end of 2004 was a modest 2.02 per cent compared to an average of 3.44 per cent during the 1990s.

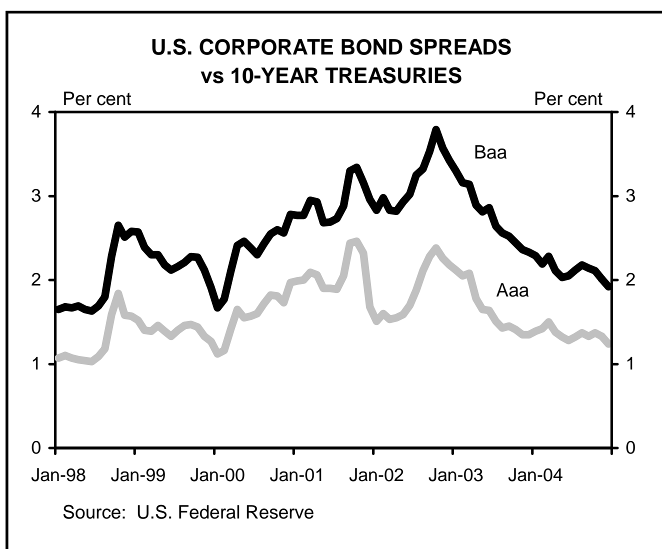
The increased appetite for long-term debt has also contributed to relatively low volatility in bond yields, with any rise in yields tending to prompt additional buying by investors to pick up marginally higher returns, thereby limiting the selloff in bonds.

Corporate and emerging market spreads have declined significantly

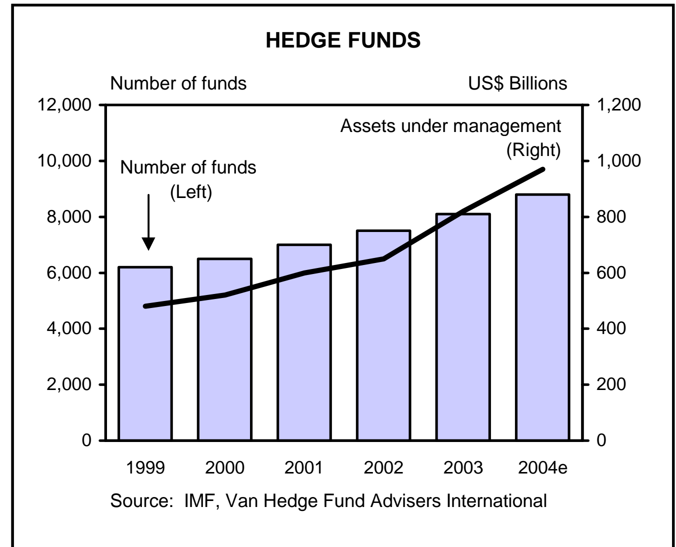
The meagre level of yields has also encouraged the purchasing of long-term debt that offers a return premium over that provided by the government debt in industrialized countries. As a result, vast amounts of funds have been channelled into corporate and emerging market debt, leading to a dramatic narrowing in their interest rate spreads compared to government debt. In the United States, the yield on Aaa-rated corporate bonds fell from 238 basis points over 10-year Treasuries in late 2002 to 114 basis points in late 2004. Meanwhile, Baa-rated corporate bond spreads plunged from 379 basis points to 180 basis points over the same time span. A similar compression of spreads has occurred in Europe. High-yield corporate bond spreads have also undergone a dramatic decline, with the spread between the yield on the Merrill Lynch high-yield bond index compared to 10-year U.S. Treasuries plunging from close to 1000 basis points in late 2002 to below 400 basis points in mid-2004. Indeed, by the middle of last year, spreads on both high-grade and high-yield corporate bonds and emerging market bond spreads fell to their lowest levels since before the 1998 Russian debt default.

It should be noted that this narrowing of credit spreads has been supported by stronger corporate balance sheets and improving economic conditions in emerging markets. The question is whether they have gone too far. And, as yet, the answer is unclear.

In any case, regardless of whether spreads are too tight, there is no disputing that market participants have taken on additional risk. The strategy of increasingly borrowing at short-term rates and/or investing more heavily in long-term assets introduces considerable interest rate risk, implying an increased vulnerability to an unexpected rise in interest rates. There is also a significant international dimension, with some financial market participants borrowing at short-term rates in one country in order to invest in the long-term financial assets of another, which carries significant foreign exchange risk. In both cases, the interest rate and exchange rate risk can be hedged, usually through financial derivatives. However, in the event of a major interest rate or foreign exchange shock, some of these risk management strategies are likely to prove imperfect and the participants may discover that they cannot unwind their positions quickly enough to avoid losses. In the same way, while the increased investment in corporate and emerging market debt may have been a rational decision, the default risk is unquestionably higher on these products than on sovereign debt.



Source: U.S. Federal Reserve



Source: IMF, Van Hedge Fund Advisers International

Low rates have channelled funds into alternative investment products

The sustained low interest rate environment has also fuelled interest in alternative investment products, such as hedge funds and income funds. Hedge funds' assets under management are estimated to have reached close to US$1 trillion in 2004 – representing a twofold increase over the past six years. Given this scale, it is clear that hedge funds have the capacity to move financial markets through their actions. And, while size alone does not imply risk, the explosive growth of the hedge fund sector has led many to question the systemic risk that the funds pose

to the global financial system.

In Canada, the drive for yield has fuelled rapid investment inflows to income funds. In mid-2004, there were 224 publicly listed income funds and in early 2005 their market capitalization was C$108 billion, roughly triple the level in 2002.

It must be stressed that this is not a criticism of hedge funds or investment trusts, as both are useful investment vehicles. The only question being is whether or not investors fully understand the risks they are taking on. For example, hedge funds often deliver higher returns through the use of leverage, but that leverage is also associated with increased market risk (i.e. more upside from rising markets, but more downside from market corrections). Meanwhile, income trusts are equities that provide a stable distribution of income, but some investors may be inappropriately viewing them as having a lower risk profile similar to fixed income investments.

Risk being transferred from global banking system

Another trend that may be raising the overall risk exposure of the global financial system is the increased transfer of risk from banks to other institutions (such as mutual funds, insurance companies, pension funds and hedge funds). This is often being accomplished through credit derivatives or the collateralization of debt obligations. To illustrate the rapid growth in this area, the IMF estimates that the notional amount of such contracts rose ninefold between 1997 and 2001, reaching roughly US$1.7 trillion, and activity in this area has continued to climb since then.

This transfer of credit risk across a broader array of financial participants carries many advantages, including a reduced concentration of credit risk, the possibility of increased access to credit, and the prospect of raising the efficiency of credit markets. However, here again, it is not evident that the participants fully understand the risks they are taking on. In a 2002 Congressional testimony, Fed Chairman Greenspan highlighted the dangers, stating that “derivatives have provided greater flexibility to our financial system. But their very complexity could leave counterparties vulnerable to significant risk that they do not currently recognize, and hence, these instruments potentially expose the overall system if mistakes are large.”

Reinsurance also changing the risk profile

The increased use of reinsurance has also made risk within the insurance industry less transparent. Once again, this is not a criticism of reinsurance itself. The practice allows insurance companies to transfer some of the risk of future claims to other parties known as reinsurers. The reinsurers are compensated by the payment of a share of the insurance premiums. However, the reinsurance agreements are often extremely complex, making it difficult to assess just how much risk has been transferred. Moreover, the reinsurers can often transfer the risk to yet another counterparty. As a result, it is difficult to assess the vulnerability of the participants to unexpected financial developments and claims.

Additional risk being carried by individuals

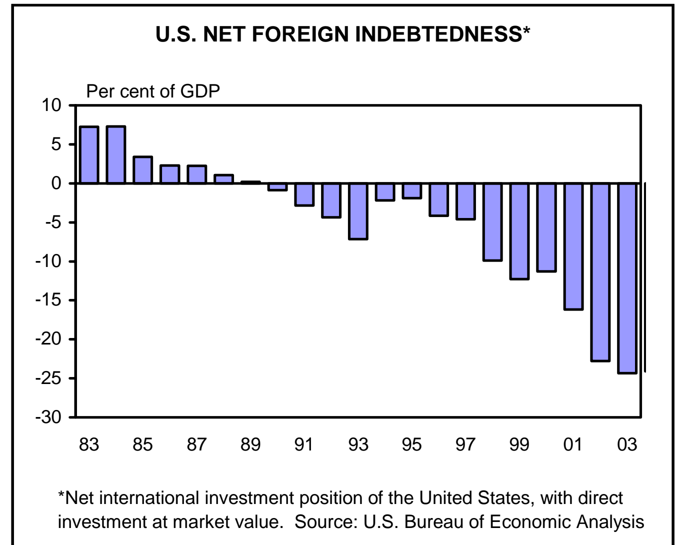
Not only is the risk profile of non-bank financial institutions changing, but so too is that of the personal sector. In the corporate sector, defined benefit pension plans are rapidly being replaced by defined contribution pension plans. This trend has been fuelled by concerns over the unfunded pension liabilities of defined benefit plans, created by disappointing financial returns in recent years. It also reflects increased recognition of the future demands on defined benefit plans from aging populations. As a result of the shift towards defined contribution plans, the market risk associated with future financial returns in pension plans has been increasingly transferred from corporations to individuals – who, arguably, are not nearly as well-equipped to manage the risk.

That said, it is unlikely that governments would stand idly by if sub-par financial returns were to leave large segments of their pensioner population in poverty. So, while businesses have increasingly transferred the market risk of future pension benefits to individuals, there may have also been an implicit transfer of the risk to the public sector.

Global savings-investment imbalance only adds to concerns

The rapid changes in the risk profile of the global financial system would be unsettling all by themselves, but they have also occurred at the time of a major global savings-investment imbalance, represented most acutely by the massive U.S. current account deficit. In order to finance this deficit, foreigners must channel $1.8 billion a day into U.S. real and financial assets – a rate that cannot be sustained indefinitely. Much of this financing is coming from Asia, which systematically runs large saving surpluses. However, the implication is that the world, and

particularly Asia, is becoming seriously over leveraged to U.S. dollars – implying that any abrupt reversal in international capital flows could pose a major shock to the global financial system. For example, an unexpectedly sharp correction in the U.S. dollar could prompt an equally unanticipated decline in demand for U.S. Treasuries, leading to a spike in long-term U.S. interest rates, which, in turn, would impact global fixed income markets.



*Net international investment position of the United States, with direct investment at market value. Source: U.S. Bureau of Economic Analysis

A call for vigilance

The bottom line is that global financial markets may be more vulnerable today to unexpected shocks than they have been in the past, implying that vigilance is called for in the pursuit of risk management strategies and the monitoring global financial developments for signs of instability. However, it must be stressed that even if the risks have increased, this does not necessarily mean that there will be a problem. Indeed, the U.S. Federal Reserve has already delivered 150 basis points of monetary tightening without creating major disruptions. This successful adjustment process has been facilitated by the Fed telegraphing its intentions to markets well in advance. Accordingly, there is good reason to be hopeful that the future rebalancing of monetary policy, both in the United States and globally, may prove similarly benign. And, while the global savings-investment imbalance has significantly shaped foreign exchange markets over the past two years, it has not unsettled global markets more broadly. Lastly, even if there is an unanticipated global financial shock, most financial intermediaries have built up relatively strong balance sheets over the past couple of years, which should help them to weather any financial storm.

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