recent rise in core inflation but appeared confident that, with growth slowing, inflation would ease later in the year, prompting markets to rally.

6. ***The Administration's Mid-Session Review sharply lowered the forecast budget deficit for this year to a level consistent with staff projections***. Reflecting buoyant and broad-based revenue growth through June, the Administration lowered its projection for the FY 2006 unified federal deficit (ends this September 30) to $296 billion (2¼ percent of GDP), from its February estimate of $423 billion (3¼ percent of GDP), leaving the forecast identical to the staff's. The strong revenue growth, together with expectations of further compression in the expenditure ratio beyond FY 2008 owing to higher growth, have also led the Administration to reduce projected deficits for FY2007–11 by ¼–½ percent of GDP (Table), with the unified federal deficit projected to fall below 1 percent of GDP by FY 2010.

7. ***The Mid-Session Review emphasized the need to address the long-term fiscal challenge posed by the unsustainable growth in entitlement spending.*** It noted that "...entitlement spending in Social Security, Medicare, and Medicaid is growing faster than the economy and the Nation's ability to pay for this spending. No plausible amount of cuts to discretionary programs or tax increases can avert this major fiscal challenge," underscoring the urgent need for entitlement reform.

United States: Unified Budget

(Percent of fiscal year GDP)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
FY 2007 Mid-Session Review[1]							
Outlays	20.1	20.6	20.1	19.4	18.9	18.7	18.8
Net interest expense	1.5	1.7	1.8	1.8	1.8	1.8	1.8
Revenue	17.5	18.3	17.7	18.1	17.9	18.0	18.1
Unified balance	-2.6	-2.3	-2.4	-1.3	-1.0	-0.8	-0.7
FY 2007 Budget							
Outlays	20.1	20.8	20.1	19.4	19.1	19.0	19.1
Net interest expense	1.5	1.7	1.8	1.9	1.9	1.9	1.9
Revenue	17.5	17.5	17.6	17.8	17.7	17.9	17.9
Unified balance	-2.6	-3.3	-2.6	-1.5	-1.4	-1.1	-1.2
Differences							
Outlays		-0.2	0.0	0.0	-0.2	-0.3	-0.3
Net interest expense		0.0	0.0	-0.1	-0.1	-0.1	-0.1
Revenue		0.8	0.1	0.3	0.2	0.1	0.2
Unified balance		1.1	0.2	0.2	0.4	0.3	0.5
Staff Forecast							
Unified Balance		-2.3	-2.6	-2.3	-2.0	-1.9	-1.8
Difference from Mid-Session Review		0.0	-0.2	-1.0	-1.0	-1.1	-1.1

Source: Office of Budget and Management

[1] In contrast to the FY 2007 budget (released February 2006), the mid-session review includes a $108 billion allowance for the costs of operations in Iraq and Afghanistan in FY 2008-11.

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IMF Executive Board Concludes 2006 Article IV Consultation with the United States

On July 24, 2006, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with the United States.[1]

Background

The U.S. economy continued to grow strongly over the last year even in the face of a withdrawal of monetary stimulus and high oil prices. Household spending remained the principal driver of the expansion, spurred by mortgage borrowing and double-digit house price inflation. However, employment and wage growth remained modest, and the household saving ratio moved further into negative territory. As a result, and despite strong business saving and an improvement in the fiscal balance, the current account deficit reached a new record high.

Household consumption and residential investment have grown an average ½ percentage point faster than GDP since the 2001 recession, financed in large part through home equity withdrawal, stimulated by rapid house price inflation as well as innovative mortgage instruments, low refinancing costs, and easy access to tax-advantaged home equity loans. However, U.S. house prices now appear to be overvalued and with signs that market conditions are cooling, the housing market is no longer likely to provide significant support to household spending.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

During the past year, business investment also remained robust, supported by declines in capital goods prices, the economic expansion, and high profits, even in the face of higher interest rates. U.S. businesses have generally used high profits and low interest rates to strengthen balance sheets and accumulate cash holding, suggesting that the fundamentals for investment remain strong.

With sustained strong growth and recent hikes in oil and commodity prices, resource utilization has increased and headline inflation remained high. Although core CPI inflation had been relatively subdued, in recent months the core rate has risen sharply, exceeding 2½ percent in June (12-month rate). At the same time, the unemployment rate—at just above 4½ percent in June—remains at the low end of most estimates of the NAIRU, and capacity utilization reached its long-run average. Nevertheless, unit labor costs have remained contained, reflecting solid productivity growth and modest wage gains.

The current account deficit has widened on higher oil prices and solid import demand, and stood at about 6½ percent of GDP in the first quarter of 2006. Nevertheless, the dollar remained broadly stable, and the U.S. net foreign liability position barely deteriorated in 2005, reflecting the valuation effects of the relative strength of foreign equity markets.

U.S. financial markets have provided important support to the expansion and facilitated the U.S. economy's ability to access foreign saving. Financial market innovation—including securitization and credit risk transfer techniques—contributed to low credit risk spreads and improved the pricing and allocation of credit risk. The increased activity of hedge funds has enhanced price discovery and liquidity in many of the new markets. At the same time, banks remained well-capitalized and highly profitable despite changing market conditions. While bank revenues continued to depend on the real estate market, widespread securitization has helped reduce vulnerabilities to regional shocks, and a range of indicators suggest that systemic risks are at a low ebb.

Against this background, the Federal Reserve Board continued to gradually withdraw monetary stimulus, raising the federal funds rate to 5 percent by the time of the Article IV discussions and further to 5¼ percent after the June 28-29 meeting of the Federal Market Open Committee (FOMC). On the fiscal front, federal tax revenues remained buoyant and expenditure discipline has been maintained, suggesting that the FY 2006 federal budget deficit is likely to outperform initial budget estimates and fall modestly to 2¼ percent of GDP. Looking forward, the Administration appears on track for achieving its goal of halving the federal budget deficit earlier than FY 2009.

The staff's baseline scenario for the short-term outlook is for a "soft landing," with growth easing to potential and inflation remaining contained. The housing market is likely to cool in response to high valuations and tightening financial conditions, reducing the impetus from consumption and residential investment, but strong fundamentals should continue to support business investment. The external deficit is likely to remain wide, but the drag on activity from net exports will lessen as growth abroad strengthens. On the supply side, solid productivity growth should accommodate wage gains while containing price pressures.

There appear to be competing risks to this outlook. The possibility of a more abrupt slowdown in the housing market, disappointments on the productivity front, and a disorderly adjustment to global imbalances, as well as the risk of higher oil prices more than offset the upside potential for business investment. Avian flu and geopolitical events represent further and more difficult to quantify downside risks. In contrast, inflation risks—which mainly stem from supply effects—seem mostly on the upside. These include the possibility of a larger-than-anticipated productivity slowdown pushing up unit labor costs, and the potential for pass-through of high commodity and oil prices.

Executive Board Assessment

Executive Directors agreed with the thrust of the staff appraisal. They noted that—despite a significant withdrawal of monetary stimulus, high energy prices, and other shocks—the U.S. economy continues to be a key engine of global growth, supported by strong productivity increases. Encouragingly, buoyant tax revenues are likely to keep the FY 2006 federal deficit well below initial budget estimates. Also, Directors commended the Federal Reserve for the measured pace of its monetary tightening which, accompanied by a clear communications policy, has helped keep inflationary expectations in check while avoiding a pronounced slowdown in activity.

Looking forward, Directors saw good prospects for a soft landing of the economy, with growth likely to ease to a more sustainable rate and inflation to remain contained. However, most Directors cautioned that risks to activity are on the downside, reflecting a cooling housing market, higher energy prices, and a negative household saving rate. At the same time, these Directors observed that the recent pick up in core inflation and expectations, coupled with a further drop in the unemployment rate, suggests a risk of a build up in price pressures.

Given these competing risks, Directors observed that the Federal Reserve will need to steer an especially delicate course that limits downside risks to activity while ensuring that inflation expectations remain anchored. In such circumstances, future policy decisions would depend heavily on evolving views on the outlook as well as the importance of ensuring that inflation expectations are kept in check.

Directors remarked that the Fed's communications strategy in recent years has been highly effective. Nonetheless, a number of Directors suggested that there could be merit in the Fed providing a more explicit statement of its inflation objective, noting that this could help further anchor inflation expectations without undermining confidence in the Fed's commitment to its broader mandate. In this context, some Directors remarked that a formal inflation target might bring little additional gain to the Fed's well-established credibility, while having implications for the Fed's other policy objectives. Directors looked forward to a further consideration of these issues, and welcomed the recent establishment of a committee to examine the Fed's overall communication policy, including refining the definition of price stability. Some Directors also observed that providing more frequent *Monetary Policy Reports* with a greater focus on future developments could further increase the Fed's high level of transparency.

Directors recognized that the U.S. financial sector has proven innovative and resilient in recent years, and noted that the financial system appears well-positioned as the credit cycle turns. At the same time, Directors saw important areas where further reform could help enhance the financial system's resilience and efficiency. These included tightening the supervision of the housing Government Sponsored Enterprises (GSEs), reforming rules for defined-benefit pension plan, and possibly moving to consolidate supervision and regulation of insurance companies. Directors welcomed the authorities' willingness to undertake an IMF Financial Sector Assessment Program, which they considered could provide further insights on these challenges, as well as a good framework for further analysis of the systemic role of the U.S. financial markets. It would be similarly beneficial to publish a regular *Financial Stability Report*.

Directors cautioned that demographic and other pressures continue to threaten long-term fiscal sustainability and economic prospects, especially given the need to accommodate the increased demands on public health and retirement systems from an aging population. They therefore welcomed the authorities' recognition of the importance of fiscal consolidation, including entitlement reform. With buoyant revenues supporting deficit reduction, most Directors suggested that the time is opportune to establish a more ambitious medium-term fiscal anchor. In particular, they noted that balancing the budget, excluding the Social Security surplus, within the next five years would set the federal debt ratio on a firm downward path. This would reduce the burden on future generations of providing health care and retirement income to the baby boom generation, while also providing the needed room to develop and phase in the reforms required to place entitlement systems on a more sustainable basis. It was observed that this would require consolidation of around ¾ percentage point of GDP a year. Such consolidation would provide a helpful boost to national saving and multilateral efforts to narrow global imbalances while having a manageable impact on U.S. and global demand. A few Directors cautioned that too rapid a fiscal consolidation could lower U.S. and global growth.

Several Directors observed that planned expenditure discipline may be difficult to sustain, especially in light of pressures to fund defense commitments and other emergency priorities. To help contain spending pressures, these Directors suggested there could be merit in re-introducing caps on discretionary outlays, as well as pay-as-you-go (PAYGO) requirements covering both entitlement spending and tax measures.

Although controlling outlays should remain central to deficit reduction, most Directors suggested that revenue measures should not be ruled out. They cautioned that it may be difficult to sustain the significant reductions in marginal tax rates of recent years while meeting the fiscal burden from population aging. They agreed that the priority should be on reforms that broaden the revenue base by reducing tax preferences, including those for mortgage interest payments, employers' contributions to health insurance plan premiums, and state and local tax payments, as suggested by the President's Advisory Panel. A number of Directors also agreed that consideration could be given to consumption-based indirect taxes—such as a national sales tax, a VAT, or energy taxation—that would maintain revenue buoyancy as workers retire.

Directors stressed the importance of re-invigorating the momentum for entitlement reform, and welcomed the proposed bipartisan commission to review this issue, which will be tasked with preparing proposals for reforming all three major entitlement programs to address future shortfalls. They noted that useful reform options have already been suggested—including for "progressive price indexation"—and that the key challenge now is to build the necessary consensus around a package of measures that would place the Social Security system on a more sustainable basis. However, concrete proposals will also be required to address Medicare and Medicaid funding gaps, especially given that with the addition of the new prescription drug benefit, the financial shortfall of the Medicare system dwarfs that of Social Security. While high-deductible health plans and other measures may help improve incentives, with health spending as a ratio-to-GDP well above the OECD average, Directors suggested that fundamental reform of the U.S. health care system would seem to be necessary.

At a more systemic level, and in light of the high U.S. current account deficit, Directors noted the risks in the medium term of a disorderly unwinding of global imbalances. While several Directors considered such risks to be relatively low, Directors agreed that the United States has a key role to play in supporting the cooperative strategy for an orderly resolution of global imbalances laid out by the International Monetary and Financial Committee in April 2006. In particular, they underscored the importance of boosting U.S. national saving, through ambitious fiscal consolidation, while also preserving the resilience and flexibility of the U.S. economy. Directors also generally considered that delaying the inevitable adjustment would mean continued increases in U.S. external indebtedness, and heighten the risk of a sharp disruption to exchange rates, financial markets, and growth—both domestically and abroad. In this context, they looked forward to the results of the multilateral consultations surveillance initiative, for the U.S. and other participating countries.

Directors agreed that leadership by the United States remains key to global trade liberalization, especially given the growing urgency of achieving an ambitious conclusion to the Doha Round negotiations. At the same time, most Directors cautioned that care would be needed to resist domestic protectionist sentiment and to ensure that bilateral trade initiatives complement rather than substitute multilateral approaches. While welcoming recent increases in U.S. overseas development assistance, Directors called on the authorities to boost such assistance further, noting that it remains one of the lowest among industrial countries as a proportion of gross national income.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

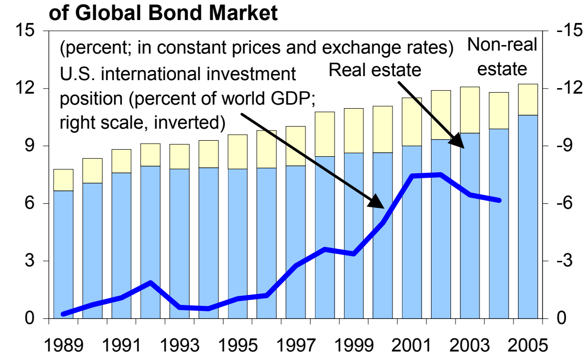
International Monetary Fund (IMF), 2005, “Recent Developments in Commodity Markets,” *World Economic Outlook*, Spring (Washington).

United States Congressional Budget Office (CBO), 2002, *Reducing Gasoline Consumption: Three Policy Options* (Washington).

V. U.S. Banking: Financial Innovation and Systemic Risk[29]

1. ***The U.S. banking system remains highly innovative***. Following computerization and consolidation in the 1990s, banks have become highly adept at isolating and allocating the various risks associated with bonds, mortgage-backed securities (MBS), and other financial products. This has contributed to the securitization of increasingly higher-risk assets, while facilitating the application of bond portfolio management techniques to mortgage books, increasing asset price discrimination, and helping to attract foreign capital. As described in Chapter 1 of this volume, these techniques have also contributed to the growing share of U.S. MBSs in the global bond market (Figure 1).

Figure 1. U.S. Asset-Backed Securities as Share of Global Bond Market



Source: Haver Analytics.

2. ***As complexity has mounted, so too have surveillance challenges***. With banks relying increasingly on hedge funds for liquidity and trading diversity in a broad range of markets, regulators are no longer able to fully track risk on a system-wide basis, but are instead focusing more intensely on a subset of systemically important institutions. These include the "big five" investment banking groups as well as large bank holding companies (BHCs). For the purpose of this paper, the 20 largest BHCs, holding assets of $7.4 trillion (58 percent of GDP) at end-September 2005, are referred to as "large complex banking groups" (LCBGs).

3. ***This paper analyzes recent U.S. banking developments, with a particular focus on LCBGs***. The analysis is based on a review of accounting and equity market data, which are combined in a Black–Scholes–Merton "distance to default" (DD) indicator. This indicator is based on market measures of a firm's profitability and balance sheet structure. The DD varies positively with returns on assets and capitalization and negatively with the volatility of assets, and its level can be mapped into a proxy measure of probability of insolvency. Thus, any increase in DD indicates improved financial soundness—reflected in a lower probability of insolvency—resulting from higher expected profitability, better capitalization, lower asset volatility, or a combination of these factors.[30]

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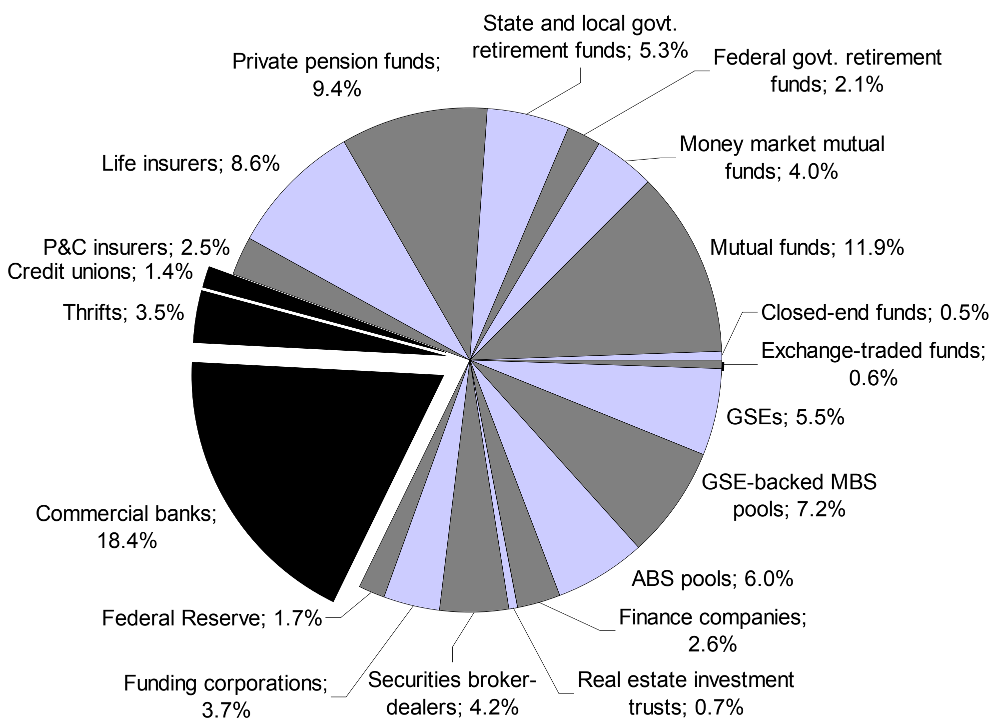
[29] Prepared by Ashok Vir Bhatia (MFD). Special thanks to Gianni De Nicoló (RES) for guidance and Marianne El-Khoury (MFD) for research assistance.

[30] For methodology, see De Nicoló and others (2004). DDs are calculated through end-2005, and so do not capture the market turbulence in mid-2006.

A. Innovation in U.S. Banking

4. ***Depository institutions are the fulcrum of the U.S. financial system, although they only account for a modest share of market assets*** (Figure 2). In addition to traditional deposit-taking and lending activities, the banking system is engaged in more complex trading businesses and offers a range of services covering most financial activities. For example, while proprietary trading activity has become commonplace at large and midsize banks, these institutions generate significant noninterest income from loan sales, servicing, securitization, ratings advisory, and fund management. Moreover, the broker-dealer subsidiaries of LCBGs, along with independent investment banks, are the leading securitizers of a wide range of assets, including into complex structures at the leading edge of financial engineering.

Figure 2. Financial Sector Assets, 2005



Source: Haver Analytics.

5. ***Against a backdrop of low interest rates and rapid house price inflation in recent years, housing finance has moved to the center of banking activity and innovation***. Large banks have transformed mortgages into a bulk commodity to be originated, securitized, and re-securitized into different risk categories for sale to domestic as well as international investors. Small and midsize banks have joined the cycle of origination and loan sale but, less able to compete against large banks with a national presence, have actively been supplementing their mortgage income with commercial real estate (CRE) lending, including for condominium construction, that requires more intimate knowledge of local conditions.

6. ***There has been substantial product innovation in the market for housing finance***. Households have traditionally been able to capitalize on steep yield curves with adjustable rate mortgages (ARMs) and step up home equity extraction with second mortgages or home equity lines of credit (HELOCs). More recently, they have also been able to purchase otherwise unaffordable homes with nontraditional ARMs carrying interest-only, negative-amortization, or low-documentation features and subsequently refinance back into fixed 15 or 30-year mortgages. Some 80 percent of the refinancing boom in 2002–03 involved traditional mortgages and HELOCs; two years later, spurred by competition between banks and mortgage companies, the market is characterized by a more complex product mix with more difficult-to-understand risks (Box 1).

B. Exposures and Risks at LCBGs

7. ***Given their size and scope, a survey of LCBGs should capture the essence of industry trends***. A focus on holding companies (as opposed to banking subsidiaries) is expedient for the equity market-based analysis to follow, because the BHC is the dominant listing unit in the banking system. The 20 LCBGs account for about two-thirds of consolidated BHC assets; one-half of net income; three-quarters of BHC securities broker-dealer assets; and virtually all BHC derivatives activity.[31]

8. ***The LCBGs form a heterogeneous set***. They include 16 U.S. BHCs and four subsidiaries of European banks. All are financial holding companies under the Gramm–Leach–Bliley Act, a status that broadens their authority to diversify functionally under the "umbrella" supervision of the Federal Reserve Board. Their emphasis on nonbank activity differs, however, with assets of their broker-dealer and insurance underwriting subsidiaries varying across LCBGs from 0–30 percent and 0–5 percent of consolidated assets, respectively. The LCBGs' banking strategies are similarly diverse, ranging from relatively traditional (mortgages and credit cards, funded by retail deposits) to complex (trading and special purpose vehicle financing for large corporate clients, funded in the markets).[32]

9. ***As corporate sector savings have grown, credit to households has become the mainstay of LCBG business***. Excluding trading assets, exposure to the household sector expanded 3 percentage points, to 36 percent of total assets, in the three years to end-September 2005, while exposure to the corporate sector correspondingly contracted to 18 percent of assets. Given the historically superior credit performance and recovery value of

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[31] At end-September 2005, the system consisted of 7,527 commercial banks and 2,288 BHCs. Some LCBGs own several hundred bank (and nonbank) subsidiaries. Data for the LCBGs cover only those institutions that were in existence at end-September 2005, with market data restricted to the 16 U.S.-listed LCBGs.

[32] At end-September 2005, core deposits varied from 3–65 percent of liabilities and household sector exposure (including investments in MBSs) from 2–68 percent of assets, with a rank correlation coefficient of 0.44.

Box 1. Mortgage Market Innovation: A Structural Break?

The issue of credit risk in banks' housing exposures has received limited attention in the recent literature. Reasons include the traditionally low delinquency rates (relative to commercial and industrial loans) and high recovery rates on residential mortgages as well as the geographic diversification often provided by securitized assets.

This may partly reflect continued government involvement. Although now making up less than half of the overall MBS market, MBSs guaranteed by Fannie Mae and Freddie Mac, the two largest housing government-sponsored enterprises (GSEs), continue to account for the bulk of bank-held MBSs.[1] Consistently small spreads between agency debt and treasuries indicate a long-standing market belief that default risks of the two types of securities are similar, notwithstanding clear statements by the Treasury—and on every agency bond indenture—that the two GSEs do not enjoy a credit guarantee from the U.S. government.

As the housing GSEs have come under regulatory pressure in recent years, banks and mortgage companies have emerged as the main market innovators. While the GSEs have focused on the securitization of conforming, fixed-rate mortgages, other market participants have gained market share by packaging newer mortgage products into more complex MBSs, including through re-securitization to create MBS-backed collateralized mortgage obligations with separate risk tranches.

The increased prevalence of ARMs may have altered a traditionally weak relationship between interest rates and foreclosures. Attention has focused on the "payment shock" risk posed by ARM resets in an environment of rising interest rates and softening house prices. More specifically, bank regulators have expressed concern that products such as payment-option ARMs that traditionally served the needs of niche borrowers with large but irregular cash flows—the proverbial "Porsche salesman"—may in, 2004–05, have been extended to stretched first-time homebuyers or property investors, with insufficient due diligence and underwriting.

The market response thus far suggests that upcoming ARM resets carry both market risk and credit risk. In a typical pattern, proactive originators contact borrowers as reset dates approach, offering refinancing of ARMs into longer debt-service profiles. To the extent that borrowers are concerned about rising interest rates, this could trigger some increase in prepayment activity.[2]

[1] With \$2.6 trillion of guaranteed MBSs and \$1.5 trillion of agency debt outstanding, Fannie Mae and Freddie Mac remain the largest underwriters of and investors in the U.S. mortgage market.

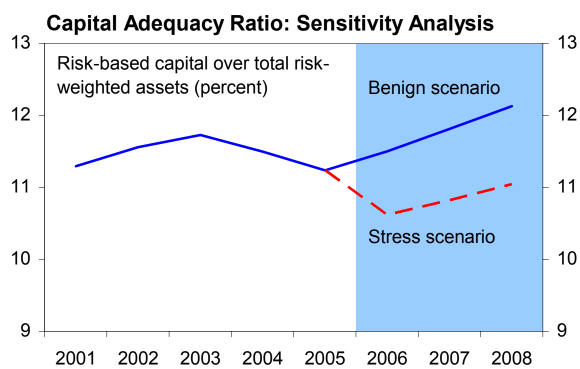
[2] Private mortgage databases suggest stretched homebuyers with nontraditional mortgages are the exception, not the rule. Cagan (2006), for instance, estimates that \$1.9 trillion of ARMs were originated in 2004–05, amounting to about 20 percent of 1-4 family mortgages outstanding; that 23 percent of such ARMs carried below-market initial "teaser" interest rates of 4 percent or less; and that 51 percent of the latter were to households with equity shares in their homes of 15 percent or less. Usefully, Cagan also estimates a national median discount of 14–16 percent on foreclosed home disposals during January 2004–June 2005.

mortgages over commercial and industrial portfolios, the sectoral shift would normally augur well for asset quality. As the housing market is beginning to cool, however, concerns are growing that payment resets on ARMs and nontraditional mortgages could shock many marginal households (Box 2).

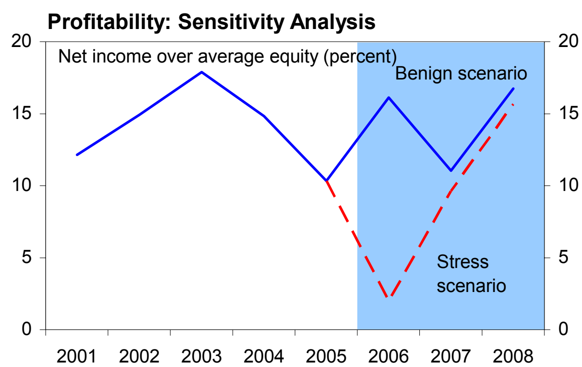
Box 2. LCBG Sensitivity to a Real Estate Shock: A Material Issue?

Although housing and commercial real estate (CRE) markets are expected to cool in a gradual and orderly manner, a more abrupt adjustment with potentially adverse impact on the banking system remains a concern.[1] Despite the mitigating and complicating factors already identified, a simple analysis of LCBG balance sheets helps provide an order of magnitude on the potential costs.

Sensitivity analysis on the LCBGs as a group suggests real estate-related credit risk could materially dent profitability, but not capital. The exercise, which focused on retained loan books, setting aside MBS portfolios, sought to isolate the impact of a deterioration in the credit quality of 1–4 family residential and CRE loans while keeping loan loss allowances constant relative to noncurrent loans. Delinquency and net charge off rates for 2006–08 were increased to their highest recorded values since 1990.[2] Relative to a benign baseline projection, the stress scenario indicated declines of about 8 percent (1 percentage point) for the average capital adequacy ratio for 2006–08; 42 percent (½ percentage point) for returns on assets (ROA); and 38 percent (5½ percentage points) for returns on equity. In sum, aggregate capital remained above regulatory floors, although aggregate profits fell by a large margin.



Sources: Federal Reserve Board; and Fund staff calculations.



Sources: Federal Reserve Board; and Fund staff calculations.

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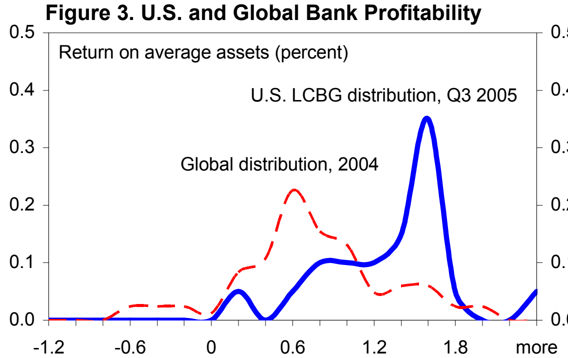
[1] CRE loans, in contrast to mortgages, have experienced fairly severe credit problems in the past, and CRE concentrations have reportedly increased at many small and midsize banks in the last five years.

[2] Delinquency rates on a 90-day basis, including nonaccrual loans, were conservatively marked up to the highest recorded values for the banking system as a whole on a 30-day basis. The baseline assumed that growth rates of total assets and gross loans, relative loan shares, and noncurrent loan ratios and net charge off rates would remain at their 2005 values through 2008.

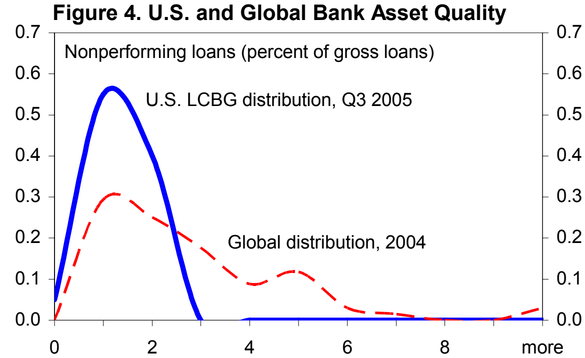
10. ***In any event, record financial results may prove difficult to sustain***. LCBGs outperformed the 100 largest banks worldwide, in terms of ROA, in 2005 (Figure 3). Real estate-related revenues contributed almost one-third of total gross income, supported by large trading gains at five LCBGs late in the year. Delinquency and net charge off rates fell to all-time lows, although an increasing ratio of loan-loss allowances to noncurrent loans suggested LCBGs were not expecting further improvements in credit quality (Figure 4). If faced with a material slowing of housing activity and related credit demand, and an uptick in foreclosures, LCBGs would be challenged to offset the revenue impact through increased lending to other sectors.

Figure 3. U.S. and Global Bank Profitability



Sources: Bankscope; Federal Reserve Board; and Fund staff calculations.

Figure 4. U.S. and Global Bank Asset Quality



Sources: Bankscope; Federal Reserve Board; and Fund staff calculations.

C. Market-Based Surveillance

11. ***With regulatory data not keeping pace with innovation, market-based surveillance has become an important complement to bank supervision***. Informational lacunae are especially evident in the reporting of hedging and credit risk transfer activity.[33] Banking agencies, therefore, maintain continuous supervisory contact with the largest institutions, including through the Large Complex Banking Organization Program and other protocols. Market participants, in turn, tend to build trading strategies around credit opinions from the rating agencies, which are uniquely positioned to assess a wide range of structured transactions. As part of its financial stability function, the Federal Reserve also monitors market-based indicators.[34]

12. ***The DD measure used in this paper suggests that LCBG financial soundness in 2004–05 was at its strongest level in a decade***. The choice of an equity-based measure over one based on newer credit risk transfer markets facilitates analysis over a longer time frame, with a stronger accent on profit expectations than credit events.[35] Calculated in its simplest form, the DD provides insights on soundness trends over time and across firms rather than precise probabilities of failure—particularly since fluctuations can sometimes be the result of shifts in investor attitudes toward risk, and less a consequence of actions by institutions under study. Results for individual LCBGs point to steady improvements in soundness in the period after the large corporate defaults of 2002.

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[33] The regulatory data do not, for instance, separate derivatives dealing positions from proprietary hedges, or clarify whether interest and exchange rate contracts represent net long or short positions, or identify holdings of collateralized debt and mortgage obligations by tranche.

[34] Nelson and Perli (2005) describe various indicators used by Federal Reserve staff, including risk-neutral probabilities of default based on credit default swap spreads and actual default probabilities of default based on Moody's KMV's "expected default frequencies", which map calculated DDs to observed firm-level default data.

[35] Indeed, "DD" may be a misnomer, given that it represents distance to insolvency rather than default.

13. ***An apparent increase in the risk diversification of LCBGs as a group is also observed, underscoring the potential value of system-level surveillance***. The "system DD" for the portfolio of LCBGs, embedding all correlations across institutions, is observed to climb faster than the average of individual DDs, implying a reduced likelihood of a shock hitting all firms contemporaneously. The widening difference between the two indicators appears to reverse a ten-year trend, observed through 2003, that had suggested LCBGs were becoming increasingly exposed to common shocks.[36] System DDs for the investment banking, insurance, and nonfinancial corporate sectors are also observed to improve.

14. ***The findings suggest no material differences in soundness among LCBGs based on their appetite for real estate exposure or emphasis on noninterest income*** (Figure 5). Separating LCBGs into two subsets, above and below the unweighted 2003–05 average ratio of real estate exposure to total assets, reveals a minor downtick in soundness at the former group in 2005, although the two subsets' average DDs remained at similar levels. This appears to indicate that markets remained relatively sanguine about risk-return tradeoffs related to the real estate sector. A similar exercise based on the ratio of noninterest income to total gross income was also inconclusive, notwithstanding the narrowing of term premiums.

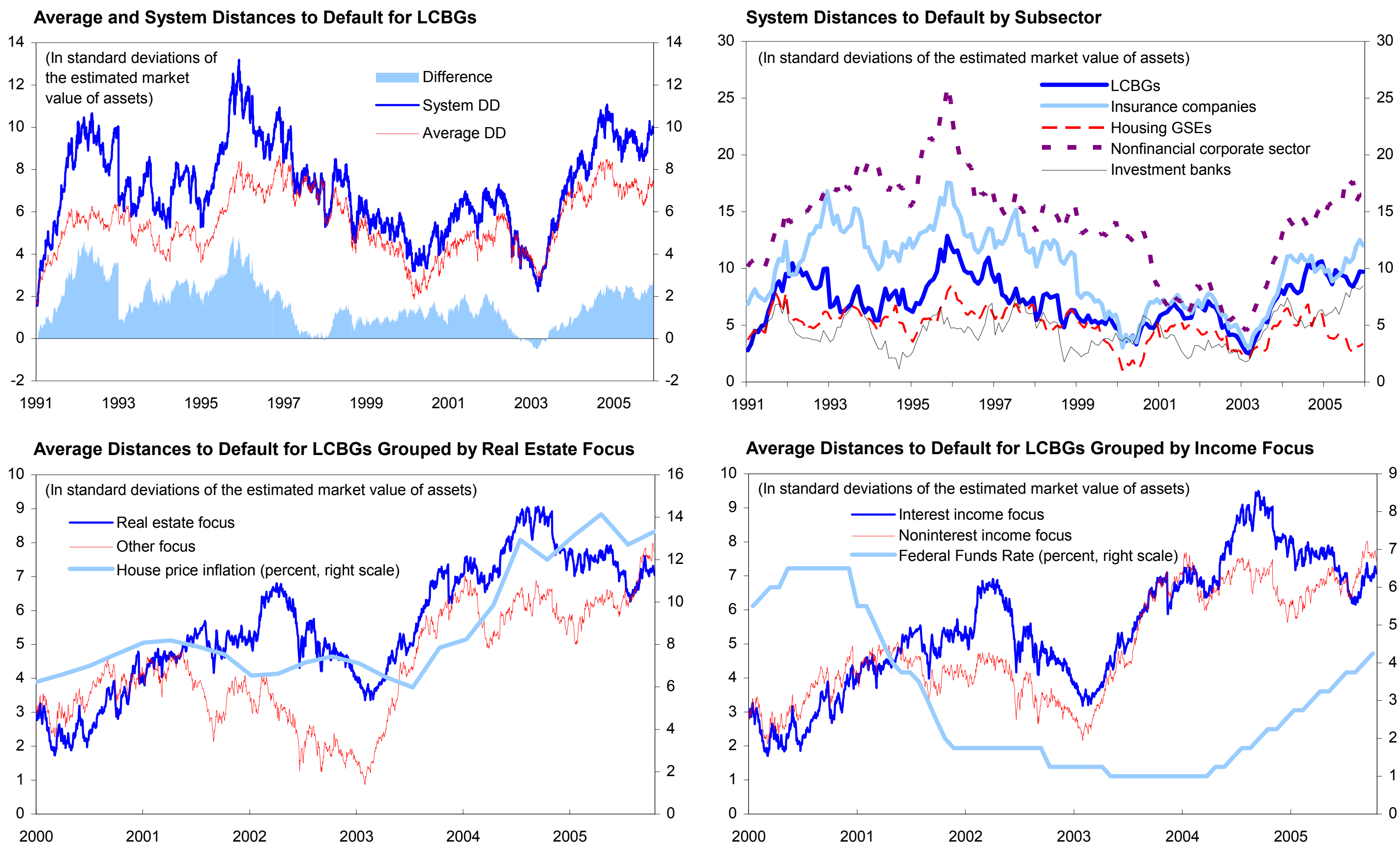
D. Regulation and Oversight

15. ***The foregoing analysis, while indicative of a banking system in good health, underscores the surveillance challenges spawned by innovation***. After years of benign conditions, new market segments could be tested in the period ahead, especially if there is a "tail event" related to global imbalances. However, accounting data shed little light on growing risk transfer activity, while market prices cannot be assumed to perfectly reflect underlying risks. In practice, U.S. regulators have met the challenge by focusing on a few systemic institutions, with an emphasis on continuous supervisory contact, internal controls, counterparty risk management, and measures to ensure rapid clearing in critical market segments. Led by the Federal Reserve, they also monitor a host of market signals.

16. ***Functional divisions remain in evidence***. With consolidation across business lines slowing, umbrella supervision has not taken on all the operational intensity anticipated under the Gramm–Leach–Bliley Act. This relates in part to the fact that synergies between banking and insurance businesses have proven elusive, as demonstrated by Citigroup divesting its

[36] In other words, banks were diversifying at the firm level while taking on similar exposures at the group level. Houston and Stiroh (2006), also basing their analysis on equity valuations, present evidence of a contemporaneous increase in systemic financial sector risk and decrease in idiosyncratic risk during 1995–2002.

Figure 5. Distance to Default Indicators for the U.S. Financial System



Sources: Datastream; Haver Analytics; and Fund staff calculations.

INTERNATIONAL MONETARY FUND

Staff Country Reports

July 2006
IMF Country Report No. 06/278

United States: Selected Issues

This Selected Issues paper for the United States was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on June 29, 2006. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the United States or the Executive Board of the IMF.

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INTERNATIONAL MONETARY FUND

UNITED STATES

Selected Issues

Prepared by M. Mühleisen, S. Ouliaris, A. Swiston, E. Tsounta (all WHD),
and A. Bhatia (MFD)

Approved by Western Hemisphere Department

June 29, 2006

Contents Page

I. The Attractiveness of U.S. Financial Markets: The Example of Mortgage Securitization[1]

1. ***Despite projections that its current account deficit is likely to remain high, the United States has been an attractive destination for foreign capital in recent years***. Foreigners held an estimated $3.3 trillion in net U.S. assets (25 percent of GDP) at the end of 2005, and another $800–900 billion (6–7 percent of GDP) are likely to be added by the end of 2006. Besides strong economic fundamentals and sound monetary policy, the ability of U.S. financial markets to intermediate domestic demand with foreign supply of funds at attractive risk-adjusted returns has helped sustain foreign inflows and support the dollar exchange rate.

2. ***As an example, this paper discusses how financial innovation turned U.S. mortgages into an asset class with world-wide investor appeal***. Mortgage securitization enabled households to tap foreign savings while satisfying foreign investors' demand for higher returns on safe investments. The paper also asks whether a bubble in the housing market has developed as easy global financing conditions helped bring U.S. mortgage rates to historic lows. The answer is "probably not," but regulatory vigilance remains essential to limit the potential fallout from a downturn—especially among smaller banks that have built up exposures to mortgage and construction loans.

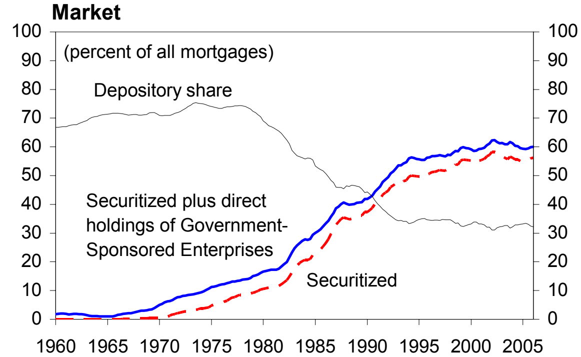
A. Securitization and Recent Trends in Mortgage Markets

3. ***The securitization, or pooling, of home loans into mortgage-backed securities (MBS) has made the nationwide mortgage market significantly more efficient and less volatile over the past 20 years***:

- The U.S. housing market was historically composed of many local markets, and lending volumes depended on funding conditions of depositories in the region. Developers tended to build up housing inventories in anticipation of stronger demand when mortgage conditions would improve, contributing to regional boom and bust cycles (Schnure, 2005).

- With securitization, banks and other mortgage originators have been able to shift significant amounts of credit and market risks to MBS holders

Figure 1. Mortgage Securitization in the U.S. Market



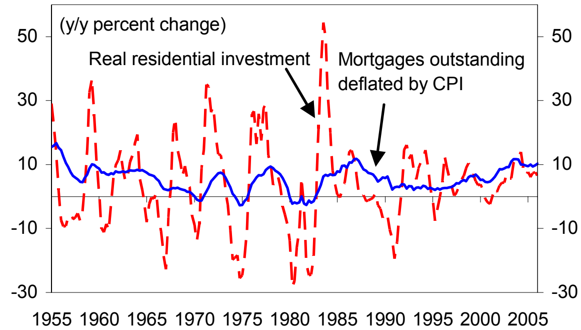
Source: Haver Analytics.

[1] Prepared by Martin Mühleisen.

(Figure 1), decoupling mortgage funding conditions from local deposit growth rates. Funding conditions are now determined in the national and international markets, and are therefore less volatile than before.

- This has helped housing activity and price developments to become less cyclical and converge across the United States (Peek and Wilcox, 2006; Figure 2).

Figure 2. Residential Investment and Mortgage Growth



Source: Haver Analytics.

4. ***Securitization benefited from the fact that standard U.S. mortgages carry fixed interest rates for up to 30 years, much longer than in most other countries***. Their long maturity makes them relatively easy to bundle, notwithstanding the fact that mortgages can also be easily refinanced or prepaid. Initially, the MBS' success also owed much to the role of government-sponsored housing enterprises (GSEs), such as Fannie Mae and Freddie Mac:

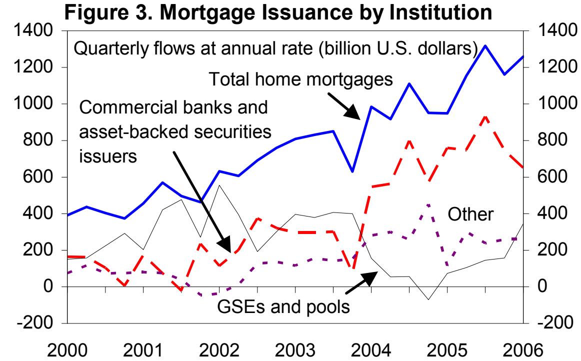
- Most of the pooling was historically done by the GSEs, who also guarantee cash flows on the underlying debt. These companies promoted greater uniformity in lending standards and lowered transaction costs, which contributed to improved market access for lower and middle-income households.

- The GSEs provided liquidity and market-making in the early stages of the market, as well as during periods of market turmoil in the 1990s. Given their favorable rating and low funding costs, the GSEs also gained from issuing commercial bonds and investing the proceeds in their own MBS issues and other securities.

- More recently, supervisors have become concerned that the GSEs' large MBS portfolios could pose systemic risks, given that their significant interest rate exposures are being hedged with other financial institutions. As of end-2005, the GSEs still held a combined 25 percent of MBS issued with their backing, down from the peak of 37 percent in 2003.

5. ***The bulk of securitization has lately been done by private mortgage institutions*** (Figure 3). Among other factors, this reflects both an increase in "jumbo" mortgages and a rising share of loans to non-prime borrowers, both of which cannot be included in a security with a GSE-backed default guarantee. This niche has been filled by private institutions, including banks and

Figure 3. Mortgage Issuance by Institution



Source: Haver Analytics.

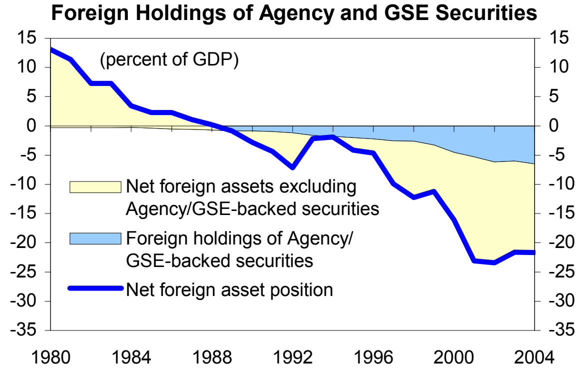
mortgage brokers, which also securitize mortgages and home equity loans with still riskier characteristics. For example, the declining affordability of housing has boosted demand for mortgages with strongly discounted initial rates and negative amortization options, allowing more expensive purchases for a given monthly payment.

6. ***These "exotic" mortgage products have begun to play a well-publicized role in recent years, especially in the condominium market***. Their strong take-up during 2004/05 has prompted U.S. regulators to emphasize the need for banks to improve risk management procedures and maintain prudential exposure limits. Moreover, smaller banks appear to have become more revenue-dependent on private and commercial construction activity. This may not be as much of an issue in the "hottest" markets—where price increases are driven by the limited availability of land—but more in peripheral markets with significant construction of new housing.

B. U.S. Housing Finance and Global Investors[2]

7. ***Mortgage-related financial products have been highly sought after by foreign investors***. Such investors held close to $1 trillion in GSE bonds and GSE-backed MBS by March 2006, an amount equivalent to about a third of the increase in U.S. net foreign debt since the 1980s (Figure 4). In other words, once holdings of equities and other investment instruments are netted out, a major part of the rising indebtedness of the United States reflects foreign investment inflows into the U.S. housing sector. To understand the strong foreign interest in these securities, it is instructive to first look at the attractiveness of the U.S. financial market for foreign investors in general.

Figure 4. U.S. Net Foreign Asset Position and Foreign Holdings of Agency and GSE Securities



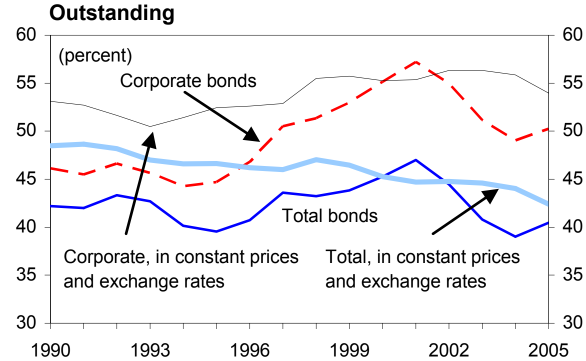
Sources: Haver Analytics; *International Financial Statistics;* and Fund staff calculations.

8. ***Reflecting its size, market-based structure, and favorable economic conditions, the United States has the deepest and most liquid financial market in the world*** (e.g., Burger and Warnock, 2004). The amount of bonds denominated in U.S. dollars was $22.5 trillion in March 2004, equal to more than 40 percent of outstanding global bond issues (Figure 5). Next to the large U.S. Treasury market, the U.S. private debt securities market is also the dominant corporate debt market in the world. As of 2003, the amount of outstanding corporate bonds issued in the United States amounted to $6.5 trillion, or half the global market. The U.S. equity market enjoys a similarly dominant position, in part because of the

[2] This section partly draws on Schinasi and others (2001).

high degree of protection afforded to financial investors by the U.S. legal system (Kho and others, 2006).

Figure 5. U.S. Share of Global Debt Securities Outstanding

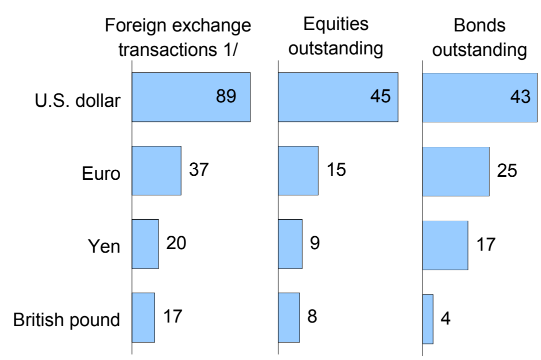


Source: BIS; *International Financial Statistics;* and Fund staff calculations.

9. ***Besides their size, U.S. securities markets have a number of structural advantages over other markets***. For example, the U.S. market offers ample liquidity in benchmark issues covering the full range of maturities along the yield curve. This ranges from the very short-term—T-bills and the repo market—to the long-term, recently underpinned by the reintroduction of 30-year bonds. Many other countries have concentrated benchmark issuance on specific segments of the yield curve—largely 5–year or 10-year maturities—and short-term markets are not always as fully developed as the United States. The United States also has the largest stock of inflation-indexed bonds on issue. In addition, a large network of primary dealers and specialized financial institutions have created liquid markets in repos, futures, options, and, more recently, credit derivatives. By facilitating ways of splicing and combining risks associated with different securities, the market provides for efficient risk pricing mechanisms and allows investors to structure exposures closely in line with their desired risk-return tradeoffs.[3]

10. ***Moreover, the U.S. Treasury market has historically been highly internationalized, given the U.S. dollar's role as global reserve currency***. Treasuries have been sought as instruments for hedging and collateral, and as the currency of choice for official foreign exchange reserves. As of mid-2004, the U.S. dollar has been involved in about 90 percent of the $1.9 trillion worth of daily global foreign exchange transaction (Figure 6), and an estimated $1.8 trillion of U.S. dollar holdings constitute two thirds of official foreign exchange reserves reported to the IMF. U.S. markets have also been an important source of

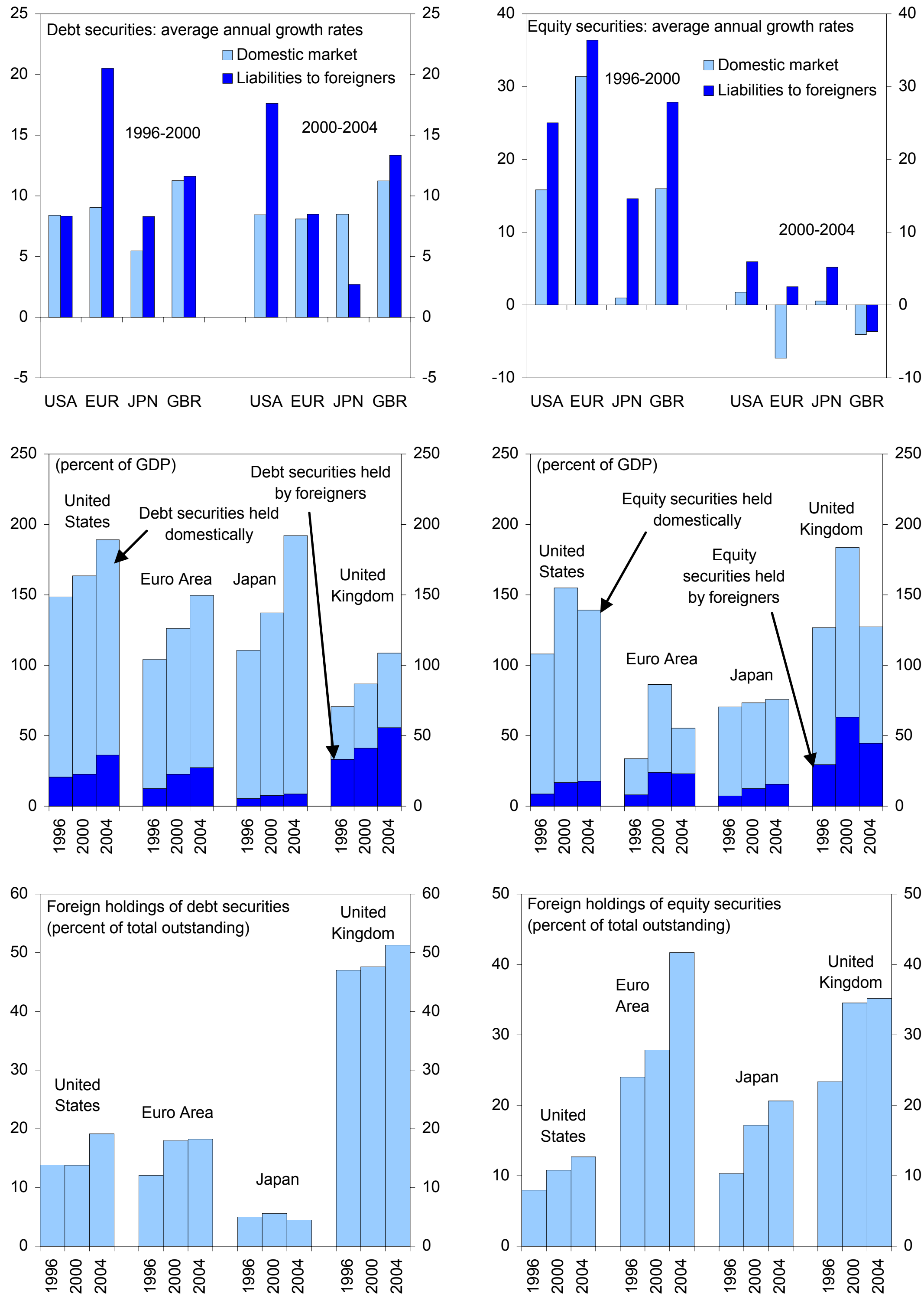
Figure 6. Currency Denomination of Financial Products, 2004



Source: McKinsey Global Institute, 2005.
1/ Because there are two currencies in a single foreign exchange transaction, the potential total is 200%; the share of other currencies comprise the remaining 37%.

[3] For example, the tranching of MBS backed by sub-prime mortgages and home equity loans allows risk-averse investors to pick up yield at limited exposure, while some of the substantive credit risk is borne by investors with a stronger risk appetite (e.g., hedge funds and speculative bond funds).

Figure 7. Foreign Participation in Major Financial Markets



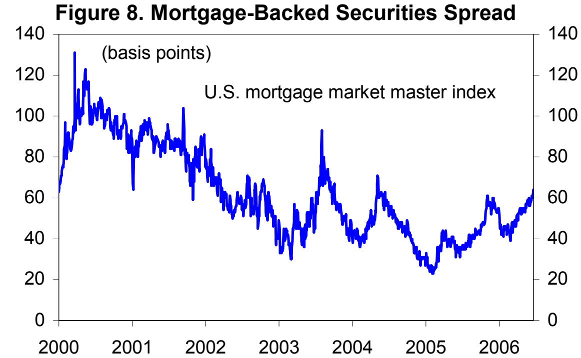
Sources: BIS; *International Financial Statistics;* and Fund staff calculations.

funds for firms from other countries—the US$-Eurobond market is of similar size as the U.S. corporate bond market, both in outstandings and relative magnitude.

11. ***The attractiveness of U.S. markets for foreign investors is borne out by a comparative analysis with other large financial markets*** (Figure 7, previous page). Between 2000 and 2004, the amount of U.S. debt securities held by foreigners increased by close to 20 percent per year, compared to growth rates of around 8 percent or less of either domestic or international securities holdings of European and Japanese securities. Although the euro area had seen increases in foreign holdings in similar magnitude in the late 1990s, foreigners now account for 36 percent of GDP in holdings of U.S. debt securities, compared to only about 27 percent of GDP in the euro area. The larger size of the U.S. market explains why the overall market share held by foreigners is about equal, however.[4] On the equity side, growth in foreign investments in the United States has also been stronger in recent years, although on a much smaller scale than in the debt market.

12. ***With their 20-100 basis points spread over Treasury bonds in recent years, MBS issues have been one the key instruments purchased by foreign investors*** (Figure 8). Payment flows relating to the underlying mortgage portfolios are regarded as highly secure. Indeed, as the supply of U.S. Treasury bonds declined in the late 1990s, MBS were considered as a possible alternative for long-term benchmark bonds. Although MBS are subject to duration risk—for example, a drop in interest rates tends to cause a surge in refinancing and prepayments—this can be hedged in interest rate derivatives markets. It is therefore not surprising that a large part of funds flowing into global fixed-income markets have found their way into the U.S. mortgage market. Indeed, reflecting their low risk rating, about one third of GSE-backed MBS held abroad are included in official foreign exchange reserves, while asset-liability management concerns have prompted global pension funds to invest in MBSs, fulfilling both a need for longer-term securities and stepped-up income flows.[5]

Figure 8. Mortgage-Backed Securities Spread



Source: Bloomberg, LP.

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[4] Data on portfolio allocations suggest that foreign investors are not overweight U.S. assets, although the size of U.S. net foreign liabilities has become large compared to other countries even when factors such as the size and openness of the U.S. economy are taken account of (Swiston, 2005).

[5] Balakrishnan and Tulin (forthcoming) point out that foreign investors have not demanded a risk premium to invest in U.S. assets, as expectations of dollar depreciation were only partly being offset by growing interest differentials in favor of the United States.

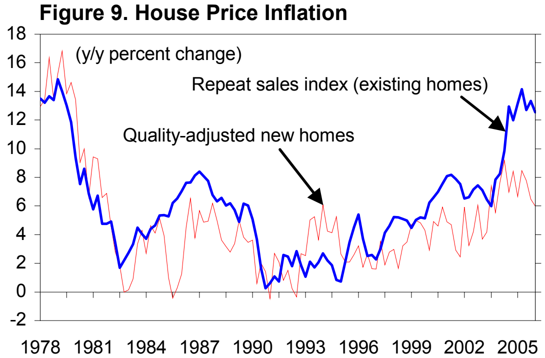
13. ***All this suggests that the U.S. financial system, and the mortgage market in particular, have evolved in a way conducive for tapping the increasing supply of funds provided by foreign investors***. U.S. markets had the infrastructure in place to intermediate large foreign inflows at a time when demographic and other factors created significant demand for housing loans, and U.S. financial institutions have also proved adept at creating instruments that catered to investors' different risk appetites. To some extent this has been matched by European covered bonds ("Pfandbriefe")—which have MBS features, except that the underlying loans remain on banks' balance sheets—that have also been high in demand. However, the market for covered bonds, measured by outstanding amounts, is only an estimated one tenth the size of the U.S. MBS market, and issuance has been sluggish owing to depressed conditions in the German housing sector.

C. Has It Gone Too Far?

14. ***Many observers are wondering whether foreign capital inflows into the U.S. housing market have kept interest rates artificially low, contributing to a housing bubble***. There is some evidence that long-term interest rates in the United States might have been higher in the absence of bond purchases by foreign investors (e.g., Warnock and Warnock, 2005). However, long-term interest rates, and by implication mortgage rates, were low throughout the industrialized world, and recent issues of the IMF's *World Economic Outlook* have identified a number of structural reasons for this phenomenon, including high corporate saving, low inflation expectations, and reduced financial market volatility. Nevertheless, the question needs to be asked whether risk and credit allocation mechanisms in the U.S. housing market have remained efficient in the face of abundant capital availability. This requires an examination of the current level of house prices.

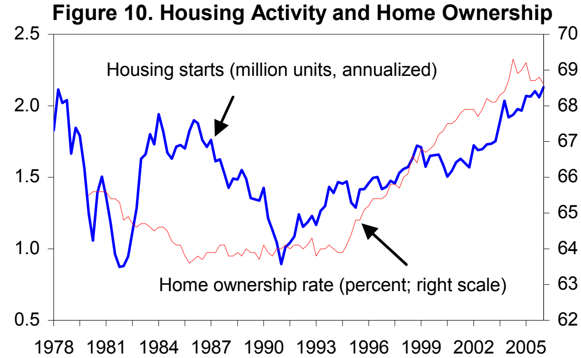
15. ***Are U.S. house prices overvalued***? Going through the third major cycle in 30 years, national house prices have on average risen by 7 percent per year since 1995—10 percent since 2000—accompanied by a strong surge in sales volumes (Figure 9). There is ample anecdotal evidence of overvalued property and speculative activities in some of the hottest local housing markets, including along the Pacific and Atlantic coast lines. Trends in other regions have been considerably less dynamic, however, and a number of factors indeed

Figure 9. House Price Inflation



Source: Haver Analytics.

Figure 10. Housing Activity and Home Ownership



Source: Haver Analytics.

supported an increase in prices in recent years (Mühleisen and Kaufman, 2003):

- Reflecting demographic and immigration trends, the home ownership rate has increased strongly and remains close to the record 69.4 percent reached in 2004 (Figure 10, previous page).
- The combination of strong disposable income growth, low interest rates, and large capital gains has provided a powerful boost to the financial situation of households. The housing affordability index has recently declined but remains near its long-term average.
- Price increases appear to reflect a growing demand for higher-quality housing in terms of size, features, and appliances. Moreover, house price inflation has been concentrated at the higher end of the real estate market.

Box 1. U.S. House Price Estimates

A simplified version of the approach by Mühleisen and Kaufman (2003) is used to gauge the level of house prices relative to fundamentals. The key variable is disposable income (per household), whereas the 30-year mortgage rate and the unemployment rate have no significance over the long term. The dependent variable is the OFHEO repeat price index. All variables are in logs.

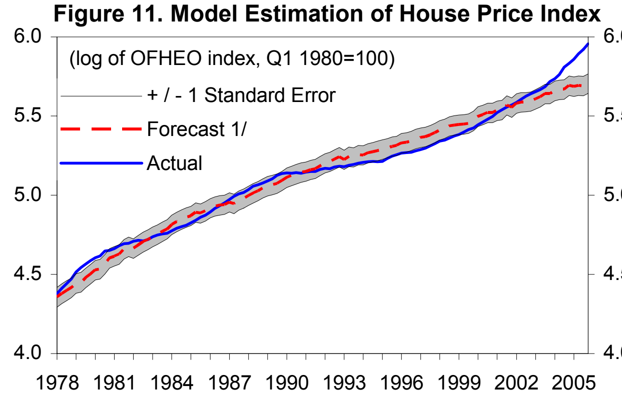
Regression of House Price Index on Fundamentals

Period	1975Q1: 2005Q3	
	Coefficient	Probability
Constant	8.092719	0.0000
Disposable income per household	0.963217	0.0000
Mortgage rate	−0.031534	0.2409
Unemployment rate	0.030958	0.3661
Observations	123	
Adjusted R-squared	0.98162	

Sources: Bureau of Economic Analysis; Bureau of Labor Statistics; Office of Federal Housing Enterprise Oversight; and Fund staff calculations.

16. ***Long-run price trends are most closely associated with household income, whereas the level of mortgage rates and the unemployment rate seem to affect mostly the short-term dynamics*** (Box 1). This result is consistent with earlier findings, although the model has only been run only on a nation-wide basis for the purpose of this paper. The equation is relatively sensitive to sample periods and the type of house price index used, but the most robust specification indicates that national house prices were around 15-20 percent above a range consistent with fundamentals in 2005 (Figure 11).

Figure 11. Model Estimation of House Price Index



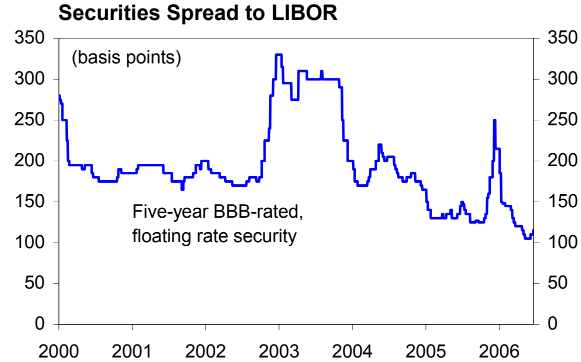
Source: Fund staff calculations.

17. ***With long-term interest rates rising, the housing market has entered into an adjustment phase***. The 30-year mortgage rate is back at a five-year high, mortgage applications have slowed, sales have dropped, and price increases appear to have retreated from last year's peaks. However, past experience suggests that aggregate house prices are much more likely to trade sideways than go through

a prolonged decline unless economic conditions deteriorate, causing sharp increases in unemployment. It is not clear to what extent such precedents provide guidance in a market that has seen considerable structural changes in recent years (see Chapter 5 of this volume). In particular, the rapid expansion of "exotic" mortgage products that may have increased the exposure of both borrowers and lenders to an economic downswing. On the other hand, some of these potentially negative effects could be offset by structural changes in favor of lower volatility that have been mentioned earlier in this chapter.

18. ***The MBS market has shown few signs of concern about the slowing housing sector***. Given the rise in exotic mortgage products, many analysts have been concerned that a correction in the housing market could entail some financial losses on the part of real estate lenders and MBS holders. However, others have pointed out that the risks from exotic mortgages still appear limited, given their relatively recent appearance, relatively diversified ownership, and some signs of a return to more conservative lending practices in 2006 (Cagan, 2006).[6] Indeed, risk spreads on securities backed by home equity loans, including those with higher risk tranches, do not indicate that financial markets are anticipating a significant increase in defaults on mortgage payments (Figure 12), even as spreads on other assets with higher risk characteristics have increased.

Figure 12. Home Equity Loan Asset-Backed Securities Spread to LIBOR



Source: J.P. Morgan Chase and Co.

D. Conclusion

19. ***This paper suggests that U.S. financial markets have been skilful in developing tools that have helped households exploit favorable global financing conditions to boost homeownership and acquire housing wealth***. This is likely to have contributed to a rising current account deficit, but indications are that credit and risk allocation mechanisms in the U.S. housing market have remained relatively efficient. This should provide comfort as the real estate market has entered what so far appears to be a cyclical downswing.

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[6] Exotic mortgages have only begun to spread as better data and more refined financial tools have become available to lenders, including complex behavioral models and sophisticated financial innovations that allow the tailoring of attendant risks to dedicated investor classes.

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II. Recent Trends in Labor Supply and Demand[7]

A. Introduction

1. ***Cyclical developments in the U.S. labor market have been atypical in recent years***. Aggregate employment and participation have tended to fall during a recession but quickly bounce back during recoveries (Figure 1). Despite a strong economic recovery since 2001, however, the bounce-back of labor markets failed to materialize, labor force participation has remained below its pre-recession level, and employment growth has been relatively sluggish.

2. ***The unusually low level of unemployment and participation rates raise questions on how much slack remains in the labor market***. With the unemployment rate just a notch above 4½ percent but wide-spread wage pressures not in evidence, an accurate gauge of the extent of labor market "reserves" is crucial for policymakers.

3. ***This chapter reviews relevant findings of the recent academic literature***. Particular attention is paid to the question whether the unusual behavior of the labor participation rate and employment growth reflects cyclical fluctuations or structural shifts with potential long-term implications.

B. What Explains Low Labor Market Participation?

4. ***Current research suggests that both cyclical and structural influences are behind low participation rates since the 2000–01 recession***. Aaronson and others (2006b) found that tight labor markets in the late 1990s contributed to a strong increase in labor market participation, and sharply deteriorating labor market conditions played a part in the decline through 2003. In addition, there is a substantial body of work suggesting the presence of a number of structural factors.

Demographic factors

5. ***Ongoing shifts in the age composition of the workforce tend to depress the aggregate participation rate.*** As labor market participation tends to be the highest for prime-age workers, and tapers off as workers get closer to retirement (Figure 2), a shift towards a larger share of mature workers may act as a drag on the aggregate participation rate.[8] With the leading edge of the baby boomers just two years away from retirement, the ranks of mature workers have been swelling rapidly in recent years, and demographic change may have become a significant driver of changes in aggregate labor supply behavior.

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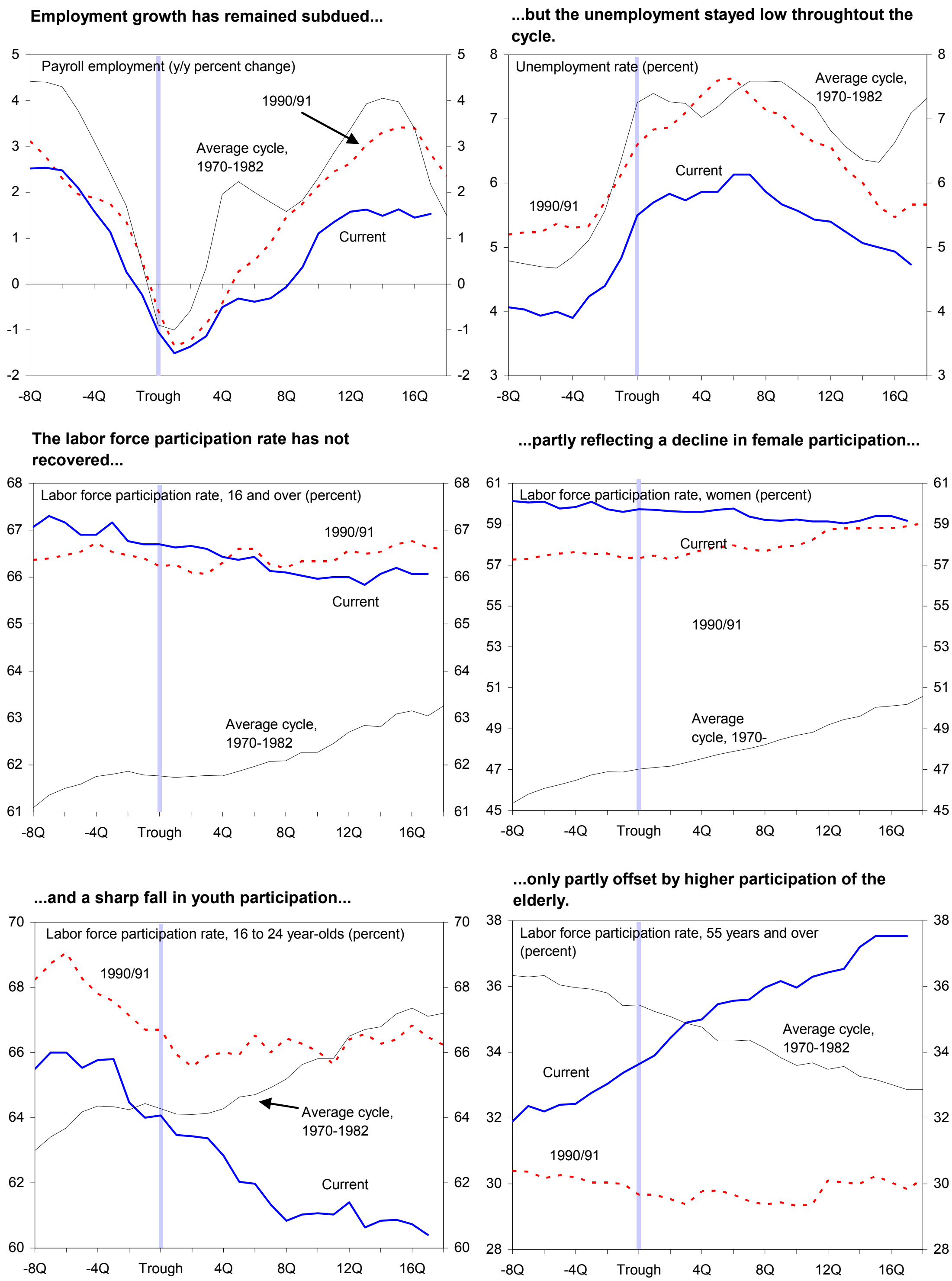
[7] Prepared by Evridiki Tsounta.

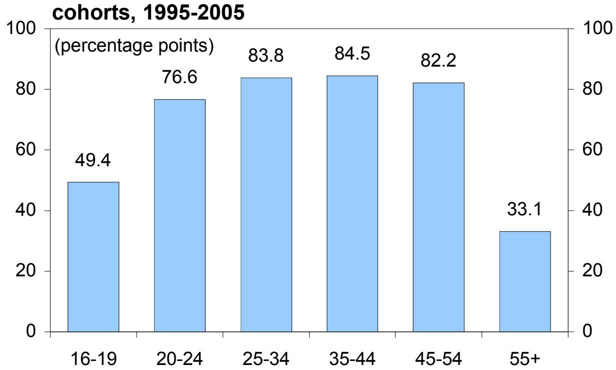
[8] Of course, ongoing demographic change may also trigger longer working lives.

Figure 1. United States: Labor Market Indicators



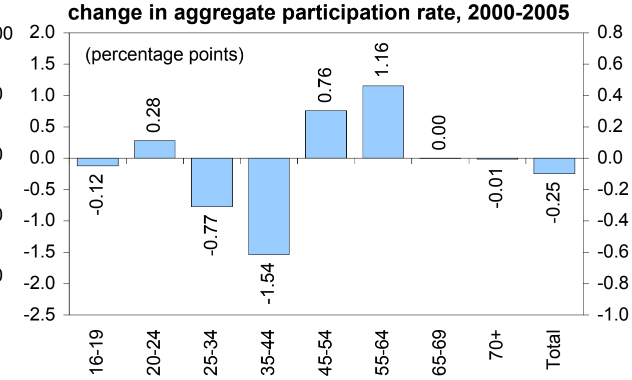
Sources: Haver Analytics; and Fund staff calculations.

Figure 2. Average participation rates by age cohorts, 1995-2005



Sources: Haver Analytics.

Figure 3. Contribution of demographics to the change in aggregate participation rate, 2000-2005

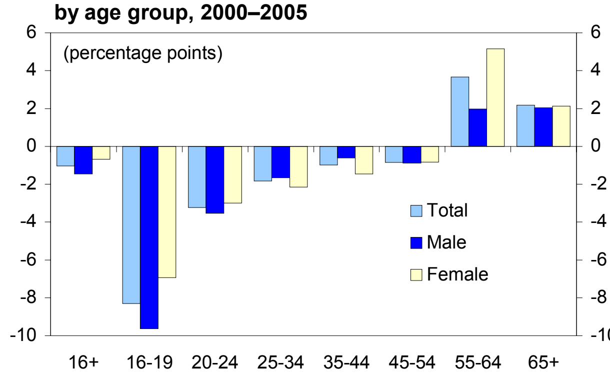


Sources: Bureau of Labor Statistics; and Fund staff calculations.

6. ***However, demographic factors account for only about a quarter of the drop in the participation rate between 2000 and 2005***. Under the assumption that age and gender-specific participation rates had remained at their 2000 levels, the rise of the share of mature workers at the expense of prime age workers would have implied a decline in the aggregate participation rate (Figure 3)[9]. However, this demographic shift only accounts for ¼ percentage point of the 1.1 percentage point decline in the overall participation rate.

7. ***The bulk of the decline in the aggregate participation rate appears to be related to weaker labor market participation of younger cohorts.*** The youngest age groups experienced the sharpest drop, although participation has also fallen for prime-age workers, particularly women (Figure 4). Elderly women have remained significantly more active in the labor market compared to 2000, however, helping to raise the participation rate of older workers by 4 percentage points over the past 5 years.

Figure 4. Change in labor force participation rate by age group, 2000–2005



Source: Haver Analytics.

Specific participation rates

8. ***The almost double-digit drop in the teen participation rate explains close to half of the drop in the participation rate in recent years*** (OECD, 2005). Unlike after previous recessions, the youth participation rate has continued to decline during the recent recovery.

[9] The estimates are based on a simple accounting procedure suggested by MacGregor and Mang (1996). The approach is based on the idea that "changes in the aggregate participation reflect changes in the participation rate of individual age-sex cohorts as well as changes in the importance of each of these cohorts in the distribution of the population" (Dugan and Robidoux, 1999).

Studies suggest that increasing school enrollment, as well as stronger competition in labor market segments where youth participate, may have played a role.

- ***Higher school enrollment is estimated to account for about ¼ of the decline in teen participation*** (Aaronson and others, 2006b; Coffin, 2004).[10] Increases in family wealth, as well as higher returns to schooling—both longer-term trends—were both identified as significant factors. In addition, Aaronson and others (2006a) note that a fall in tuition (net of grants and education tax benefits) and an increase in the number of community colleges lowered the cost of education and made college attendance more widely accessible over the last decade.
- ***Stronger competition from other population groups may have increased the share of discouraged youth***. For example, low-skilled women who entered the labor market following the implementation of the Temporary Assistance for Needy Families welfare reform may have competed for jobs available for young adults. Immigration of unskilled workers may also have worsened employment opportunities, particularly for less-educated young males (CBO, 2004a,b).[11] In addition, higher participation by older workers could have had an impact to the extent that employers have substituted inexperienced young with experienced mature workers.

9. ***Moreover, the long-term increase in female participation appears to have come to an end***. Prior to the last recession, a slight trend decline in prime-age male participation—continued since 2001—had been offset by a trend increase in female labor participation. Indications are that the latter trend has now halted:

- ***Weaker labor market conditions only explain about a third of the fall in female participation between 2000 and 2004*** (Hotchkiss, 2005). Shifts in the demographic composition of the female labor force, including a greater share of Hispanic women, as well as the somewhat weaker labor market pull from education are found to have

[10] Aaronson and others (2006a) find that about 1.6 percentage points of the 8 percentage point drop in teen participation between 2000–04 could be explained by a rise in school enrollment. The remaining was explained by lower participation rates among existing students (5.1 percentage points), and non-enrollees (1.4 percentage points). For 20–24 year-olds, the contributions were more evenly spread. Coffin (2004) finds that 40 percent of the decline in teen participation since the end of the recession is explained by increases in school enrollment, particularly in summer schools, and teen unemployment.

[11] Immigrant labor has been the largest source of growth in the total labor force, accounting for about half of its increase since the beginning of the 1990s (Camarota, 2004). Between 2000 and 2005, the number of less-educated adult immigrants in the labor force increased by 1.6 million. By comparison, unemployment among less educated adult natives increased by nearly 1 million, with an additional 1.5 million choosing to leave the labor force (Camarota, 2006). In addition, while the number of discouraged workers has declined over the past year, this decline has been limited to those aged above 25 years old (OECD, 2005), suggesting that most of the discouraged workers had been among the younger, less educated cohorts.

contributed. However, the bulk of the decline in the participation rate remains unexplained, suggesting a role for structural factors.

- ***The decline in female labor market participation has been concentrated among younger, highly educated, married women with young children*** (Bradbury and Katz, 2005). This suggests that changes in labor market preferences or other factors specific to that demographic group, may have been partly responsible. Rising incomes may also have allowed secondary earners in families with higher incomes to withdraw from the labor market.

10. ***The rise in labor participation rates of older workers is largely seen as a response to structural factors***. Long-term trends such as rising longevity, better health, higher educational achievement, and higher female participation among the baby boomers have facilitated labor market participation by older workers.[12] In addition, ongoing health care cost increases, the weakening of company-based defined benefit pension plans, recent pensions scandals, and uncertainty regarding the Social Security system may have motivated workers to delay retirement.[13] By contrast, the effects of the unwinding IT bubble—which impacted retirement assets—are seen as moderate, given that the share of significantly affected individuals appears to have been relatively small (Coile and Levin, 2006) and the subsequent housing boom has mitigated any negative wealth effects.

C. What Influenced Employment Growth?

11. ***Employment growth has been unusually weak during the current recovery***. Non-farm payroll employment has grown by less than 2 percent since the cyclical trough in 2001, compared to 6 percent over a corresponding period in the early 1990s and around 12 percent on average in previous cycles. The weakness of employment has been most pronounced in manufacturing, but the service sector has also underperformed relative to previous upturns.

12. ***The lack of job growth is often attributed to the increased pace of structural change in the economy, but the empirical evidence is inconclusive***. Structural change is characterized by permanent destruction of jobs in declining industries and creation of new jobs in emerging industries. Given the need for labor markets to adjust, structural change could have imposed a temporary drag on employment growth in recent years. However, the evidence for this hypothesis is mixed:

- On the one hand, temporary layoffs have played a relatively small role in the latest cycle, consistent with the view that structural factors have grown in importance

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[12] For an overview of the factors affecting elderly participation, see Burtless (1999) and Burtless and Quinn (2001).

[13] Gruber and Madrian (1995) suggest that the introduction of a universal health care system in the United States would increase the rate of early retirement.

(Schweitzer, 2004). In addition, the share of industries experiencing either net job gains or job losses during *both* phases of the last economic cycle has increased from previous cycles (Groshen and Potter, 2003). This could indicate that the share of declining or emerging industries in the economy is growing, consistent with intensifying structural change.

- On the other hand, data for job creation and job losses across industries do not support the hypothesis of growing inter-industry job reallocation in recent years (Faberman, 2004).

13. ***While outsourcing has grown considerably in recent years, the evidence supporting a significant impact on employment growth also remains limited***:

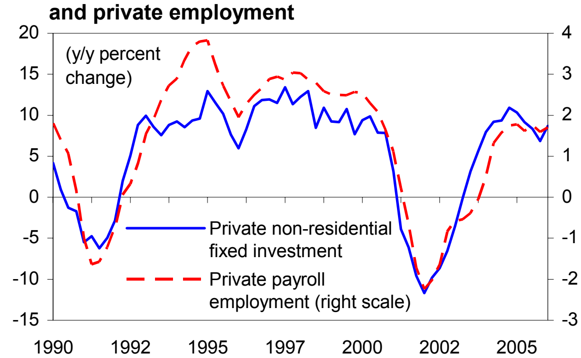
- There are indications that industries and occupations commonly associated with offshoring have experienced above-average job declines since 2001 (GAO, 2004). However, negative employment effects associated with outsourcing vanish at less disaggregated industry levels as higher employment growth in other industries provides an offset (Amiti and Wei, 2005).

- Consequently, job growth at the sectoral level appears to be only weakly affected (Amiti and Wei, 2004).[14] This is confirmed by statistics suggesting that the scale of outsourcing remains small (Schultze, 2004). For example, layoffs due to overseas relocation represented only about 1.5 percent of layoffs in 2004.[15]

- Looking at the broader impact of globalization, Faberman (2004) finds that trends in job destruction and creation across industries are independent of their exposure to international trade.

- An earlier analysis found that increased foreign trade contribute to changes in relative wages, but its effect on aggregate employment remains ambiguous (Swagel and Slaughter, 1997).

Figure 5. Growth in non-residential investment and private employment



Source: Haver Analytics.

14. ***The close correlation between employment and investment growth suggests that the sluggish recovery of the labor market may be related to unusually subdued investment*** (Figure 5). In the aftermath of the investment boom in the late 1990s, and in the face of larger economic and geopolitical

[14] Amiti and Wei (2004, 2005) only consider data for an earlier period (up to 2000).

[15] Based on the Department of Labor's Mass Layoff Survey that covers establishments with at least 50 employees.

uncertainties, firms appear to have become cautious both in their capital spending and hiring decisions. Therefore, the finding that many industries reduced employment levels both during and after the recession may less reflect structural factors than large adjustment needs in industries where capital spending and employment growth had been previously overambitious (Faberman, 2004; Cooper, 2006).

D. Conclusions

15. ***A number of structural factors are likely to restrain labor supply growth in the United States***. Notwithstanding higher participation rates among the elderly, population ageing is likely to have slightly negative impact over the medium term, with the Bureau of Labor Statistics projecting to a fall in the overall participation rate of ½-1 percentage point. Youth participation could continue on its declining trend if school enrollment were to rise, reflecting likely increases in returns to schooling. Similarly, the trend rise in female labor participation may have come to an end, particularly as higher wealth and family incomes facilitate withdrawals from the labor force.

16. ***There is little evidence for structural factors behind the slow rate of employment growth in recent years, however***. By contrast, there is some support for the hypothesis that low labor demand may be related to the unwinding of an investment and employment boom in the late 1990s. With the labor market expected to tighten once this adjustment has run its course, wage pressures could be expected to increase.

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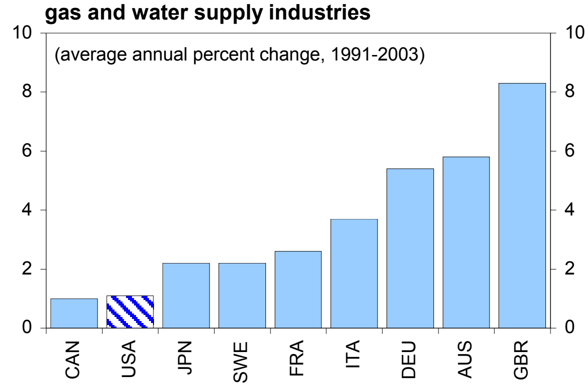
III. Challenges Facing the U.S. Electricity Sector[16]

A. Introduction

1. ***Recent bottlenecks in electricity distribution have highlighted the challenges facing the U.S. electricity sector***.[17] As shown by two major blackouts in California and the Northeast in recent years, interruptions in the supply of electricity can have a significant impact on economic activity. For example, the U.S. Department of Energy (DOE) estimated that the cost of the blackout of August 14, 2003 in the Northeast amounted to $4-10 billion (DOE, 2004, 2005). With electricity demand expected to increase by 50 percent over the next 25 years (White House, 2006), the need to maintain a reliable and efficient electricity sector is evident.

2. ***International comparisons suggest that there is room for improving the performance of the U.S. electricity sector***. The United States ranks nineteenth in quality performance surveys among OECD countries (OECD, 2005), and productivity growth in utilities also appears to have lagged most other large industrial countries (Figure 1). Reform proposals for the electricity sector tend to focus on improving the reliability of the transmission and distribution infrastructure, including by more integration across state lines and with Canada (OECD 2004, 2005; CEA, 2004).[18] In addition, it has been proposed that greater competition in the distribution sector could enhance efficiency and consumer choice, as occurred for large users following deregulation in the wholesale electrical sector (OECD, 2004).

Figure 1. Labor productivity growth in electricity, gas and water supply industries



Source: OECD, 2004, *Canada Country Survey*.

B. Evolution of the Electricity Sector

3. ***The U.S. electricity sector has long been dominated by vertically integrated utilities that own their generation, transmission, and distribution facilities***. Most utilities entered into interconnection and coordination arrangements with neighboring utilities, and the

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16 Prepared by Evridiki Tsounta.

17 In a 2002 study, the DOE (2002) noted that "there is growing evidence that the U.S. transmission system is under stress."

18 According to the North American Electric Reliability Council (Owens, 2005), transmission transactions that could not be completed due to congestion on transmission lines increased almost eight-fold to more than 2,300 in 2004 compared with 300 uncompleted transactions in 1998.

wholesale market developed around long-term contracts for the sale of bundled power to large customers such as municipalities and cooperatives. Geographical segmentation was significant, however, with each utility covering a defined and usually small service area.

4. ***The energy crises in the 1970s and 1980s triggered calls for more efficient electricity generation and distribution***. Between 1970 and 1985, average residential electricity prices more than tripled in nominal terms, and prices for industrial customers more than quadrupled. Responding also to energy shortages in the wake of the first oil shock, the 1978 Public Utility Regulatory Policies Act (PURPA) facilitated the build-up of cogeneration facilities and laid the groundwork for competitive wholesale power markets.[19] Subsequently, the 1992 Energy Policy Act exempted certain wholesale generators from restrictions of the 1935 Public Utility Holding Company Act (PUHCA) that limited holding companies to activities related to their gas or electric businesses and restricted expanding their geographic scope (Hunt, 2001).

5. ***Competition in the wholesale market increased further beginning in 1996 with the unbundling of electricity services***. The Federal Energy Regulatory Commission's Order No.888 (FERC, 1996) required all public utilities that own, control or operate facilities used for transmitting electricity in interstate commerce to provide "open access" to their transmission facilities on a non-discriminatory basis.[20] As a result, market entry increased significantly. Independent system operators (ISOs) and Regional Transmission Organizations (RTOs) were established, and now operate about 70 percent of the transmission system. This increased trade in bulk power and helped establish efficient regional wholesale markets.

6. ***However, shortcomings of the transmission infrastructure limit benefits from competition in the wholesale generation market***. Generation capacity is dispersed widely across the country, and transmission infrastructure is not sufficient to ensure competition in power generation or to keep pace with the growth in electricity demand in recent decades (Owens, 2005). Figure 2 shows the main interregional transmission bottlenecks that were pointed out by a Department of Energy study (DOE, 2002).

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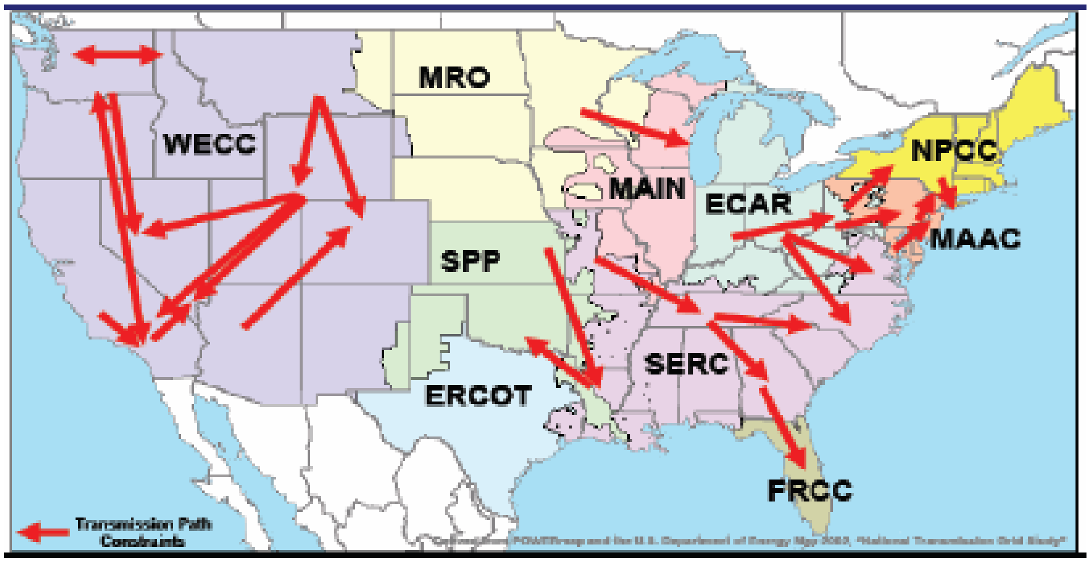
[19] Cogeneration facilities produce two types of energy simultaneously from one source in such a way that both are usable rather than one being treated as waste energy. Before PURPA, only utilities could own and operate electric generating plants. PURPA required utilities to buy power from independent companies that could produce power at a lower cost than the utilities' generating plants, encouraging the creation of natural gas-fired cogeneration plants, where steam is produced along with electricity (UCSUSA, 2006).

[20] Order No. 888 found that unduly discriminatory and anticompetitive practices existed in the electric industry, and that transmission-owning public utilities had discriminated against others seeking transmission access. The Order requires utilities to (i) publish non-discriminatory transmission service rate schedules; and (ii) participate in a computer-based information system providing real-time data about transmission capacity, prices and other information. The nondiscrimination provisions prohibit transmission providers from supplying different transmission services to different customers and requires that they charge users of the same grid the same price.

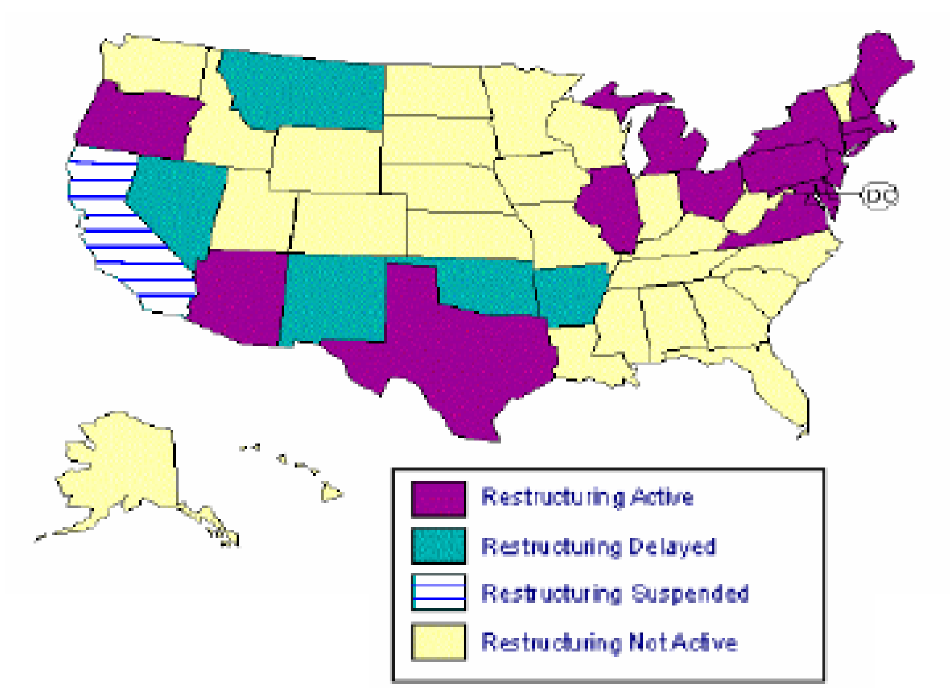
Figure 2. Transmission Path Constraints in the United States[1/]



Source: Delivered from Powermap and DOE (2002).
1/ The map indicates the various electric reliability councils.

Figure 3. Status of State Electric Industry Restructuring Activity

As of February, 2003



Source: EIA (2003).

7. ***Current projections suggest that the shortfall in transmission infrastructure will continue.*** Over the next 6-7 years, high voltage transmission capacity is expected to increase by only 6 percent (in line-miles), while electricity demand and generation capacity is projected to increase by 20 percent (DOE, 2002). The DOE estimated that relieving transmission bottlenecks in four U.S. regions (including California, PJM, New York, and New England) alone could save consumers about $500 million annually.[21]

C. Current Policy and Remaining Issues

8. ***Restructuring and deregulation in electricity markets has decelerated following the energy crisis in California in 2000-01 and the collapse of Enron***.[22] The U.S. Energy Information Administration (EIA) describes restructuring as being on hold outside the Northeast, Texas, Oregon, and Arizona (Figure 3).

9. ***Electricity sector reform has been found to be more of a challenge in the United States than in other countries.*** Comparing the United States to the U.K., New Zealand, Australia and Spain, the OECD (2004) identified two factors likely to complicate structural reforms:

- ***State responsibility for electricity regulation***. Compared to countries with more centralized authorities, the preponderance of state-specific regulations may have complicated the formulation of a national electricity strategy.

- ***Slow untangling of vertically integrated local monopolies***. Other countries have moved faster to separate market segments that are naturally competitive (generation and marketing) from those that constitute natural monopolies (transmission and distribution). This may have been more conducive to subsequent deregulation, and initial public ownership of utilities may also have facilitated reforms.

10. ***The 2005 Energy Bill eased some of these constraints.*** Among other provisions, the Bill removed a number of obstacles to electricity investments, such as reducing the tax depreciation recovery period of transmission assets by 5 years to 15 years. It also widened the scope of open access requirements for transmission lines; made electric reliability standards mandatory; gave federal officials the authority to select sites for new power lines; and expedited the process for selecting sites on both federal and private lands. These measures aim to improve the operation and reliability of electric transmission networks, promote investment, and enhance transparency in the electricity sector (U.S. House of Representatives, 2005).

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[21] PJM includes the Pennsylvania, New Jersey and Maryland Interconnection.

11. ***While these steps are useful, there remains scope for further reforms.*** As noted by the U.S. Department of Energy (DOE, 2003), increasing regional integration and uniformity of rules could facilitate infrastructure investment and could result in substantial net savings to consumers. In addition, the DOE identified considerable room for increasing competition in the retail electricity sector. International experience (OECD, 2004) suggests that the retail market for services to larger customers should be liberalized first, given that the potential gains tend to be more significant than for households or small businesses, at least in the short term. Removing favorable tax and subsidy treatments of public utilities and privatization of government-owned assets could also help increase transparency and foster competition.

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[22] Problems in California's electricity market were often quoted as a prime example for failed retail competition; Enron was involved in restructuring in most states that introduced competition (OECD, 2004).

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IV. Recent Oil Price Developments and the Performance of the U.S. Economy[23]

1. ***The substantial rise in crude oil prices since the beginning of 2003 has raised concerns about the risks to U.S. growth and inflation***. These stem, in part, from the fact that the oil price shocks of 1973, 1981, and 1991 were all followed by recessions. Since the United States is a net importer of crude oil, higher crude oil prices act like an excise tax on domestic consumers, reducing disposable income available for non-fuel consumption with no offsetting benefits for domestic producers. For example, given the level of crude oil imports by the U.S. in 2005, consumers paid an effective "tax" of about 0.6 percent of GDP in 2005.[24] With respect to inflation, crude oil price increases also add directly to headline inflation, potentially raising the need for tighter monetary policy to ward off any second round effects on core inflation.

2. ***The current oil price shock, however, appears to have had a limited impact on U.S. growth and inflation***. Existing estimates of the relationship between U.S. economic growth and oil prices suggest a cumulative decline in annual GDP growth somewhere between 2 to 4 percentage points for the rise in crude oil prices since 2003 (e.g., Jones and others, 2004). However, U.S. output during 2004–05 was close to potential, while projected growth for 2006 remains healthy at 3.4 percent—a marginal decline compared with the 3.5 and 4.2 percent growth registered in 2005 and 2004 respectively.

A. Recent Developments in Crude Oil and Primary Commodity Markets

3. ***The global price of crude oil, as measured by the IMF average spot price, has more than doubled since 2003*** (Figure 1). This increase was largely unexpected, reflecting, for the most part, an unprecedented surge in global crude oil consumption owing to robust global growth.[25] Supply constraints also played a role, as evidenced by numerous geo-political tensions that threatened crude oil supplies at the same time that spare extraction capacity of Organization of Petroleum Exporting Countries (OPEC)—the swing producer in the global crude oil market—declined to unprecedented lows (IMF, 2005).

4. ***In contrast to previous price shocks, long-dated crude oil futures (i.e., market expectations for crude oil prices out to 2012) have also risen substantially since 2003***.

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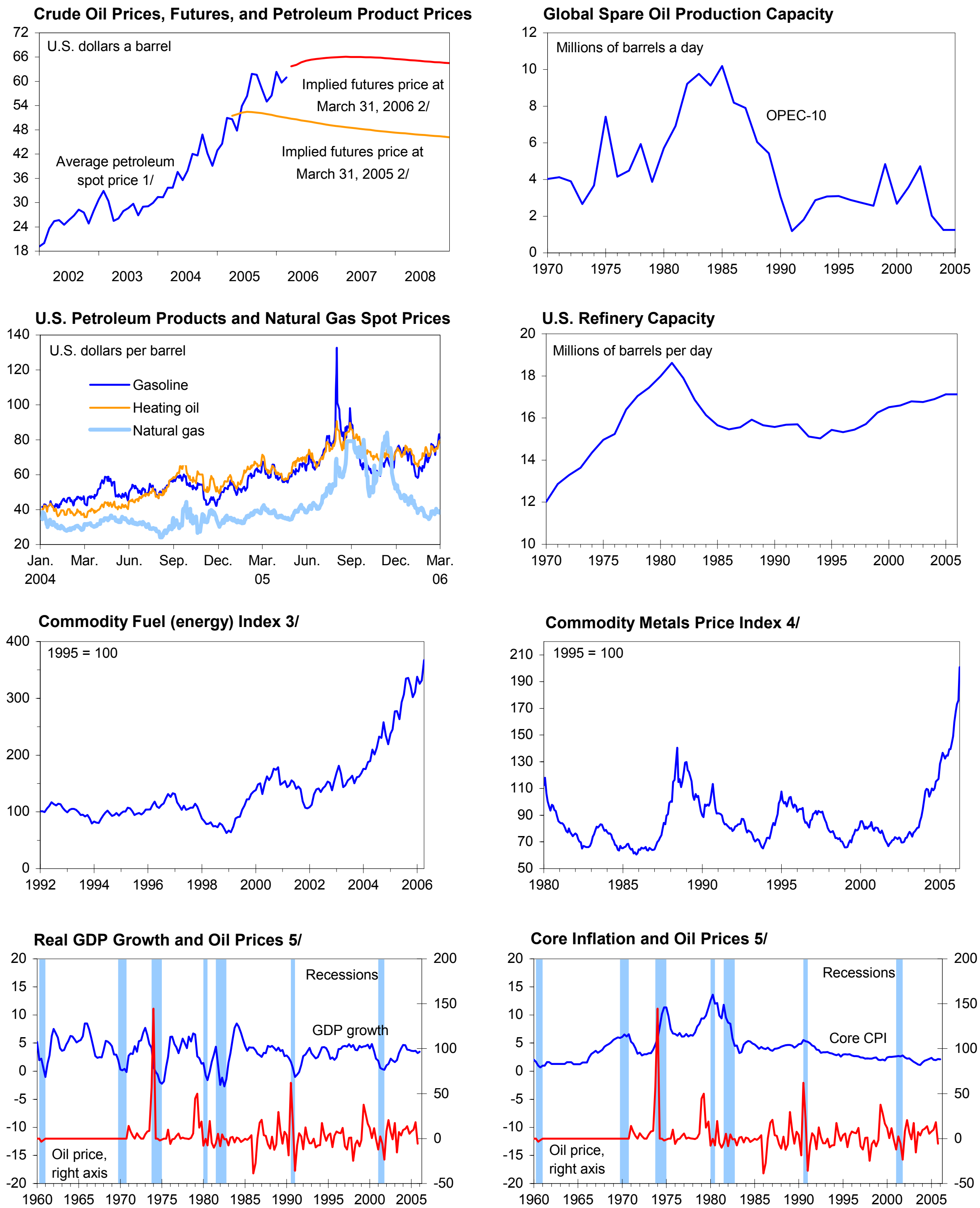
[23] Prepared by Sam Ouliaris. This note has benefited from comments by Ravi Balakrishnan, Kornélia Krajnyák, and Martin Mühleisen.

[24] The actual first-round impact is likely to be moderated by rising U.S. exports to oil exporting nations.

[25] Early 2003 future curves for crude oil, which extended to 2008, failed to predict subsequent price increases. Also, the surge in global crude oil consumption was particularly evident in 2004, stemming from growth in the United States, China, and India.

Figure 1. Oil Market Developments



Sources: Energy Information Agency; Department of Energy; *World Economic Outlook,* April, 2006; and Fund staff calculations.

1/ Average unweighted petroleum spot price of West Texas Intermediate, U.K.Brent, and Dubai Fateh crude.

2/ Five-day weighted average of NYMEX Light Sweet Crude, IPE Dated Brent, and implied Dubai Fateh.

3/ Includes crude oil (petroleum), natural gas, and coal price indices.

4/ Includes copper, aluminum, iron ore, tin, nickel, zinc, lead, and uranium price indices.

5/ Annual growth rates. Crude oil corresponds to simple average of three spot prices: Dated Brent, West Texas Intermediate, and the Dubai Fateh.

Perhaps more importantly, the long-end of the curve has remained at elevated levels since then, suggesting that the increase in crude oil prices has a sizable permanent component. If the current crude oil future price curve is any indication, the price of crude oil is projected to remain above US$65 per barrel at least until 2011, reflecting expectations of steady global oil demand growth, modest increases in crude oil production capacity, and uncertainty from geo-political risks.[26]

5. ***The rise in crude oil prices has led to substantial increases in petroleum product prices in the United States, notably in the price of gasoline.*** The increase in gasoline prices has been exacerbated by high refinery utilization rates and structural rigidities in the U.S. refinery sector that reduce its ability to respond to short-run market disturbances.[27] As a result, U.S. gasoline prices have become more susceptible to shifts in the supply-demand balance—as the aftermath of Hurricane Katrina clearly demonstrated. Hurricane Katrina shut-in almost 25 percent of U.S. crude oil production and natural gas from the Gulf of Mexico, and reduced refinery capacity by 10–15 percent for an extended period.

6. ***The substantial rise in crude oil prices has also coincided with a generalized increase in the prices of other primary commodities.*** The IMF index of commodity prices has increased by approximately 110 percent since January 2003, while its energy component, which tracks crude oil, natural gas, and coal prices, has increased by approximately 140 percent. Generalized movements in primary commodity prices may have implications for future U.S. inflation—energy commodities, for example, account for roughly 5 percent of the U.S. consumer price index, while goods excluding food and energy account for approximately 22 percent.

B. Do Rising Oil Prices Still Matter?

7. ***The economic impact of the rise in crude oil prices in terms of lower output and higher inflation since 2003 appears to have been quite moderate so far.*** Indeed, the U.S. economy has moved closer to potential since 2003 and core inflation has been subdued. A number of explanations have been offered for the benign impact, including:

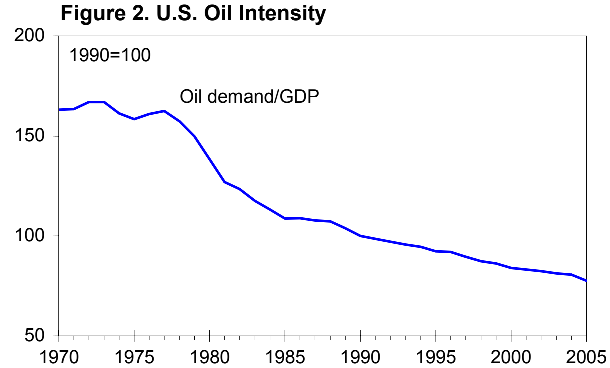
- ***The first-round effect of higher oil prices on GDP has fallen relative to the 1970s***. Two reasons can be offered for this outcome. First, U.S. oil intensity—as measured by the oil consumption/GDP ratio—is now substantially lower than in the 1970s, in part owing to the energy conservation-inducing effects of higher real oil prices in the

[26] It is well-documented, however, that crude oil futures price curves are poor predictors of future spot prices (e.g., IMF, 2005, pp. 64–68).

[27] For example, recent efforts to replace the Methyl tertiary butyl ether (MTBE) additive in gasoline with ethanol have been hampered by high refinery utilization rates in the United States, raising gasoline prices relative to the underlying price of crude oil.

1970s and early 1980s (Figure 2). The lower oil intensity also reflects the changing structure of U.S. industry—namely a declining share of manufacturing and a growing share of less energy intensive services. Second, despite the significant increase in nominal prices since 2003, real oil prices remain below those observed in the 1970s.

Figure 2. U.S. Oil Intensity



Sources: Haver Analytics; and Fund staff calculations.

- ***A significant component of the current increase in crude oil prices reflects the robust growth in the world economy rather than an exogenous price shock***. By contrast, the decline in OPEC output in the 1970s was a classic "supply shock" increasing the cost of production without raising real output. Since 2003, however, crude oil prices have risen *despite* substantial *increases* in global crude oil output, reflecting OPEC's accommodative stance toward the growth in crude oil consumption. It follows that a significant proportion of the first-round effects of the higher oil prices since 2003 should be assigned to the original stimuli (i.e., an exogenous shock or structural break) that initiated the growth in the global economy—rather than oil price movements themselves.

8. Other factors may have indirectly contributed to the benign impact of the higher crude oil prices, including:

- ***Reduced pass-through of higher crude oil prices to consumers***. Higher labor productivity combined with low real wage growth has improved corporate profitability in the United States, possibly providing a buffer for producers to absorb the current oil price shock. At the same time, greater competition in the manufacturing sector—reflecting greater imports from low-cost producers such as China—have reduced manufacturers' ability to pass on higher crude oil prices to consumers.

- ***Improved monetary policy credibility***. Notwithstanding higher crude oil prices, including higher long-dated futures prices, inflation expectations appear largely in check, core inflation remains subdued, and follow-on wage demands are not, as yet, evident—in contrast to the 1970s, when accommodative monetary policy may have contributed to a oil-induced wage-price spiral.

9. ***Looking forward, however, many of the factors offsetting the negative impact of higher crude oil prices could wane***. With the output gap closing in the United States, latent price pressures from other primary commodities may eventually appear. In particular:

- Despite recent additions to overall capacity, OPEC's spare capacity—in essence, the world's strategic petroleum reserve—remains close to its historical lows, increasing the likelihood of future supply shortages. As such, crude oil supply shocks—actual or perceived—could play a greater role in future movements in the price of crude oil, thereby raising the 'exogenous' component of such movements.
- If crude oil prices remain high, consumers will likely revise down their expectations regarding the size of the "temporary component" of the current oil price shock. This would likely reduce their willingness to offset future movements in oil prices, leading to greater pass-through to headline inflation and higher wage demands. Upward pressure on headline inflation could necessitate further increases in short-term interest rates, with potentially adverse effects on the housing market and consumption.
- As noted above, the rise in crude oil prices has been associated with a generalized increase in primary commodity prices—energy and non-fuel—since 2002, and latent pressures for higher prices may remain. In a staggered price setting for wages and energy contracts, pressures for higher prices might well remain, especially if suppliers are in the process of revising their expectations for commodity prices.

C. Policy Implications

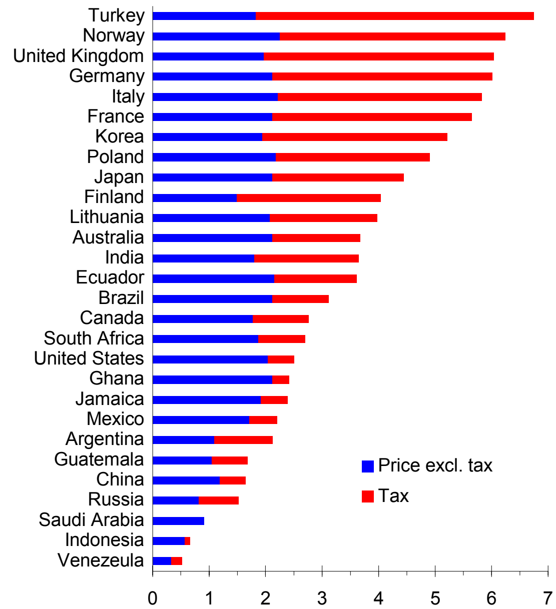
10. ***U.S. energy policy has aimed at reducing the security-related and macroeconomic risks associated with high crude oil imports and moderating the environmental consequences of the energy intensity of the U.S. economy*** (Prust and Simard 2004). However, U.S. policy initiatives have generally downplayed the role of energy taxation to reduce. the demand for energy products. The focus, instead, has been on incentives toward boosting domestic energy supply and innovation to increase the efficiency of energy use.

11. ***Declining U.S. energy intensity has moderated the impact of higher crude oil prices on growth and inflation, and further declines could be encouraged through appropriate policy measures that reduce the demand for energy***. If crude oil and gasoline prices remain at today's elevated levels, past experience suggests that market participants will eventually switch to cheaper sources of energy, though the adjustment process may be long. The speed of the adjustment depends not only on relative prices, but also on the viability of alternative technologies and the extent to which market participants expect prices to remain permanently higher—the latter playing an especially important role. Increasing taxes on energy products if and when prices fall—notably gasoline taxes, which are presently low by international standards (Figure 3)—could help the process and encourage appropriate responses from consumers. While taxes could reduce demand in a cost-effective way (CBO, 2002), more stringent fuel-efficiency standards for cars and light trucks, through an incremental fix, could

also be helpful to limit the growth in gasoline consumption.[28] The Administration could also expand incentives for buying fuel efficient cars—the existing tax credit for hybrid cars is due to expire after automakers have sold 600,000 hybrid vehicles.

Figure 3. Energy Prices and Taxes

U.S. dollars per gallon



Source: *World Economic Outlook,* April, 2006.

12. ***Given the high utilization rates in the refinery sector and recent sensitivity of gasoline prices to short-run disruptions to refinery capacity, additions to refinery capacity in the United States are being considered***. Deregulation and low profits have combined to push the industry into consolidation and modernization, reducing overall refinery capacity to 17 million barrels per day by 2005 (compared to 19 billion barrels per day in 1981). However, trend growth in gasoline consumption has pushed refinery utilization rates to historical highs. Moreover, increasingly challenging fuel specifications—including the methyl tertiary butyl ether (MTBE) ban in several states—have added to the complexities of refining and distribution across state boundaries, preventing cross-boarder movements in gasoline supplies. To be sure, with returns to refining substantially above historical levels and future prospects sound, the market could easily be left to resolve the refinery shortage. However, with "time-to-completion" lags of between 5–7 years and tight federal regulations governing refineries additions and expansion, the Administration could streamline the approval process, and remove any obstacles that unnecessarily lengthen construction times. Acceptance of proposals for the construction of refineries could be facilitated by efforts to promote more efficient refinery technologies.

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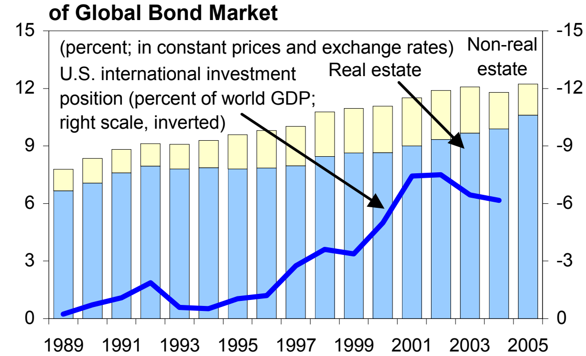
V. U.S. Banking: Financial Innovation and Systemic Risk[29]

1. ***The U.S. banking system remains highly innovative***. Following computerization and consolidation in the 1990s, banks have become highly adept at isolating and allocating the various risks associated with bonds, mortgage-backed securities (MBS), and other financial products. This has contributed to the securitization of increasingly higher-risk assets, while facilitating the application of bond portfolio management techniques to mortgage books, increasing asset price discrimination, and helping to attract foreign capital. As described in Chapter 1 of this volume, these techniques have also contributed to the growing share of U.S. MBSs in the global bond market (Figure 1).

Figure 1. U.S. Asset-Backed Securities as Share of Global Bond Market



Source: Haver Analytics.

2. ***As complexity has mounted, so too have surveillance challenges***. With banks relying increasingly on hedge funds for liquidity and trading diversity in a broad range of markets, regulators are no longer able to fully track risk on a system-wide basis, but are instead focusing more intensely on a subset of systemically important institutions. These include the "big five" investment banking groups as well as large bank holding companies (BHCs). For the purpose of this paper, the 20 largest BHCs, holding assets of $7.4 trillion (58 percent of GDP) at end-September 2005, are referred to as "large complex banking groups" (LCBGs).

3. ***This paper analyzes recent U.S. banking developments, with a particular focus on LCBGs***. The analysis is based on a review of accounting and equity market data, which are combined in a Black–Scholes–Merton "distance to default" (DD) indicator. This indicator is based on market measures of a firm's profitability and balance sheet structure. The DD varies positively with returns on assets and capitalization and negatively with the volatility of assets, and its level can be mapped into a proxy measure of probability of insolvency. Thus, any increase in DD indicates improved financial soundness—reflected in a lower probability of insolvency—resulting from higher expected profitability, better capitalization, lower asset volatility, or a combination of these factors.[30]

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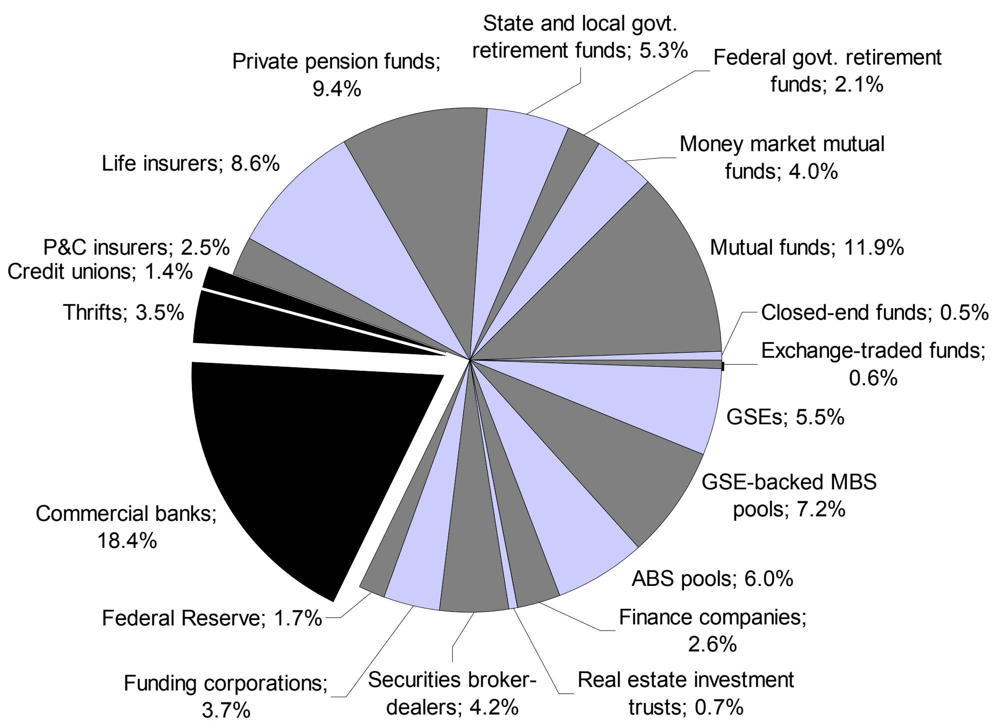
[29] Prepared by Ashok Vir Bhatia (MFD). Special thanks to Gianni De Nicoló (RES) for guidance and Marianne El-Khoury (MFD) for research assistance.

[30] For methodology, see De Nicoló and others (2004). DDs are calculated through end-2005, and so do not capture the market turbulence in mid-2006.

A. Innovation in U.S. Banking

4. ***Depository institutions are the fulcrum of the U.S. financial system, although they only account for a modest share of market assets*** (Figure 2). In addition to traditional deposit-taking and lending activities, the banking system is engaged in more complex trading businesses and offers a range of services covering most financial activities. For example, while proprietary trading activity has become commonplace at large and midsize banks, these institutions generate significant noninterest income from loan sales, servicing, securitization, ratings advisory, and fund management. Moreover, the broker-dealer subsidiaries of LCBGs, along with independent investment banks, are the leading securitizers of a wide range of assets, including into complex structures at the leading edge of financial engineering.

Figure 2. Financial Sector Assets, 2005



Source: Haver Analytics.

5. ***Against a backdrop of low interest rates and rapid house price inflation in recent years, housing finance has moved to the center of banking activity and innovation***. Large banks have transformed mortgages into a bulk commodity to be originated, securitized, and re-securitized into different risk categories for sale to domestic as well as international investors. Small and midsize banks have joined the cycle of origination and loan sale but, less able to compete against large banks with a national presence, have actively been supplementing their mortgage income with commercial real estate (CRE) lending, including for condominium construction, that requires more intimate knowledge of local conditions.

6. ***There has been substantial product innovation in the market for housing finance***. Households have traditionally been able to capitalize on steep yield curves with adjustable rate mortgages (ARMs) and step up home equity extraction with second mortgages or home equity lines of credit (HELOCs). More recently, they have also been able to purchase otherwise unaffordable homes with nontraditional ARMs carrying interest-only, negative-amortization, or low-documentation features and subsequently refinance back into fixed 15 or 30-year mortgages. Some 80 percent of the refinancing boom in 2002–03 involved traditional mortgages and HELOCs; two years later, spurred by competition between banks and mortgage companies, the market is characterized by a more complex product mix with more difficult-to-understand risks (Box 1).

B. Exposures and Risks at LCBGs

7. ***Given their size and scope, a survey of LCBGs should capture the essence of industry trends***. A focus on holding companies (as opposed to banking subsidiaries) is expedient for the equity market-based analysis to follow, because the BHC is the dominant listing unit in the banking system. The 20 LCBGs account for about two-thirds of consolidated BHC assets; one-half of net income; three-quarters of BHC securities broker-dealer assets; and virtually all BHC derivatives activity.[31]

8. ***The LCBGs form a heterogeneous set***. They include 16 U.S. BHCs and four subsidiaries of European banks. All are financial holding companies under the Gramm–Leach–Bliley Act, a status that broadens their authority to diversify functionally under the "umbrella" supervision of the Federal Reserve Board. Their emphasis on nonbank activity differs, however, with assets of their broker-dealer and insurance underwriting subsidiaries varying across LCBGs from 0–30 percent and 0–5 percent of consolidated assets, respectively. The LCBGs' banking strategies are similarly diverse, ranging from relatively traditional (mortgages and credit cards, funded by retail deposits) to complex (trading and special purpose vehicle financing for large corporate clients, funded in the markets).[32]

9. ***As corporate sector savings have grown, credit to households has become the mainstay of LCBG business***. Excluding trading assets, exposure to the household sector expanded 3 percentage points, to 36 percent of total assets, in the three years to end-September 2005, while exposure to the corporate sector correspondingly contracted to 18 percent of assets. Given the historically superior credit performance and recovery value of

[31] At end-September 2005, the system consisted of 7,527 commercial banks and 2,288 BHCs. Some LCBGs own several hundred bank (and nonbank) subsidiaries. Data for the LCBGs cover only those institutions that were in existence at end-September 2005, with market data restricted to the 16 U.S.-listed LCBGs.

[32] At end-September 2005, core deposits varied from 3–65 percent of liabilities and household sector exposure (including investments in MBSs) from 2–68 percent of assets, with a rank correlation coefficient of 0.44.

Box 1. Mortgage Market Innovation: A Structural Break?

The issue of credit risk in banks' housing exposures has received limited attention in the recent literature. Reasons include the traditionally low delinquency rates (relative to commercial and industrial loans) and high recovery rates on residential mortgages as well as the geographic diversification often provided by securitized assets.

This may partly reflect continued government involvement. Although now making up less than half of the overall MBS market, MBSs guaranteed by Fannie Mae and Freddie Mac, the two largest housing government-sponsored enterprises (GSEs), continue to account for the bulk of bank-held MBSs.[1] Consistently small spreads between agency debt and treasuries indicate a long-standing market belief that default risks of the two types of securities are similar, notwithstanding clear statements by the Treasury—and on every agency bond indenture—that the two GSEs do not enjoy a credit guarantee from the U.S. government.

As the housing GSEs have come under regulatory pressure in recent years, banks and mortgage companies have emerged as the main market innovators. While the GSEs have focused on the securitization of conforming, fixed-rate mortgages, other market participants have gained market share by packaging newer mortgage products into more complex MBSs, including through re-securitization to create MBS-backed collateralized mortgage obligations with separate risk tranches.

The increased prevalence of ARMs may have altered a traditionally weak relationship between interest rates and foreclosures. Attention has focused on the "payment shock" risk posed by ARM resets in an environment of rising interest rates and softening house prices. More specifically, bank regulators have expressed concern that products such as payment-option ARMs that traditionally served the needs of niche borrowers with large but irregular cash flows—the proverbial "Porsche salesman"—may in, 2004–05, have been extended to stretched first-time homebuyers or property investors, with insufficient due diligence and underwriting.

The market response thus far suggests that upcoming ARM resets carry both market risk and credit risk. In a typical pattern, proactive originators contact borrowers as reset dates approach, offering refinancing of ARMs into longer debt-service profiles. To the extent that borrowers are concerned about rising interest rates, this could trigger some increase in prepayment activity.[2]

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[1] With \$2.6 trillion of guaranteed MBSs and \$1.5 trillion of agency debt outstanding, Fannie Mae and Freddie Mac remain the largest underwriters of and investors in the U.S. mortgage market.

[2] Private mortgage databases suggest stretched homebuyers with nontraditional mortgages are the exception, not the rule. Cagan (2006), for instance, estimates that \$1.9 trillion of ARMs were originated in 2004–05, amounting to about 20 percent of 1-4 family mortgages outstanding; that 23 percent of such ARMs carried below-market initial "teaser" interest rates of 4 percent or less; and that 51 percent of the latter were to households with equity shares in their homes of 15 percent or less. Usefully, Cagan also estimates a national median discount of 14–16 percent on foreclosed home disposals during January 2004–June 2005.

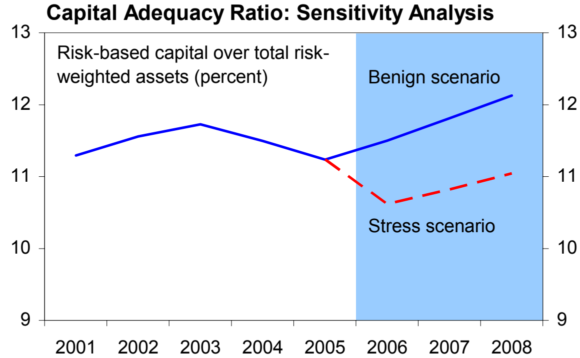
mortgages over commercial and industrial portfolios, the sectoral shift would normally augur well for asset quality. As the housing market is beginning to cool, however, concerns are growing that payment resets on ARMs and nontraditional mortgages could shock many marginal households (Box 2).

Box 2. LCBG Sensitivity to a Real Estate Shock: A Material Issue?

Although housing and commercial real estate (CRE) markets are expected to cool in a gradual and orderly manner, a more abrupt adjustment with potentially adverse impact on the banking system remains a concern.[1] Despite the mitigating and complicating factors already identified, a simple analysis of LCBG balance sheets helps provide an order of magnitude on the potential costs.

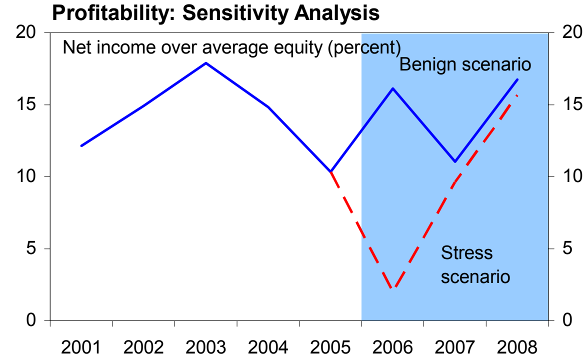
Sensitivity analysis on the LCBGs as a group suggests real estate-related credit risk could materially dent profitability, but not capital. The exercise, which focused on retained loan books, setting aside MBS portfolios, sought to isolate the impact of a deterioration in the credit quality of 1–4 family residential and CRE loans while keeping loan loss allowances constant relative to noncurrent loans. Delinquency and net charge off rates for 2006–08 were increased to their highest recorded values since 1990.[2] Relative to a benign baseline projection, the stress scenario indicated declines of about 8 percent (1 percentage point) for the average capital adequacy ratio for 2006–08; 42 percent (½ percentage point) for returns on assets (ROA); and 38 percent (5½ percentage points) for returns on equity. In sum, aggregate capital remained above regulatory floors, although aggregate profits fell by a large margin.

Capital Adequacy Ratio: Sensitivity Analysis



Sources: Federal Reserve Board; and Fund staff calculations.

Profitability: Sensitivity Analysis



Sources: Federal Reserve Board; and Fund staff calculations.

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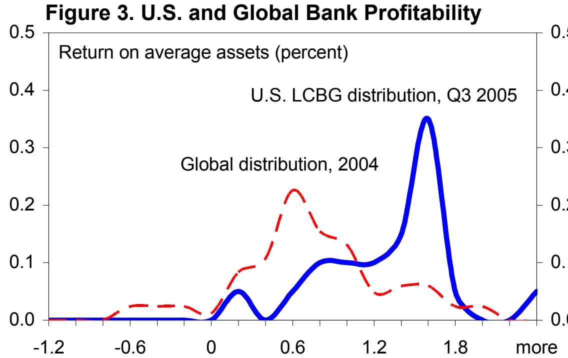
[1] CRE loans, in contrast to mortgages, have experienced fairly severe credit problems in the past, and CRE concentrations have reportedly increased at many small and midsize banks in the last five years.

[2] Delinquency rates on a 90-day basis, including nonaccrual loans, were conservatively marked up to the highest recorded values for the banking system as a whole on a 30-day basis. The baseline assumed that growth rates of total assets and gross loans, relative loan shares, and noncurrent loan ratios and net charge off rates would remain at their 2005 values through 2008.

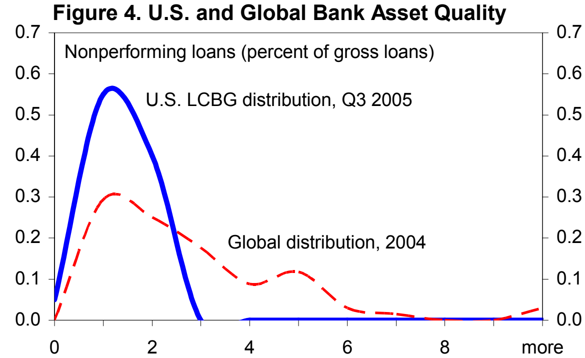
10. ***In any event, record financial results may prove difficult to sustain***. LCBGs outperformed the 100 largest banks worldwide, in terms of ROA, in 2005 (Figure 3). Real estate-related revenues contributed almost one-third of total gross income, supported by large trading gains at five LCBGs late in the year. Delinquency and net charge off rates fell to all-time lows, although an increasing ratio of loan-loss allowances to noncurrent loans suggested LCBGs were not expecting further improvements in credit quality (Figure 4). If faced with a material slowing of housing activity and related credit demand, and an uptick in foreclosures, LCBGs would be challenged to offset the revenue impact through increased lending to other sectors.

Figure 3. U.S. and Global Bank Profitability



Sources: Bankscope; Federal Reserve Board; and Fund staff calculations.

Figure 4. U.S. and Global Bank Asset Quality



Sources: Bankscope; Federal Reserve Board; and Fund staff calculations.

C. Market-Based Surveillance

11. ***With regulatory data not keeping pace with innovation, market-based surveillance has become an important complement to bank supervision***. Informational lacunae are especially evident in the reporting of hedging and credit risk transfer activity.[33] Banking agencies, therefore, maintain continuous supervisory contact with the largest institutions, including through the Large Complex Banking Organization Program and other protocols. Market participants, in turn, tend to build trading strategies around credit opinions from the rating agencies, which are uniquely positioned to assess a wide range of structured transactions. As part of its financial stability function, the Federal Reserve also monitors market-based indicators.[34]

12. ***The DD measure used in this paper suggests that LCBG financial soundness in 2004–05 was at its strongest level in a decade***. The choice of an equity-based measure over one based on newer credit risk transfer markets facilitates analysis over a longer time frame, with a stronger accent on profit expectations than credit events.[35] Calculated in its simplest form, the DD provides insights on soundness trends over time and across firms rather than precise probabilities of failure—particularly since fluctuations can sometimes be the result of shifts in investor attitudes toward risk, and less a consequence of actions by institutions under study. Results for individual LCBGs point to steady improvements in soundness in the period after the large corporate defaults of 2002.

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[33] The regulatory data do not, for instance, separate derivatives dealing positions from proprietary hedges, or clarify whether interest and exchange rate contracts represent net long or short positions, or identify holdings of collateralized debt and mortgage obligations by tranche.

[34] Nelson and Perli (2005) describe various indicators used by Federal Reserve staff, including risk-neutral probabilities of default based on credit default swap spreads and actual default probabilities of default based on Moody's KMV's "expected default frequencies", which map calculated DDs to observed firm-level default data.

[35] Indeed, "DD" may be a misnomer, given that it represents distance to insolvency rather than default.

13. ***An apparent increase in the risk diversification of LCBGs as a group is also observed, underscoring the potential value of system-level surveillance***. The "system DD" for the portfolio of LCBGs, embedding all correlations across institutions, is observed to climb faster than the average of individual DDs, implying a reduced likelihood of a shock hitting all firms contemporaneously. The widening difference between the two indicators appears to reverse a ten-year trend, observed through 2003, that had suggested LCBGs were becoming increasingly exposed to common shocks.[36] System DDs for the investment banking, insurance, and nonfinancial corporate sectors are also observed to improve.

14. ***The findings suggest no material differences in soundness among LCBGs based on their appetite for real estate exposure or emphasis on noninterest income*** (Figure 5). Separating LCBGs into two subsets, above and below the unweighted 2003–05 average ratio of real estate exposure to total assets, reveals a minor downtick in soundness at the former group in 2005, although the two subsets' average DDs remained at similar levels. This appears to indicate that markets remained relatively sanguine about risk-return tradeoffs related to the real estate sector. A similar exercise based on the ratio of noninterest income to total gross income was also inconclusive, notwithstanding the narrowing of term premiums.

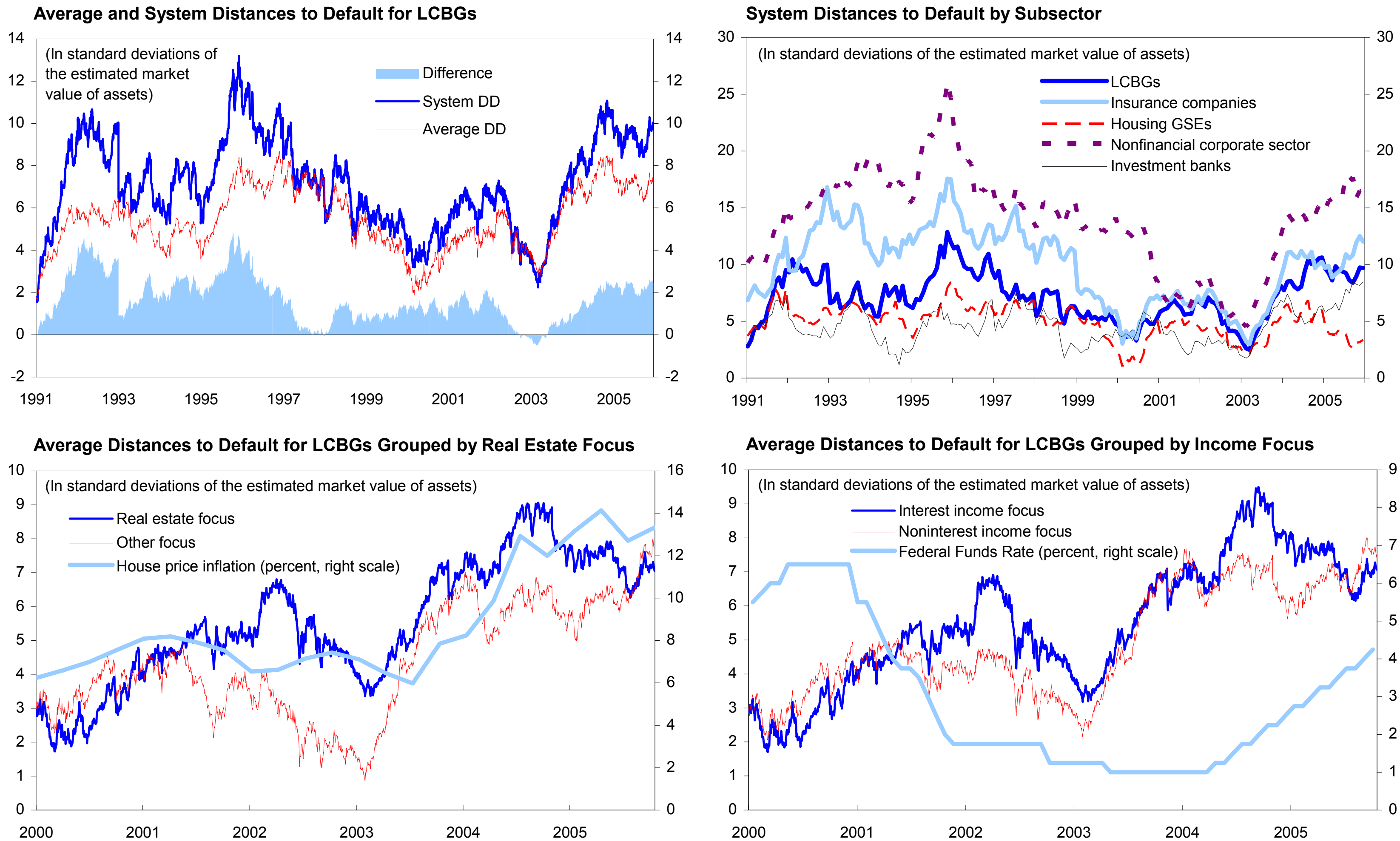
D. Regulation and Oversight

15. ***The foregoing analysis, while indicative of a banking system in good health, underscores the surveillance challenges spawned by innovation***. After years of benign conditions, new market segments could be tested in the period ahead, especially if there is a "tail event" related to global imbalances. However, accounting data shed little light on growing risk transfer activity, while market prices cannot be assumed to perfectly reflect underlying risks. In practice, U.S. regulators have met the challenge by focusing on a few systemic institutions, with an emphasis on continuous supervisory contact, internal controls, counterparty risk management, and measures to ensure rapid clearing in critical market segments. Led by the Federal Reserve, they also monitor a host of market signals.

16. ***Functional divisions remain in evidence***. With consolidation across business lines slowing, umbrella supervision has not taken on all the operational intensity anticipated under the Gramm–Leach–Bliley Act. This relates in part to the fact that synergies between banking and insurance businesses have proven elusive, as demonstrated by Citigroup divesting its

[36] In other words, banks were diversifying at the firm level while taking on similar exposures at the group level. Houston and Stiroh (2006), also basing their analysis on equity valuations, present evidence of a contemporaneous increase in systemic financial sector risk and decrease in idiosyncratic risk during 1995–2002.

Figure 5. Distance to Default Indicators for the U.S. Financial System



Sources: Datastream; Haver Analytics; and Fund staff calculations.

insurance arm in 2005 in favor of an "open architecture" model that did not limit customers to proprietary insurance products. Similarly, leading investment banks have shown themselves reluctant to submit to umbrella oversight by the Federal Reserve, generally opting to acquire industrial loan companies over commercial banking subsidiaries. In most respects, U.S. financial supervision, therefore, remains highly decentralized.

17. ***Nevertheless, the regulatory system continues to adapt***. Bank supervision is becoming more quantitative and risk-focused, with market studies playing an important supporting role. Implementation of Basel II should help improve the "granularity" of supervisory data, providing more transparency on the largest banks' internal estimates of probabilities of default, losses given default, portfolio correlations, and value at risk. Moreover, housing GSE reform tops the Administration's agenda, followed potentially by greater federal involvement in insurance regulation.

E. Conclusion

18. ***Financial soundness of LCBGs, as well as investment banks and insurers, is found to have improved in 2003–05***. Distance-to-default measures are at multi-year highs, while weakening comovements of LCBG risk profiles point to diversification gains at a system level. Dividing LCBGs into real estate-focused and other, more diversified subsets, or by the share of noninterest income in total gross income, reveals no meaningful differences.

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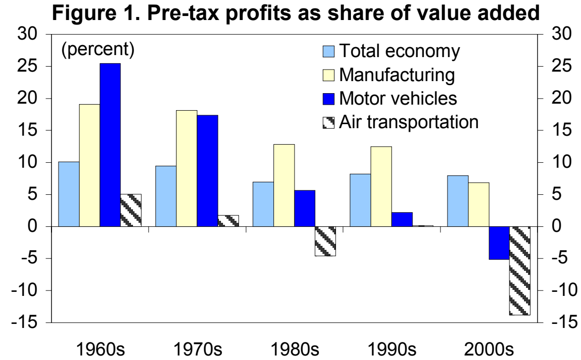
VI. Structural Change and Competition Among Auto Manufacturers and Airlines[37]

A. Introduction and Summary

1. ***The weak performance of the U.S. auto manufacturing and air transportation industries has raised questions regarding their systematic importance***. Two of the major domestic car manufacturers and their financing subsidiaries account for about 10 percent of outstanding high-yield debt (J.P. Morgan, 2005). The automotive industry also accounts for nearly 6 percent of single-employer, defined-benefit pension plan participants insured by the Pension Benefit Guaranty Corporation (PBGC), while the air transportation industry accounts for 2 percent (PBGC, 2005a).

2. ***The macroeconomic significance of these sectors has fallen, in part reflecting heavy losses***. The two industries each account for about ½–1 percent of total value added, and similar shares of employment. Both industries have experienced especially difficult times in recent years. Profitability in the auto industry has continued its decades-long downward trend; airline profits, which have been below average for some time already, also took a sharp dive in the last few years (Figure 1). Although the overall macroeconomic impact of further decline in these sectors would likely be limited, further wage, benefit and employment losses among auto and airline workers could intensify a debate regarding the rising exposure of individuals to economic and financial risks.

Figure 1. Pre-tax profits as share of value added



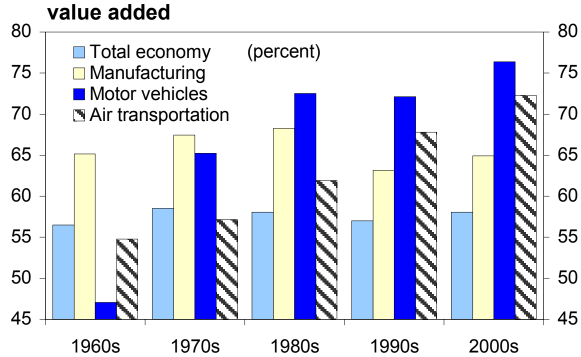
Sources: Haver Analytics; and Fund staff calculations.

B. An Anatomy of Losses

3. ***Several factors have contributed to recent losses among auto manufacturers and airlines***:

- ***Employee compensation*** (Figure 2). Compensation growth mirrored robust revenue growth in the early and mid-1990s. However, firms found themselves unable to slow compensation growth when revenues

Figure 2. Employee compensation as share of value added



Sources: Haver Analytics; and Fund staff calculations.

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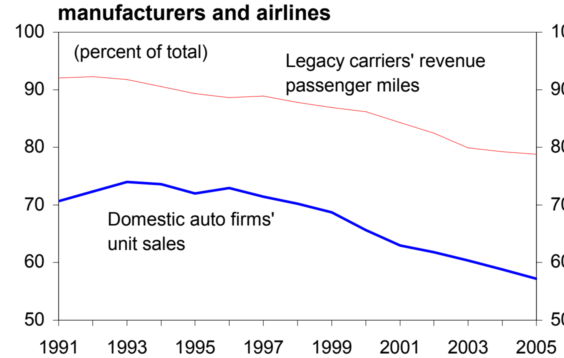
[37] Prepared by Andrew Swiston.

stagnated, in part because of their reliance on multi-year agreements negotiated with labor unions. As a result, the share of employee compensation in value added, which was already high by economy-wide standards, rose further in recent years. With an aging workforce, the auto sector was hit especially hard by rising employee/retiree benefits, which grew from a quarter of overall compensation in the 1990s to a third since 2000.

- ***Declining market share***. Competition has prevented firms from raising prices to maintain profitability, given their loss of market share. The market share of the once-dominant "Big Three" automakers has dropped from 75 percent in the mid-1990s to less than 60 percent at present, mainly vis-à-vis foreign automakers (Figure 3).[38] Meanwhile, the market share of legacy airlines fell from over 90 percent in the early 1990s to less than 80 percent currently.[39]

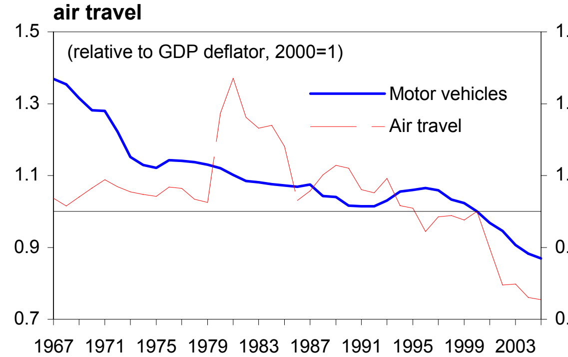
Figure 3. U.S. market share of major auto manufacturers and airlines



Sources: Bloomberg, LP; Department of Transportation; and Fund staff calculations.

- ***Falling relative output prices***. Competition has also prevented firms from raising prices to maintain profitability. After a period of relative stability, auto prices have fallen 20 percent relative to the GDP deflator since the mid-1990s (Figure 4). The price of air travel declined in the early 1990s, and, after a slight rebound through 2000, dropped 25 percent relative to the

Figure 4. Relative prices of motor vehicles and air travel



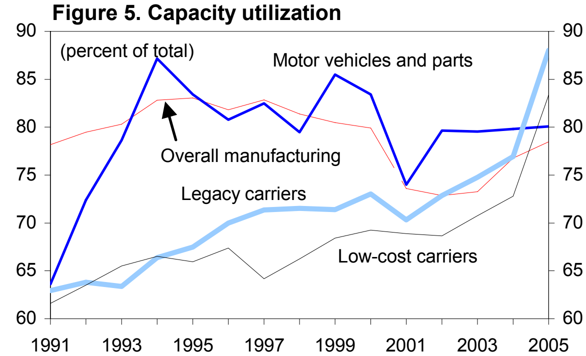
Sources: Haver Analytics; and Fund staff calculations.

[38] Domestic auto parts suppliers have also lost market share. Imported parts as a share of domestic auto output has risen from 16 to 21 percent since the late 1990s, and employment in the parts industry relative to other auto industry employment has fallen 15 percent since 2000.

[39] "Legacy airlines" refers to the six large, national carriers (historical data includes a seventh, which in 2001 was taken over by one of the other six). "Low-cost airlines" refers to seven, mostly smaller, national carriers. "Regional airlines"—smaller carriers that do not maintain a national flight network—are not included in the analysis. See GAO (2004) for a detailed description, as well as a thorough analysis of competition among airlines.

GDP deflator in the last five years. Real revenue per passenger per mile has been cut in half since 1990.

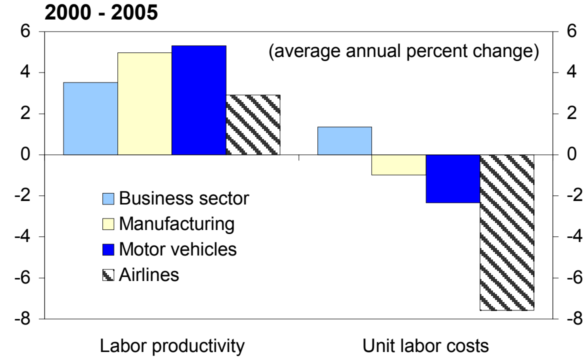
Figure 5. Capacity utilization



Sources: Haver Analytics; Department of Transportation; and Fund staff calculations.

4. ***Despite new sources of competition, spare capacity doesn't appear to be an industry-wide problem in either sector***. Capacity utilization among auto manufacturers has been higher than in overall manufacturing, while among airlines, capacity utilization as measured by the "passenger load factor"—the percent of seats filled by paying passengers—has risen by 20 percentage points since the early 1990s, at both legacy and low-cost airlines (Figure 5).

Figure 6. Labor productivity and unit labor costs, 2000 - 2005

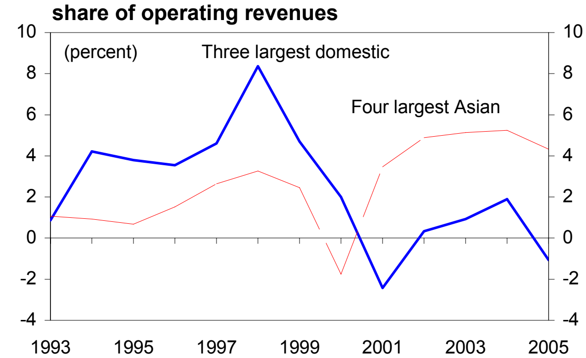


Sources: Haver Analytics; and Fund staff calculations.

5. ***In response, both sectors have cut payrolls and raised productivity, but not enough to restore profitability***. In both the auto and airline sector, the number of employees has fallen at an annual rate of around 4 percent since 2000, compared with largely unchanged payrolls in the economy as a whole. Firms in both sectors have also negotiated reductions in compensation of employees. As a result, productivity growth has remained robust despite weakness in revenues, and unit labor costs have been cut (Figure 6).

C. Intra-Industry Trends

Figure 7. Auto manufacturers: Net income as a share of operating revenues



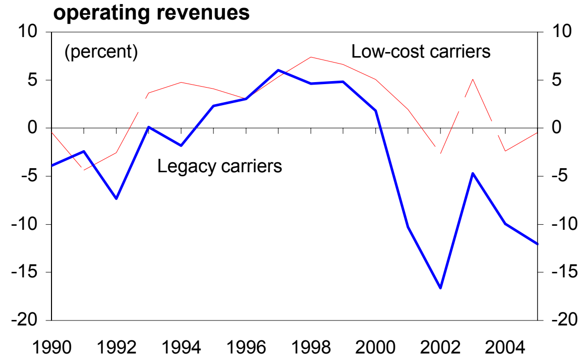
Sources: Bloomberg, LP; and Fund staff calculations.

6. ***Foreign auto companies have increasingly supplanted domestic companies in the U.S. market***. Having enjoyed higher profitability in the 1990s, the three major domestic auto companies have struggled to break even in recent years while their four largest Asian competitors remained profitable (Figure 7). The foreign firms appear to have attained higher vehicle quality and a better brand image than domestic firms—illustrated by the fact that average prices are about $2,000 higher per vehicle for a standard model (Moody's, 2005, McKinsey Global Institute, 2005). Customer satisfaction and resale value of the vehicles of foreign companies have also been consistently higher (Moody's, 2005, Sloan, 2006).

7. ***Partly as a result, foreign car companies have maintained healthier credit ratings and financial ratios in recent years***. The four largest Asian firms, for example, have all improved their credit ratings since 2000, while two of the three major domestic firms have seen their rating fall by eight steps from investment grade to "junk" status. The competitive advantage of foreign firms extends to their U.S.-based operations. While domestic firms have reduced their North America-based production by 2 percent per year since 1997, foreign firms have expanded their North America-based production by 6 percent per year, with their share of total U.S. production rising from 20 percent to 30 percent.

8. ***There has also been a wide disparity between the performance of legacy airlines and low-cost airlines***. The revenues of legacy airlines have fallen almost 7 percent per year since 2000, while revenues of low-cost carriers have grown at a 3½ percent annual rate. Despite success by legacy carriers in cutting costs, the cost gap per passenger mile between legacy and low-cost airlines has remained, and the growing market share of low-cost airlines has allowed them to avoid the massive losses experienced by legacy airlines (Figure 8). Of the seven legacy carriers operating in 2000, five have gone through Chapter 11 bankruptcy restructurings. Between 2000 and 2006, the credit ratings of legacy carriers were lowered five and a half steps on average, while low-cost carriers' ratings were lowered an average of one step.

Figure 8. Airlines: Net income as a share of operating revenues



Sources: Department of Transportation; and Fund staff calculations.

9. ***In both industries, less profitable firms have clung to outdated business models and face significant costs related to pension and health benefits***:

- In the auto sector, unionization and firm age have added to the legacy costs facing domestic firms—at about $130 billion (1 percent of GDP), their unfunded liabilities related to pension plans and other benefits are several times higher than their competitors' (FitchRatings, 2005). In addition, retiree medical costs of domestic auto firms amount to about $10 billion per year, an amount significantly higher than their competitors (Moody's, 2005). Domestic companies also lagged their competitors in introducing production process improvements, adding new vehicle features, and raising vehicle dependability (McKinsey Global Institute, 2005).

- Labor costs account for over 40 percent of the unit cost difference between legacy airlines and low-cost airlines. This reflects a more highly-tenured, highly-unionized workforce and greater retiree costs (GAO, 2004). For example, the unfunded pension liabilities of legacy airlines amount to $22 billion (0.2 percent of GDP), not including $9 billion in claims that the PBGC already assumed in 2005 from two firms in

Chapter 11 (PBGC, 2005b). Low-cost carriers, by contrast have not offered significant defined-benefit pension plans (Kiefer, 2005). Planes of legacy airlines also spend fewer hours in flight each day, in part because of older fleets with more different types of planes, which raises maintenance and training costs (GAO, 2004).

D. Conclusion

10. ***The overall macroeconomic effects of further difficulties in the domestic auto and airline sectors would likely be manageable***. Airlines are a small proportion of the economy, and the importance of auto manufacturers has already been in decline for some time. Moreover, the presence of healthy firms in each industry means that, from a macroeconomic perspective, difficulties at any firms could be offset to some extent by expanding capacity at others—as is currently occurring—or takeover of weak firms by strong ones. Even the unfunded pension liabilities covered by the PBGC represent a relatively small risk to fiscal outlays, given that losses would likely be spread over several years.

11. ***However, recent cutbacks of promised pension and health benefits highlight the broader issue of how workers and firms will adapt to a world of global competition***. Recently-approved legislation to increase PBGC premiums and index them to inflation will limit risks to the PBGC but impose a further burden on firms with underfunded defined-benefit plans. This could accelerate the trend toward defined-contribution pension plans which, combined with the declining generosity of worker and retiree health benefits, transfers risk from firms to individuals.

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INTERNATIONAL MONETARY FUND

Staff Country Reports

July 2006
IMF Country Report No. 06/279

United States: 2006 Article IV Consultation—Staff Report; Staff Statement; and Public Information Notice on the Executive Board Discussion

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2006 Article IV consultation with the United States, the following documents have been released and are included in this package:

- the staff report for the 2006 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on May 31, 2006, with the officials of the United States on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 30, 2006. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- a staff statement of July 24, 2006 updating information on recent developments.

- a Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its July 24, 2006 discussion of the staff report that concluded the Article IV consultation.

The document listed below has been or will be separately released.

Selected Issues Paper

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

UNITED STATES

Staff Report for the 2006 Article IV Consultation

Prepared by the Staff Representatives for the 2006 Consultation with the United States

Approved by Anoop Singh and Carlo Cottarelli

June 30, 2006

- ***The 2006 Article IV discussions took place in Washington, D.C. during April and May***. The staff team comprised C. Towe (Head), T. Bayoumi, M. Mühleisen, R. Balakrishnan, V. Klyuev, K. Krajnyák, S. Ouliaris, and E. Tsounta (all WHD); P. Mills (ICM); A. Bhatia (MFD); P. Mullins (FAD); H. Lankes and J. Hallaert (PDR). Ms. Lundsager, Alternate Executive Director, and Ms. Pollard, Advisor (OED), also participated in the meetings.

- ***The Managing Director, the First Deputy Managing Director, Mr. Rajan (RES), Mr. Singh (WHD), and Mr. Moghadam (OMD) took part in the concluding discussions with outgoing Treasury Secretary Snow and Federal Reserve Chairman Bernanke on May 31***. The mission also met with officials from the U.S. Treasury, Federal Reserve Board, Congressional Budget Office, Department of Health and Human Services, Federal Deposit Insurance Corporation, National Association of Insurance Commissioners, National Association of State Budget Officers, Office of the Comptroller of the Currency, Office of Management and Budget, Office of the U.S. Trade Representative, Pension Benefit Guaranty Corporation, and Securities and Exchange Commission. The team also met with financial and energy market participants, officials of the Federal Reserve Banks of Dallas and New York, and the New York State Insurance Department in February and March.

- ***The United States is a party to the convention on Combating Bribery of Foreign Public Officials in International Business Transactions and the Financial Action Task Force (FATF)***. An evaluation of the United States' compliance with FATF recommendations took place in 2006, with the report currently being finalized.

- ***U.S. authorities are developing a strategy to respond to an outbreak of an "avian flu" pandemic that includes preserving the functionality of the financial system***. Financial institutions are expected to develop response plans based on government assumptions, and tests of the authorities' own preparedness are set to take place later in the year. Given the heavy reliance on remote computer access in case of an outbreak, the capacity of the communications infrastructure to provide sufficient bandwidth remains a critical factor.

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EXECUTIVE SUMMARY

The U.S. economy has remained a key engine of global growth, despite devastating hurricanes, a withdrawal of monetary stimulus, and high energy prices. Activity has remained robust, supported by strong productivity growth, and buoyant tax revenues seem likely to keep the FY 2006 federal deficit well below initial budget estimates.

The Federal Reserve will need to steer a delicate course between competing risks. A cooling housing market, higher energy prices, and an unusually low saving rate could weigh more heavily on activity than expected. However, given the recent pick up in core inflation and price expectations, policymakers have appropriately cautioned that some further policy firming may yet be needed. There would also seem merit in the Fed providing a more explicit statement of its inflation objective to help further anchor inflation expectations.

The U.S. financial sector has proven innovative and resilient in recent years. There are important areas where further reform could help enhance the financial system's strength and efficiency, including by tightening the supervision of the housing GSEs, moving to consolidate supervision and regulation of insurance companies, and reforming corporate pension plans. Publishing a regular *Financial Stability Report* and undertaking a Fund FSAP could provide further insights on these challenges.

Firm and vigorous implementation of the cooperative strategy laid out by the IMFC last April would support an orderly resolution to global imbalances. The United States has a major role to play in addressing this shared responsibility, and its main task remains to boost national saving, including by more ambitious fiscal consolidation. Achieving a balanced budget, excluding the Social Security surplus, within the next five years would set the federal debt ratio on a firm downward path and reduce the fiscal burden on future generations.

Although controlling outlays should remain central to deficit reduction, revenue measures should not be ruled out. There would seem merit in re-introducing caps on discretionary spending, as well as pay-as-you-go (PAYGO) requirements covering both entitlement spending and tax measures. On the revenue side, the priority should be on reforms that would broaden the revenue base by reducing tax preferences, but consideration could also be given to consumption-based indirect taxes.

It is critically important to re-invigorate the momentum for entitlement reform. Based on existing proposals, the challenge for policymakers is to form the necessary consensus to reform Social Security. Moreover, given the much larger financial shortfall of the Medicare system, fundamental reform of the U.S. health care system seems necessary.

Leadership by the United States remains key to global trade liberalization. Continued U.S. commitment is needed to ensure sufficient momentum for an ambitious conclusion to the Doha Round negotiations. Care will also be needed to resist domestic protectionist sentiment and to ensure that bilateral trade initiatives complement multilateral approaches.

I. Outlook and Key Issues

1. ***The U.S. economy has continued to be an engine of global growth despite monetary tightening and high oil prices*** (Figure 1). Over the last year, household spending remained robust, spurred by mortgage borrowing and double-digit house price inflation. However, with employment and wage growth remaining modest, the household saving ratio dropped into negative territory. As a result, and notwithstanding strong business saving and an improvement in the fiscal balance, the current account deficit reached a new record high.

2. ***Officials and staff both expect a "soft landing," with growth easing to potential and inflation remaining contained*** (Tables 1 and 2).[1] The housing market is likely to cool in response to high valuations and tightening financial conditions, causing the impetus from consumption and residential investment to wane, but strong fundamentals should continue to support business investment. The external deficit is likely to remain wide, but the drag on activity from net exports will lessen as growth abroad strengthens. On the supply side, solid productivity growth should accommodate wage gains while containing price pressures.

United States: Medium-Term Projections
(Percent change from previous period, unless otherwise indicated)

	2005	2006	2007	2008	2009	2010	2011
National production and income							
Real GDP	3.5	3.5	3.1	3.2	3.2	3.2	3.2
Total domestic demand	3.6	3.7	3.1	3.1	3.1	3.1	3.1
Final domestic demand	3.9	3.6	3.1	3.1	3.1	3.1	3.1
Private final consumption	3.5	3.1	2.8	2.8	2.8	2.9	2.9
Net exports 1/	-0.3	-0.4	-0.2	-0.1	-0.1	-0.1	-0.1
Unemployment rate (percent)	5.1	4.8	4.8	4.8	4.8	4.8	4.8
CPI inflation	3.4	3.2	2.6	2.5	2.5	2.5	2.5
Unified federal balance (Fiscal year) 2/	-2.6	-2.3	-2.6	-2.3	-2.0	-1.9	-1.8
Current account balance 2/	-6.3	-6.5	-6.7	-6.7	-6.7	-6.7	-6.7
Memorandum items:							
Partner country growth	2.8	3.2	2.9	2.9	2.8	2.8	2.8
Oil prices ($/Barrel) 3/	53.4	66.5	69.8	68.5	67.5	66.8	66.0

Sources: Haver Analytics; and Fund staff estimates.
1/ Contributions to growth; NIPA basis, goods and services.
2/ In percent of GDP.
3/ Average petroleum spot price: simple average of U.K. Brent, Dubai, and West Texas prices.

3. ***Staff and officials also concurred on the sources of macroeconomic uncertainties, but had somewhat different perceptions of the balance of risks*** (Figure 1 shows fan charts, whose construction is discussed in Annex I):

[1] Box 1 summarizes the United States' relations with the Fund.

Box 1. Fund-U.S. Relations

The United States and the Fund enjoy a close relationship, reflecting a consensus on the fundamental factors underpinning growth in market-based economies. Chief among those are a commitment to free trade, the strong role of property rights and sound institutions, flexible labor and product markets, a deep financial system, a relatively small size of government, and a high degree of transparency of economic policy decisions.

Within this broader consensus, both sides have taken different views on the amount of U.S. fiscal adjustment needed to prepare for population aging and the role of tax policy. While both sides agree that entitlement reform is key to long-term sustainability, the Fund has been advocating a more determined effort at fiscal consolidation to prepare for population aging. The Administration aims to reduce the deficit to around its long-term average of 1½-2 percent of GDP, and has ruled out revenue measures to achieve more ambitious deficit reduction.

The authorities also remain skeptical about the role of U.S. fiscal policy in reducing global current account imbalances. The authorities commended bilateral surveillance of the United States for integrating analysis from the Fund's *World Economic Outlook* and other sources.[1] However, they have discounted staff arguments that fiscal adjustment in the United States by itself could contribute significantly to an orderly adjustment of global current account imbalances, presenting their own analysis to suggest that the U.S. current account deficit is relatively insensitive to U.S. fiscal policy.[2]

Nevertheless, the United States has been a key voice for strengthening the role of the Fund in resolving global imbalances. Treasury officials have called on the Fund to strengthen its surveillance over members' exchange rate policies and have supported the introduction of multilateral consultations, reflecting the authorities' view that the resolution of global current account imbalances is a shared responsibility.

U.S. legislation has also been seeking to promote sound economic policies internationally through the work of the Fund. The U.S. Executive Director is obliged to pursue slightly more than 70 legislative mandates (as of August 2005) prescribing U.S. policy goals at the Fund, ranging from exchange rate stability to strengthened financial systems, good governance, AML/CFT, and U.S. voting positions on assistance to individual borrower countries. Progress toward these goals is evaluated in annual reports by the U.S. Treasury and the U.S. Government Accountability Office (GAO) to Congress.[3]

The authorities' agreement to discuss the modalities of a Financial Sector Assessment Program (FSAP) provides a welcome recognition of the Fund's work on financial sector soundness. The United States is the last G-7 country yet to agree to an FSAP, which has been a long-standing recommendation by staff.

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[1] "Working with the IMF to Strengthen Exchange Rate Surveillance," Remarks by Under Secretary for International Affairs Tim Adams at the American Enterprise Institute, February 2, 2006.

[2] See M. Barth and P. Pollard, "The Limits of Fiscal Policy in Current Account Adjustment," Department of the Treasury, Office of International Affairs, Occasional Paper No. 2, 2006.

[3] See "Implementation of Legislative Provisions Relating to the International Monetary Fund: A Report to Congress," Department of the Treasury, November 2005.

- ***Staff considered risks to growth to be on the downside***. The possibility of a more abrupt slowdown in the housing market, possible disappointments on the productivity front, and a disorderly adjustment to global imbalances more than offset the upside potential for business investment. Further, more difficult to quantify downside risks stemmed from avian flu and geopolitical events. Officials regarded risks as relatively balanced as they were more sanguine about the potential impact of the housing slowdown on spending and placed greater weight on upside potential from business investment, exports, and productivity.

- ***Staff suggested that the risks to inflation were on the upside.*** These stemmed largely from supply effects, including the possibility of a larger-than-anticipated productivity slowdown pushing up unit labor costs and the potential for pass-through of high commodity prices. Federal Reserve officials acknowledged the risks from commodity prices but were less concerned about downside risks to productivity growth.

4. ***Against this outlook, growing global current account imbalances, and the imminent retirement of the "baby boom" generation, the discussions focused on***:

- ***Maintaining noninflationary growth***. With policy interest rates having risen to around neutral, and output and inflation risks somewhat skewed, monetary policy decisions had become more delicately balanced.

- ***Preserving domestic and external financial stability***. For example, U.S. policies could reduce risks from financial market volatility stemming from a disorderly resolution of global external imbalances.

- ***Preparing for an aging population***. This involves reforming unsustainable entitlement programs and potentially pursuing more forceful medium-term public debt reduction to cope with spending pressures as the baby boom generation retires.

II. Monetary Policy: Maintaining Noninflationary Growth

A. How Fast Will Household Spending Slow?

5. ***Household spending has been the main driver of the expansion, boosted by the housing boom*** (Figure 2). With capital gains—particularly on houses—boosting personal wealth, real consumption and residential investment spending has grown an average ½ percentage point faster than GDP since the 2001 recession. Real disposable income growth has been held back by rising energy prices and lackluster employment growth, and household saving turned negative as spending was financed in part through home equity withdrawal (HEW), which rose to a record 8 percent of U.S. personal income in 2005.

6. ***Staff and officials agreed that easy financing conditions and flexible U.S. financial markets had supported the housing market and contributed to a record housing equity withdrawal (HEW) ratio*** (Figure 3). Mortgage securitization had helped channel foreign savings into the U.S. housing market while allowing mortgage originators greater flexibility

to diversify credit exposures and reduce systemic risk. Innovative mortgage instruments, low refinancing costs, and access to tax-advantaged home equity loans, had also supported HEW.

7. ***Staff observed that, while conditions varied across regions, U.S. house prices seemed overvalued and a correction appeared to have started*** (Chapter 1 of the *Selected Issues* paper suggests house prices are 15–20 percent above equilibrium). Fed officials did not disagree with this assessment but cautioned that such estimates were subject to considerable uncertainty and varied considerably across models. Moreover, empirical evidence suggested that the impact of personal income and employment conditions on house prices tended to dominate that of long-term interest rates, suggesting that less favorable financing conditions were unlikely to represent a significant shock to prices.[2]

8. ***Staff and officials agreed that a cooling in the housing market was likely to dampen consumption and residential investment***. The mission suggested that, with real house price inflation likely to halve to 5 percent in 2006 (yoy)and decelerate further subsequently, the increasing use of HEW and nontraditional mortgages implied that the sensitivity of consumption to a change in housing wealth would probably be at the upper end of the usual estimate of 3–7 cents per dollar. Once the impact on residential investment was added, this implied a reduction in GDP growth of around ½ percent of GDP over the next two years (Annex I). Background work, summarized in Annex II.1, illustrates that in the U.K. and Australia, countries that experienced HEW ratios similar to that in the United States in recent years, slowing house price inflation led to a manageable rebound in household saving.

9. ***Staff viewed the balance of risks for household spending and residential investment as being on the downside***. A faster deceleration in house prices could further amplify the impact on consumer and residential spending by eroding confidence and increased the strain on borrowers. These risks were exacerbated by the negative household saving rate and continued high energy prices that reduced discretionary spending power. Fed officials responded that, given the surprising strength of consumption over many years, smaller effects from slowing house prices and high energy costs were also possible.

B. Will Business Investment Surprise on the Upside?

10. ***Fed officials viewed the recent strength of business investment as consistent with underlying fundamentals***. While business investment had been weak in the aftermath of the IT bubble, officials viewed the trends in the capital/labor ratio and other indicators as suggesting that any post-IT bubble overhang had been worked off. Continuing declines in capital goods prices and strong demand had made capital accumulation attractive even as interest rates had become less stimulative. As a result, purchases of (especially IT) equipment and software had accelerated to levels not seen since the late-1990s. Real growth in structures had been less strong and, given high office vacancy rates, officials expected this trend to continue.

---

[2] Private sector analysts projected a relatively small short-term impact on the ratio of debt payments to income from upward movements in variable mortgage rates on adjustable rate mortgages and nontraditional mortgages.

11. ***Officials and staff agreed that business investment could surprise on the upside***. In line with global trends, the corporate sector had used high profits and low interest rates to strengthen balance sheets—including through equity buybacks—and accumulate large cash holdings, taking on the unusual position of a net lender (Figure 4).[3] Although an expected weakening in consumption growth could have some dampening effect on business spending, extremely strong fundamentals—the near-record profit rate, healthy expected earnings growth, low leverage, and the still low cost of capital—suggested upside risks dominated.

C. Are Price Pressures Building?

12. ***Fed officials acknowledged that the recent uptick in core inflation had been discouraging***. The unemployment rate—at 4¾ percent in April—had fallen to the low end of most estimates of the NAIRU, and capacity utilization was around its long-run average. Nevertheless, unit labor cost increases had been contained, reflecting solid productivity growth and modest wage gains. Officials noted that the absence of wage pressures could indicate a lower level of the NAIRU, although other structural factors, including globalization, could also have played a role. Staff analysis (summarized in Annex II.2) suggests that low inflation in recent years has largely reflected a larger-term downward trend. This has been somewhat reinforced by cyclical factors, including through globalization, that could reverse as the domestic and global environment evolves.[4]

13. ***Officials expected wage pressures to pick up over the coming year, but did not anticipate much pass-through to overall inflation***. The post-2000 drop in labor market participation (discussed in Chapter 2 of the *Selected Issues* paper) was unlikely to be reversed. Thus, low unemployment could eventually lead to a pick-up in wage growth and some recovery of the labor share of national income (Figure 5).[5] However, this would not necessarily translate into inflation, given strong productivity growth and room for downward adjustments to profit margins.

14. ***Officials also observed that the boom in commodity prices implied a short-term inflation risk***. Energy prices now seemed to be feeding into inflation expectations, and this process might not yet be complete even if energy prices remained at their present level. While the impact of higher oil prices on the economy had been smaller than in the past, partly reflecting the reductions in oil intensity of production and productivity growth (staff analysis is contained in Chapter 3 of the *Selected Issues* paper), there continued to be a risk

[3] See Chapter 4 of the April 2006 *World Economic Outlook*.

[4] Chapter 3 of the April 2006 *World Economic Outlook* contains a multilateral discussion of globalization and inflation.

[5] Chapter 2 of last year's *Selected Issues* paper analyzes international trends in labor's share of national income.

of price shocks related to bottlenecks in some key segments of the U.S. energy infrastructure.[6]

D. Monetary Policy Discussions

15. ***The technical discussions took place before the increase in financial market volatility of May-June and the associated heightened concerns voiced about inflation, including by senior Fed officials***. The global sell-off of riskier assets—most notably global equities and emerging market bonds—confirmed incipient evidence that the credit cycle was turning but has not had a significant impact on private sector assessments of U.S. growth prospects or financial vulnerabilities.

16. ***At the time of the meetings, staff suggested that, at 5 percent, the federal funds rate was close to most estimates of a neutral level*** (Figure 6). With inflation risks on the upside, however, a "risk management" approach to monetary policy—which took into account both the likely path of the economy and the risks around that path—could suggest the need for some further tightening, consistent with market expectations of a further rise in the federal funds rate by 25 basis points in subsequent months.

17. ***Officials responded that the direction of future policy decisions had become much less certain than earlier, when the federal funds rate was well below the neutral range***. The May 10 Federal Market Open Committee (FOMC) statement reflected these considerations, noting that while "a further policy firming may yet be needed to address inflation risks … the extent and timing of any such firming will depend importantly on the evolution of the economic outlook as implied by incoming information." Reflecting heightened inflation concerns, the FOMC raised the Fed funds rate to 5¼ percent on June 29 and the accompanying statement observed that while "some inflation risks remain ... any additional firming will depend on the evolution of the outlook for both inflation and economic growth."

18. ***Fed officials noted that policy decisions were complicated by uncertainty about the factors contributing to low long-term bond yields***. If low term premiums reflected a shift in portfolio preferences toward long-term assets—possibly in response to the "great moderation" in macroeconomic volatility in recent decades—short-term interest rates would need to be higher than otherwise to offset the boost to demand from lower long rates. Conversely, if low term premiums reflected a weakening of global investment demand or higher global saving that helped contain domestic price pressures, a tightening would not be warranted.

19. ***They observed that the impact of global financial market integration on the monetary transmission mechanism was equally difficult to assess***. Staff suggested that increased integration of national bond markets could help explain the muted rise in long-term interest rates and the correspondingly subdued response of demand components to U.S.

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[6] Recent hurricanes have underlined structural weaknesses in the U.S. energy industry, including heavy reliance on Gulf Coast facilities and slow growth in refinery capacity. There are also increasing signs of strains in the electricity sector, as discussed in Chapter 4 of the *Selected Issues* paper.

monetary tightening. Officials responded that it was difficult to gauge how the monetary transmission mechanism had changed in recent years, but they noted that recent movements in long-term interest rates seemed to reflect a relatively accurate anticipation of the pace and timing of Fed tightening, and the response of demand to these interest rate movements was consistent with past trends.

20. ***Fed officials did not see rising commodity prices as reflecting broader global inflationary pressures***. Rather than a symptom of abundant global liquidity—including through easy U.S. monetary policy—officials viewed the commodity price boom as reflecting a relative price shift in response to rapid growth in commodity intensive countries, such as China. While the global economy might be hitting some bottlenecks, there was little sign of generalized pressures on resources. Rather, fast productivity growth in emerging markets had limited cost increases of their products and the ability of producers elsewhere to pass through higher commodity prices.

21. ***The mission suggested that the present conjuncture seemed propitious for the Fed to define its inflation objective more explicitly***. Fed officials responded that a committee headed by Vice-Chairman Kohn had been established to examine the Fed's overall communication policy, including refining the definition of stable prices. Before such a refinement could occur, however, it would be necessary to establish a consensus that, by lowering inflation uncertainty, such a move would also be helpful in achieving the other objectives defined in the Federal Reserve Act (maximum employment and moderate long-term interest rates). Staff also suggested it could be helpful to increase the frequency and forward-looking element of the biannual *Monetary Policy Report*, to which officials responded that it would be difficult given the size and diversity of the FOMC.

III. Preserving Domestic and External Financial Stability

A. How Long Will Benign Financing Conditions Continue?

22. ***Discussions of financial sector developments centered on the implications of the rapid pace of change in the structure of U.S. financial markets*** (Figure 7). Officials observed that low credit spreads partly reflected the effectiveness of securitization and credit risk transfer techniques for improving the pricing and allocation of credit risk, especially for asset classes with higher risk profiles.[7] The increased activity of hedge funds had enhanced price discovery and liquidity in many of the new markets. However, they agreed with the mission that some markets had yet to be fully tested in a less benign financial environment.

23. ***Officials observed that banks had been remarkably adept in responding to changing market conditions***. Although banking margins had been squeezed by the flattening of the yield curve, profitability had been sustained by non-interest income and low charge-off rates, notwithstanding the impact of Hurricane Katrina and a spike in personal bankruptcies in late 2005 ahead of changes to the bankruptcy code. While bank revenues remained

[7] Discussed in various *Global Financial Stability Reports* and Calvin Schnure "Boom-Bust Cycles in Housing: The Changing Role of Changing Financial Structure," IMF Working Paper 05/200.

dependent on the real estate market, even small and regional banks had traded parts of their loan book against mortgage-backed securities, reducing their vulnerability to regional shocks.

24. ***Staff and officials agreed that a range of indicators suggested that systemic risks were at a low ebb*** (Figure 8):

- ***Distance-to-default measures*** for "large complex banking groups" (LCBGs, discussed in more detail in Chapter 5 of the *Selected Issues* paper), the "big five" investment banks, and the insurance sector had recovered to levels last seen in the mid-1990s. Default risks were largely confined to declining industries (the auto and airline sectors are discussed in Chapter 6 of the *Selected Issues* paper).

- ***Value-at-risk and implied default risk measures*** were low despite upticks after the May 2005 automotive industry rating downgrades and a large insurer's admission of accounting inaccuracies in late 2004.

- ***Capital adequacy*** remained strong across the banking sector, reflecting high profitability in recent years.

25. ***Staff and officials agreed, however, that increased risk-taking could foreshadow some deterioration in credit quality***. U.S. corporate credit markets remained strong, supported by sustained brisk earnings growth, and credit spreads were low. However, staff observed that ample liquidity had begun to facilitate a pickup in mergers and acquisitions as well as leveraged buyout activity, while easier bank lending conditions had allowed loan leverage ratios to rise to levels last experienced in 1997. These trends could signal a turn in the credit cycle, leading to increased market volatility and widening corporate credit spreads. Subsequent to the discussions, a rise in equity market volatility in May and June was accompanied by a global sell-off of riskier assets, although the impact on corporate bond spreads has been modest.

26. ***Financial sector risks related to household borrowing appeared relatively manageable***. With bank exposures increasingly concentrated in the household sector, officials felt that recent regulatory guidance tightening standards for home equity lending and nontraditional mortgages had already led to tighter credit conditions in those markets. Moreover, stress tests indicated that borrowers at risk of significant mortgage payment increases remained a small minority, concentrated mostly among higher-income households that were aware of the attendant risks. Officials acknowledged, however, that for banks with high concentrations of commercial real estate and construction loans on their books, sustaining revenues in the case of a downturn could be difficult. Staff observed that there was a risk of a significant dent in banking profitability if the housing market slowed abruptly.

27. ***Officials acknowledged that regulators were facing a challenge to respond to the rapid evolution of the financial system***. They emphasized that—with markets becoming more complex and decentralized—supervisors could no longer track risk exposures on a system-wide basis, but instead needed to ensure that controls and procedures at systemically important institutions and infrastructure providers were robust. Given the increasingly

complex structure of bank's operations, traditional supervisory activities were being augmented by a stronger analytical focus on large banks and critical market segments.

28. ***Specific regulatory issues covered during the discussions included***:

- ***Hedge funds***. Fed officials noted that leverage and concentration indicators of hedge funds had moderated, and that their trading strategies were more diverse than in the period leading up to the LTCM crisis. The mission broadly agreed with their view that hedge fund market activities were too fluid for direct regulation to be effective, and that supervisors—both in the United States and abroad—needed to focus instead on measures to limit counterparty risk to banks acting as prime brokers and to continue to improve the financial infrastructure.[8]

- ***Government-sponsored enterprises (GSEs)***. Staff and Treasury officials agreed on the need for rules to reduce the size of GSEs' own portfolios given the systemic risks they posed to the financial system. Officials were cautiously optimistic that the Administration's proposals to create a new regulator, establish risk-based capital requirements, and limit GSEs' portfolios would gain congressional support in 2006. Using the Treasury's ability to limit GSE debt issuance remained a second-best alternative, as it could encourage these institutions to accept greater risks to maintain profitability.

- ***Basel II***. Bank regulators expected some decline in minimum capital requirements after the shift to Basel II norms in 2009. They acknowledged that the impact on bank balance sheets was uncertain, in part because the role of the economic cycle would only become fully evident after the system was implemented. However, capital adequacy standards could be recalibrated, if necessary, as the transition to the new framework was to take place over several years.

- ***Insurance regulation***. Officials observed that the Administration had recently flagged the need for a stronger federal role in insurance regulation, which was presently a state responsibility. Staff supported this suggestion given the sector's systemic importance, increasing globalization, and the potential for regulatory arbitrage across jurisdictions. Officials noted that similar considerations could argue for some consolidation in the regulation of some segments of the financial sector (including banks), although specific proposals were not under consideration.

- ***Industrial Loan Companies (ILCs)***. Federal Reserve officials reiterated their concern that large commercial firms owning ILCs—some of which had evolved into sophisticated financial institutions—were not subject to consolidated supervision provisions under the Bank Holding Company Act. To protect the principle of

[8] Reflecting its focus on investor protection, the SEC proposed a rule requiring the registration of U.S. hedge fund advisers to improve controls and record-keeping systems. However, this regulation was struck down by the courts in June of this year.

- consolidated supervision over banking operations, the mission agreed that ILCs should be limited in their ability to establish nationwide branch networks.

29. ***The mission suggested that a Fund Financial Sector Assessment Program (FSAP) might be a useful vehicle for providing an international perspective on these issues***. Treasury and Fed officials responded that they were open to participating in an FSAP, and indicated interest in discussing specific modalities. The team also asked whether publishing a *Financial Stability Report*—as prepared by many other central banks or financial sector supervisors—might improve the market's understanding of U.S. financial risks and vulnerabilities. Fed officials responded that such a report would not add much value to what was already being published by regulators and market participants.

30. ***The team welcomed Administration proposals to strengthen defined benefit (DB) plans***. Officials explained that current workers seemed to be accumulating retirement assets at a pace comparable to previous generations but, given the unfunded liabilities of many DB plans and the Social Security system, maintaining living standards past retirement could become more challenging. Proposals included reducing disincentives for overfunding of plans, using corporate bond yields to calculate pension liabilities, and allowing the Public Benefit Guaranty Corporation (PBGC) to set risk-based premiums. On the accounting side, officials were confident that a pending proposal by the Financial Accounting Standards Board (FASB) to include pension accounts in corporate balance sheets would lead to greater transparency and could help improve plan funding.

31. ***Staff and officials agreed that automatic enrollment in employer sponsored defined contribution plans with rising contribution schedules could help boost personal saving.*** Officials were seeking to amend pension regulations so that workers could be automatically enrolled in such plans, but legislation might be required to protect employers from legal sanctions that might arise if the return on pension investments disappointed. Officials observed that tax incentives, such as the lifetime saving accounts (LSAs) proposed in the budget, could also stimulate personal saving, but acknowledged that the net impact on national saving might be small in the absence of offsetting deficit-reduction measures.

B. How Will the Current Account Deficit Adjust?

32. ***The current account widened to a record 6¼ percent of GDP in 2005, owing to higher oil prices and the relative strength of U.S. import demand*** (Figure 9 and Tables 3 and 4). In addition, staff analysis suggests that the shift in U.S. trade toward low-cost producers had blunted some of the measured real effective exchange rate depreciation in recent years (Figure 10 and Box 2 in last year's *Staff Report*). Nonetheless, the U.S. net foreign liability (NFL) position barely deteriorated in 2005, reflecting the effects of the relative strength of foreign equity markets on U.S. residents' investments, although recent financial market developments may have reversed some of these gains.

Box 2. U.S. Spillovers to the Rest of the World

With the world's largest economy and most dominant financial markets, the U.S. has large significant spillovers on other countries :

- ***Real activity***. Past *WEO* forecast errors (available since 1990) suggest that an unanticipated 1 percent undershoot in U.S. growth is associated with a ¼ percent slowing in growth elsewhere, with the largest effects being on countries with close trade and financial links. This may underestimate the effect of U.S. growth on the rest of the world, given the possible offsets provided by large non-U.S. shocks in the 1990s—such as the Asian crisis and German unification.

United States: Spillover Effects of Unanticipated U.S. Growth on the Rest of the World and Key Trading Partners, 1990-2005 1/

Rest of the World	0.23
Canada	0.42
China	0.74
Mexico 2/	0.67
United Kingdom	1.19
Euro Area 3/	0.34
Japan	0.19

Source: Fund staff calculations

1/ Values indicate the empirical relationship (slope coefficient) between U.S. growth forecast error and a given country's growth forecast error.

2/ Estimated over 1998-2005, to exclude the effects of the Tequila crisis.

3/ Median of France, Germany, and Italy.

- ***Financial markets***. U.S. financial markets retain their global dominance, for example dollar assets represent about half of global private sector bonds. Recent studies find that shocks to U.S. long-term real interest rates continue to flow through to foreign rates, including to major regions such as the euro area, and emerging market bond spreads appear particularly closely linked to U.S. financial conditions (see Box 1.5 of the April 2006 *Global Financial Stability Report*). In addition, rising gross international investment positions have increased the potential for wealth spillovers from changes in the dollar and U.S. asset prices (Annex II.4). Finally, U.S. financial market conditions have a direct impact on countries that link their exchange rates to the U.S. dollar.

- ***External indebtedness***. Most analysts agree that while the size of U.S. net international liabilities are not currently a concern they are growing at an unsustainable rate. While many see a significant—and possibly abrupt—adjustment of the dollar as being necessary to correct this trend, with attendant risks for global growth and financial stability (as discussed in the *World Economic Outlook*), others have suggested that the resolution could come through a gradual adjustment of global saving and investment balances with more limited impacts on exchange rates.

U.S. monetary and fiscal policies also have international spillovers although the size of their impact remains a subject of controversy. *Global Financial Stability Reports* have discussed how abundant international liquidity—partly reflecting the stance of the Fed—has put downward pressure on global bond yields and supported a search for yield. In addition, analysis in the *World Economic Outlook* and elsewhere has estimated the impact of U.S. fiscal deficits on U.S. and global saving, external imbalances, and global real interest rates.

U.S. policies often matter more for other countries than domestically. A good example of this is the proposal by the President's Tax Reform commission to move from taxing worldwide corporate earning to a territorial system, which has generated almost no discussion at home but could significantly increase global tax competition. Staff analysis of this subject is discussed in Annex II.5.

33. ***Officials agreed that the current account deficit seemed likely to widen further***. Although the pickup in activity in Europe and Japan would support the trade balance, the large gap between exports and imports meant that exports needed to grow almost twice as fast as imports simply to keep the deficit unchanged. This could be difficult to achieve given that most estimates placed the income elasticity of U.S. imports as up to double the size of that for exports. Growing foreign indebtedness and rising U.S. interest rates also meant that debt dynamics were adverse, with the investment balance expected to turn negative in 2006.

34. ***The staff noted that the real exchange rate appeared significantly overvalued, especially given the projected deterioration of U.S. net foreign liabilities*** (see Annex III). A staff assessment using macroeconomic fundamentals estimated the overvaluation in the 15-35 percent range. Officials cautioned that such estimates were highly sensitive to underlying assumptions, markets were best placed to judge appropriate exchange rate levels, and foreign investors showed no signs of becoming less willing to invest in U.S. markets. In this context, they expressed concern that exchange rate inflexibility and other factors were impeding needed adjustment in many countries' competitiveness.

35. ***Officials remained relatively sanguine about the risk of a disorderly adjustment***. U.S. financial markets were well placed to intermediate global savings, and recent dollar strength implied that the demand for U.S. securities was not satiated.[9] Staff noted that market expectations implied a relative sanguine view of the risks of future dollar weakness (background work, summarized in Annex II.3, finds dollar risk premiums have varied widely over time but have not consistently risen with the increase in net foreign liabilities). Officials responded that, although sharp exchange rate adjustments could not be ruled out, experience suggested that markets could absorb considerable exchange rate movements, particularly since national financial systems had become more resilient.

36. ***The mission cautioned about the risks of a "disorderly" resolution of imbalances, emphasizing the need for a cooperative global adjustment strategy***. This underscored the importance of raising U.S. national saving, including by more ambitious fiscal consolidation, in conjunction with steps toward greater exchange rate flexibility in emerging Asia and continued structural reforms to boost growth in Europe and Japan. Extensive analysis in the *World Economic Outlook* and elsewhere indicated that a disorderly resolution could significantly lower growth in the United States and abroad (Box 2).[10] Annex II.4 summarizes background work suggesting that wealth losses to foreign investors from a drop in U.S. asset prices and the value of the dollar could be significant.

37. ***Officials agreed that the solution to global imbalances would require a multilateral approach***. They expressed strong support for the Fund's leadership in the multilateral consultations process, and hoped that this would increase the understanding of the shared

[9] Analysis in Chapter 1 of the *Selected Issues* paper suggests that mortgage securitization has created an asset class that has proved highly attractive to domestic and foreign investors.

[10] Appendix 1.2 of the September 2005 *World Economic Outlook* simulates the impact on the United States and rest of the world of different scenarios on the resolution of global imbalances.

responsibility for addressing the situation. Officials were concerned that surplus countries had not accepted the need to boost domestic demand relative to output and cautioned that, without such an understanding, efforts to boost U.S. national saving—including through fiscal deficit reduction—would likely have a modest impact on global imbalances but could slow global growth. They also stressed that increased financial globalization argued against pursuing international exchange rate agreements, such as those contained in the 1985 Plaza Accord.

IV. Fiscal Policy: Preparing for an Aging Population

A. The Long-Term Challenge

38. ***Staff and Treasury officials agreed that the long-term fiscal outlook was unsustainable and that entitlement reform was needed*** (Figure 11). Population aging and rising health care costs are projected to place an ever increasing burden on public retirement and health systems in the United States, as it is in other OECD countries (Figure 12). The FY 2007 budget projects that spending on entitlement programs (including Social Security and Medicare) will rise by around 1½ percent of GDP each decade through 2080. With contributions to these programs expected to grow much less rapidly:

- ***The Trustees currently estimate the 75-year funding gap of the Social Security and Medicare systems at 325 percent of GDP***. The Social Security system—which presently runs a cash surplus of 1½ percent of GDP—is projected to fall into deficit as early as 2017. The underfunding of the Medicare system is much larger, and has been increased by 80 percent of GDP by the prescription drug benefit.

- ***Medicaid—the federal and state program providing health coverage for the poor and disabled—also has a large implicit funding gap***. The rapid increase in outlays would make it increasingly difficult for states to meet their balanced-budget requirements without spending cuts elsewhere, increased tax revenues, or higher federal transfers.

- ***Social Security reforms have stalled in Congress***. The Administration has proposed establishing a bipartisan commission to examine broad reform of entitlement programs, but there has been little subsequent progress. Greater consensus was needed in Congress to carry the process forward.

B. Medium-Term Budget Policy

39. ***Officials emphasized that recent revenue buoyancy and expenditure discipline had improved fiscal prospects*** (Table 5). Tax receipts through April (which included annual personal tax filings for 2005) exceeded projections on both the personal and corporate side by a significant margin. The reasons for revenue overperformance were still not fully understood, but all indications were that this year's deficit would fall below 2½ percent of GDP, well under the budget projection of 3¼ percent. As a result, the objective of "halving the deficit"—relative to the $540 billion (4½ percent of GDP) that had been forecast for FY2005—now seemed likely to be met by FY 2008, a year ahead of schedule.

United States: Budget Projections
(Fiscal years; in percent of GDP)

			Projection					
	2004	2005	2006	2007	2008	2009	2010	2011
FY 2007 Budget								
Unified balance	-3.6	-2.6	-3.3	-2.6	-1.5	-1.4	-1.1	-1.2
Primary balance	-2.2	-1.1	-1.6	-0.8	0.3	0.5	0.8	0.7
Unified balance exc. social security	-4.9	-4.0	-4.6	-4.0	-3.0	-2.9	-2.7	-2.8
Debt held by the public	37.2	37.3	38.5	39.0	38.5	37.9	37.2	36.5
Staff Projection 1/								
Unified balance	-3.6	-2.6	-2.3	-2.6	-2.3	-2.0	-1.9	-1.8
Primary balance	-2.2	-1.1	-0.6	-0.8	-0.5	-0.2	-0.1	0.0
Unified balance exc. social security	-4.9	-4.0	-3.6	-4.0	-3.7	-3.6	-3.4	-3.3
Debt held by the public	37.2	37.3	37.3	38.0	38.4	38.7	38.7	38.6

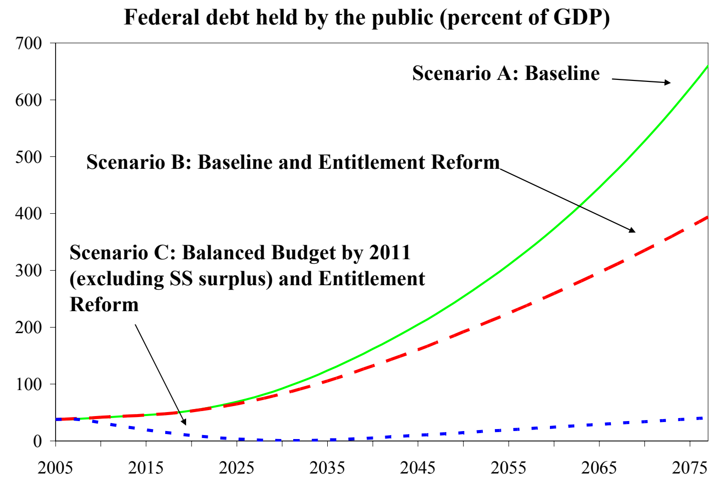
Sources: FY 2007 Budget of the U.S. Government (February 6, 2006); and Fund staff estimates.
1/ Staff projections are based on the Administration's budget adjusted for differences in macroeconomic projections; staff estimates of the cost of ongoing operations in Iraq; some additional non-defense discretionary expenditure; and continued AMT relief beyond FY2007. The projections also assume that PRA's are not introduced.

40. ***Staff welcomed the improved fiscal performance, which provided the opportunity to embrace a more ambitious medium-term target for deficit reduction***. The fall in the federal fiscal deficit largely reflected unexpected revenue buoyancy, whose permanence remained to be seen. The expenditure ratio was still rising despite some recent success in constraining nondefense discretionary spending (comprising about one-fifth of all outlays), reflecting rising costs of entitlement programs and debt service, as well as emergency spending on Afghanistan, Iraq, and hurricane Katrina. Budget projections showing a deficit reduction to 1¼ percent of GDP by FY 2011 appeared unambitious, implying an adjustment of only around 1 percentage point relative to the likely outturn for FY 2006.

41. ***Balancing the budget excluding the Social Security surplus over the next five years, if coupled with entitlement reform, would restore long-term fiscal sustainability*** (Box 3). Staff analysis suggested that even with reforms that slowed entitlement benefit growth gradually (to provide individuals with time to adjust long-term plans) large additional adjustments would be needed to meet the needs of a growing elderly population. Achieving a balanced budget excluding Social Security would meet this challenge by lowering the debt burden and interest costs, thereby lessening the size of the necessary fiscal adjustment and avoiding placing an undue burden on future generations. This would require annual consolidation of some ¾ percent of GDP, whose impact on U.S. and global demand seemed manageable.

42. ***Officials stressed the Administration's commitment to achieving deficit reduction through expenditure restraint.*** The staff cautioned, however, that the discipline on discretionary spending assumed in the current budget appeared optimistic. Budget proposals involved a backloaded reduction of nondefense discretionary spending as a ratio to GDP to

Box 3: Attaining Fiscal Sustainability



Long-term fiscal scenarios illustrate the need to combine entitlement reform with ambitious fiscal consolidation. A baseline scenario developed by the Congressional Budget Office (CBO) illustrates that population aging and rapidly increasing health care costs put federal entitlement spending on an unsustainable path (Scenario A).[1] It assumes (i) a moderation in annual excess health cost growth—defined as the difference between per capita Medicare and Medicaid costs and inflation—from 2½ percentage points at present to 1 percentage point after 2030; (ii) a sharp drop in discretionary spending from 10.2 percent of GDP to 7.6 percent in 2030 and 6.6 percent by 2050; and (iii) maintaining the revenue ratio at its long-term average of 18.3 percent of GDP.

Entitlement reform that gradually reduces the growth of health and retirement benefits improves the situation but does not achieve fiscal sustainability (Scenario B). Reforms are assumed to eliminate the annual excess cost growth for Medicare and Medicaid by 2050, which reduces the rise in health care outlays from this source by 40 percent through 2050, and progressive indexation of Social Security benefits is also assumed.[2] However, these steps are not enough to prevent a rapid build up of debt, reflecting the doubling of the old-age dependency ratio.

Combining such reform with balancing the budget excluding social security by FY 2011 achieves long-term fiscal sustainability. Scenario C augments entitlement reform with medium-term deficit reduction that achieves budget balance, excluding Social Security, in FY 2011 through higher revenues or lower nonentitlement spending. The 3 percent of GDP improvement in the nonentitlement primary balance is assumed to be maintained subsequently.

Alternative paths for achieving fiscal sustainability involve much lower benefits or higher taxes:

- ***To maintain the revenue ratio at its historical average***, excess cost growth in Medicare and Medicaid would need to be eliminated immediately, presumably through benefit reductions, and larger cuts to the nonentitlement spending ratio would be required.
- ***More gradual deficit reduction***—assumed to occur through rescinding the 2001 and 2003 tax cuts and leaving the AMT unreformed—would lead to a higher debt ratio than with the reforms contained in Scenario C, increasing the needed long-term fiscal consolidation by slightly over 2 percentage points of GDP.

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[1] "The Long-Term Budget Outlook," Congressional Budget Office, December 2005.

[2] "Long-Term Analysis of S. 2427, The Sustainable Solvency First for Social Security Act of 2006," Congressional Budget Office, April 2006.

unprecedented lows, relied on several measures that had previously been rejected by Congress, and ignored the costs of funding operations in Iraq and Afghanistan beyond FY 2007 (Chapter 3 of the 2004 *Selected Issues* paper discusses the potential for expenditure restraint). The team welcomed, therefore, the Administration's support of a reinstatement of pay-as-you-go (PAYGO) rules for mandatory spending and statutory limits on the growth of discretionary spending, but questioned the unwillingness to include tax cuts in the PAYGO rules.[11]

43. ***The staff suggested that it would be prudent to explore options for raising the revenue ratio to meet long-term spending pressures***. Given rising entitlement spending, there could be growing pressure to withdraw the 2001–03 marginal income tax cuts due to expire in 2011, and it would be increasingly difficult to bear the revenue costs of reforming the AMT. In order to avoid the attendant negative implications for economic efficiency, a number of options could be considered in the context of a broader tax reform:

- ***Base broadening***. The President's Advisory Panel on Federal Tax Reform offered a number of options for gradually reducing a number of ill-targeted and distortionary tax breaks, including those for mortgage interest payments, employers' contributions to health insurance plan premiums, and state and local tax payments. The team also noted the possibility of raising Social Security and Medicare contribution limits.
- ***Energy taxation***. Energy taxes could yield significant revenues and, by lowering consumption, could also help support of the authorities' energy security and environmental objectives.
- ***A national VAT***. An indirect consumption tax would tend to maintain buoyancy even as the workforce retires and, by avoiding taxation of factor incomes, would encourage private saving and investment.

44. ***Officials responded that it was inadvisable to set a medium-term deficit objective to address spending pressures whose size was uncertain and whose solutions were largely political***. The real issue, which would require difficult political choices by Congress rather than shifts in the near-term fiscal stance, was whether U.S. society was prepared to tolerate the higher taxes needed to finance existing entitlement programs or would accept lower entitlement benefits per capita. The Administration opposed revenue increases to finance deficit reduction because of their detrimental supply-side effects. Although the ratio of revenues to GDP would tend to rise gradually over time through bracket creep, they cautioned that in the past the tendency had been to respond with tax cuts, and the ratio had not deviated from its long-term average of slightly over 18 percent of GDP for an extended time in the postwar period.

[11] The Budget Enforcement Act's PAYGO rules required that any legislation affecting revenues or entitlement programs be deficit neutral, whereas the Administration has proposed exempting tax cuts from this discipline.

C. Entitlement Reform

45. ***The team observed that there appeared to be an urgent need for major reform of the U.S. health care system to contain costs.*** U.S. health care spending was around 15 percent of GDP, well above the OECD average, with the public sector responsible for around half of the total (Figure 13). Officials agreed on the need for reform and noted that their key focus was on addressing the tendency of third-party insurance to insulate consumers from rising health costs. Accordingly, health savings accounts (HSAs) had been introduced coupled with tax incentives for high deductible health care insurance plans, and steps were also being taken to improve information on the quality and effectiveness of procedures/services.

46. ***The Administration was encouraging state initiatives to increase the efficiency of the Medicaid program***. Officials observed that states were in a better position than the federal government to control health costs through policy initiatives and experimentation. For example, "personal responsibility accounts" that encouraged healthier lifestyles had shown some promise. State representatives agreed that the federal government was providing significant flexibility in the Medicaid program while also tightening the definition of expenses eligible for federal matching grants.

47. ***Officials indicated that the Administration was open to a range of reforms of the Social Security system.*** The President had endorsed slowing benefit growth by linking payments to a sliding combination of wage and price indexing, which would more than halve the 75-year funding gap. The Administration would consider most additional proposals that moved the system to a sounder financial footing, particularly towards the end of the 75-year funding window, such as indexing benefits to longevity and raising the cap on payroll taxes, although raising payroll tax rates would not be acceptable. While the President had proposed creating Personal Retirement Accounts without raising payroll taxes, other approaches had not been rejected. Staff responded that the key priority was to ensure that reforms are not delayed, as this would only increase the cost of the eventual adjustment.

V. Trade Policy and ODA

48. ***Officials stressed that an ambitious completion of the Doha round remained a priority for the Administration***. With trade promotion authority (TPA) expiring mid-2007, there was a need to wrap up negotiations by the end of this year. Staff noted that reductions in U.S. agricultural subsidies, and similar subsidies elsewhere, would need to be a key component of a multilateral deal. Officials responded that the United States had already made an ambitious proposal, including the ultimate elimination of agricultural tariffs and trade-distorting subsidies, and expressed disappointment with the unwillingness of others to reciprocate. They cautioned that it would be impossible to gain Congressional support for lower U.S. agricultural subsidies without a corresponding increase in market access.

49. ***Officials saw U.S. bilateral free trade arrangements (FTAs) as a complement to multinational negotiations, while staff expressed concern about their proliferation***. U.S. FTAs have been concluded or are under negotiation with 29 countries; only four were in place in 2002. Officials observed that U.S. negotiators sought comprehensive and WTO-

compatible FTAs that generally increased support within countries for multilateral agreements, and that the United States was looking for free trade "any way it can." Staff responded that the proliferation of preferential agreements could undermine the multilateral fabric of world trade. The potential for defensive responses to others' FTAs suggested there was scope to agree mutual restraints or the inclusion of open-access clauses allowing countries to accede to existing FTAs. Simple and liberal rules of origin were crucial to avoid burdening cross-border value chains.

50. ***Staff emphasized the importance of resisting mounting protectionist sentiment***. In particular, recent Congressional proposals targeted at China risked hurting workers in both countries while having little impact on the U.S. trade balance. Officials responded that they considered United States/Chinese trade relations as healthy and stressed that all U.S. policies were WTO compliant and were aimed at integrating China into the multilateral trading system. Treasury officials observed that the May semiannual report on economic and exchange rate policies had not designated China as a currency manipulator, and indicated that the Administration favored shifting the nomenclature from the inherently subjective concept of "manipulation" to the more analytically precise "misalignment."

51. ***The mission inquired about prospects for raising the share of U.S. official development assistance (ODA) in GDP, which remains one of the lowest among industrial countries***. While the budget had requested a modest increase for FY 2007, OECD estimates suggested that this could be insufficient to meet the Gleneagles G-8 commitments on increased aid to Africa; the Millennium Challenge Account; and initiatives on HIV/AIDS and malaria. Officials suggested that the United States was well on its way to meeting these commitments, especially with large increases in Millennium Challenge Corporation financing programmed for the next few years. Moreover, they stressed that overall U.S. assistance (including remittances and other private capital flows) remained several times the level of official ODA, and were more important for the United States than for other countries.

VI. Staff Appraisal

52. ***The U.S. economy has remained a key engine of global growth, despite devastating hurricanes, a withdrawal of monetary stimulus, and high energy prices.*** Activity has remained robust, supported by strong productivity growth, and buoyant tax revenues seem likely to keep the FY 2006 federal deficit well below initial budget estimates. Looking forward, prospects appear favorable for growth to gradually ease to a more sustainable rate.

53. ***In the year ahead, the Federal Reserve faces the difficult task of steering a course between competing risks***. In particular, a cooling housing market, higher energy prices, and negative household saving rate could weigh more heavily on activity than expected. At the same time, however, the recent pick up in core inflation and expectations, coupled with a further drop in the unemployment rate, have underscored the danger of a build up in price pressures. Given the importance of keeping inflation expectations in check, policymakers have appropriately cautioned that some further policy firming may yet be needed.

54. ***There would seem to be merit in the Fed providing a more explicit statement of its inflation objective***. While the Fed's communications strategy in recent years has been highly effective, this additional step could help further anchor inflation expectations without undermining confidence in the Fed's commitment to its broader mandate. Providing more frequent *Monetary Policy Reports* with a greater focus on future developments could also further increase the Fed's high level of transparency.

55. ***The U.S. financial sector has proven innovative and resilient in recent years.*** The system appears well-positioned as the credit cycle turns, although conditions in markets for credit derivatives merit close monitoring, and there are important areas where further reform could help enhance the financial system's resilience and efficiency:

- Action is still needed to carry forward the Administration's proposals to strengthen the supervision of the housing GSEs and limit the size of their balance sheets so as to contain systemic risk in financial markets.

- Steps too are needed to improve the funding of the PBGC, strengthen the accounting and transparency of defined benefit pension plans, and improve the incentives for participation in defined contribution plans.

- Supervision and regulation of insurance companies is fragmented and steps to establish a more uniform approach would be welcome.

- Undertaking a Fund FSAP and publishing a regular *Financial Stability Report* could provide further insights on these challenges.

56. ***The United States has a major role to play in catalyzing vigorous implementation of the cooperative strategy laid out by the IMFC last April***. An orderly resolution of imbalances would be supported by ambitious fiscal consolidation that helps boost national saving. Delaying the inevitable adjustment of global imbalances will mean continued increases in U.S. external indebtedness, heightening the risk of a sharp disruption to exchange rates, financial markets, and growth, both domestically and abroad.

57. ***The Budget again this year has highlighted that demographic and other pressures threaten both fiscal sustainability and the nation's future prosperity.*** While there is no doubt that entitlement reform is essential for achieving a sustainable fiscal position, even significant entitlement reforms and cuts in other spending may not be sufficient to accommodate the increased demands on public health and retirement systems from an aging population.

58. ***With buoyant revenues supporting deficit reduction, the time is opportune to establish a more ambitious medium-term fiscal anchor.*** In particular, achieving a balanced budget, excluding the Social Security surplus, within the next five years would set the federal debt ratio on a firm downward path, reducing the burden on future generations of providing health care and retirement income to the baby boom generation. It would also provide the needed room to develop and phase in the reforms required to place entitlement systems on a more sustainable basis. Given current budget projections, this would require consolidation of

around ¾ percentage point of GDP a year, providing a helpful boost to national saving and multilateral efforts to narrow global imbalances.

59. ***Although controlling outlays should remain central to deficit reduction, revenue measures should not be ruled out***:

- ***On the expenditure side***, despite some success in slowing the growth of discretionary outlays, it may be difficult to sustain expenditure discipline, especially in light of pressures to fund defense commitments and other emergency priorities. Therefore, there would seem merit in re-introducing caps on discretionary outlays, as well as pay-as-you-go (PAYGO) requirements covering both entitlement spending and tax measures.

- ***On the revenue side***, it may be difficult to sustain the significant reductions in marginal tax rates of recent years while meeting the fiscal burden from population aging. Nonetheless, the priority should be on reforms that would broaden the revenue base by reducing tax preferences, including those for mortgage interest payments, employers' contributions to health insurance plan premiums, and state and local tax payments, as suggested by the President's Advisory Panel. Consideration could also be given to consumption-based indirect taxes—such as a national sales tax, a VAT, or energy taxation—that would maintain revenue buoyancy as workers retire.

60. ***It is critically important to re-invigorate the momentum for entitlement reform.*** The Administration has offered some useful suggestions—including for "progressive price indexation"—and the challenge for policymakers is to form the necessary consensus to develop a package of reforms that can place the Social Security system on a sustainable basis. However, especially with the addition of the new prescription drug benefit, the financial shortfall of the Medicare system dwarfs that of Social Security, and while high-deductible health plans and other measures may help improve incentives, a broader, fundamental reform of the U.S. health care system seems necessary.

61. ***Leadership by the United States remains key to global trade liberalization.*** Continued U.S. commitment and initiative is needed to ensure sufficient momentum for an ambitious conclusion to the Doha Round negotiations. At the same time, care will be needed to resist domestic protectionist sentiment and to ensure that bilateral trade initiatives complement rather than substitute multilateral approaches. Further boosting ODA would help achieve the ambitious goals already agreed to support the poorest countries in the world.

62. It is expected that the next Article IV consultation with the United States will be held on the regular 12-month cycle.

Table 1. Selected Economic Indicators

(Percentage change from previous period at annual rate, unless otherwise indicated)

	2005	2006	2007	2008	2009	2010	2011	2005 Q3	Q4	2006 Q1	Q2	Q3	Q4
National production and income													
Real GDP	3.5	3.5	3.1	3.2	3.2	3.2	3.2	4.1	1.7	5.6	2.8	2.9	3.1
Net Exports 1/	-0.3	-0.4	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-1.4	-0.2	-0.4	-0.3	-0.3
Total domestic demand	3.6	3.7	3.1	3.1	3.1	3.1	3.1	4.0	2.9	5.5	3.0	3.0	3.2
Final domestic demand	3.9	3.6	3.1	3.1	3.1	3.1	3.1	4.5	1.1	5.8	3.0	3.1	3.1
Private final consumption	3.5	3.1	2.8	2.8	2.8	2.9	2.9	4.1	0.9	5.0	2.5	2.6	2.8
Public consumption expenditure	1.5	2.6	3.1	2.1	2.0	2.2	2.1	4.0	-1.7	4.7	3.4	3.3	3.3
Gross fixed domestic investment	7.2	6.1	4.4	4.9	4.9	4.7	4.6	6.3	3.8	9.3	4.7	4.3	4.0
Private fixed investment	8.1	6.5	4.6	5.4	5.3	5.1	5.1	8.0	3.9	10.1	4.9	4.4	4.0
Equipment & software	10.9	9.8	8.1	8.0	8.0	8.0	8.0	10.6	5.0	14.8	9.0	8.0	8.0
Structures (non-residential)	2.0	6.0	4.8	3.6	3.5	3.2	3.0	2.2	3.0	12.6	4.0	6.0	6.0
Structures (residential)	7.1	2.6	-0.2	2.8	2.4	2.0	2.0	7.3	2.8	3.3	0.0	-1.0	-2.0
Public fixed investment	3.0	3.8	3.4	2.2	2.8	2.5	2.1	-2.4	3.4	5.0	3.6	3.6	3.5
Change in private inventories 1/	-0.3	0.1	0.0	0.0	0.0	0.0	0.0	-0.4	1.9	-0.2	0.0	0.0	0.1
Nominal GDP	6.4	6.4	5.2	5.3	5.3	5.3	5.3	7.6	5.2	8.9	5.1	5.1	5.2
Personal saving ratio (% of DI)	-0.5	-0.6	0.3	1.1	1.7	2.3	2.9	-1.6	-0.5	-1.4	-0.8	-0.3	0.0
Private investment rate (% of GDP)	16.9	17.5	17.6	17.9	18.2	18.4	18.6	16.7	17.3	17.4	17.5	17.5	17.5
Employment and inflation													
Output gap	-0.4	-0.1	-0.2	-0.2	-0.2	-0.1	0.0	-0.2	-0.6	0.0	-0.1	-0.2	-0.2
Potential GDP	3.3	3.3	3.2	3.2	3.2	3.1	3.1	3.3	3.3	3.3	3.3	3.2	3.2
Unemployment rate (percent)	5.1	4.8	4.8	4.8	4.8	4.8	4.8	5.0	4.9	4.7	4.8	4.8	4.8
CPI inflation	3.4	3.2	2.6	2.5	2.5	2.5	2.5	5.5	3.2	2.2	3.1	2.7	2.5
GDP deflator	2.8	2.8	2.0	2.0	2.0	2.0	2.0	3.3	3.5	3.1	2.2	2.1	2.0
Financial policy indicators													
Central gov't balance ($ b, public accounts)	-318	-296	-354	-329	-314	-308	-304						
In percent of FY GDP	-2.6	-2.3	-2.6	-2.3	-2.0	-1.9	-1.8	...	...	...	...	...	...
Central government balance ($ b, NIPA)	-380	-367	-424	-405	-386	-377	-341						
In percent of CY GDP	-3.0	-2.8	-3.0	-2.7	-2.5	-2.3	-2.0	...	...	...	...	...	...
General government balance ($ b, NIPA)	-478	-442	-478	-452	-454	-441	-402						
In percent of CY GDP	-3.8	-3.3	-3.4	-3.1	-2.9	-2.7	-2.3	...	...	...	...	...	...
Three-month Treasury bill rate	3.2	5.0	5.3	5.3	5.3	5.3	5.3	3.4	3.9	4.5	4.9	5.2	5.3
Ten-year government bond rate	4.3	5.2	5.8	6.0	6.0	6.0	6.0	4.2	4.5	4.6	5.1	5.4	5.6
Balance of payments													
Current account balance ($ b)	-792	-868	-935	-984	-1035	-1089	-1145	-734	-892	-835	-868	-884	-886
Merchandise trade balance ($ b)	-783	-875	-912	-933	-951	-972	-997	-795	-850	-832	-877	-893	-900
Balance on invisibles ($ b)	-9	7	-23	-52	-84	-116	-148	61	-42	-3	9	9	14
Current account balance (% of GDP)	-6.3	-6.5	-6.7	-6.7	-6.7	-6.7	-6.7	-5.8	-7.0	-6.4	-6.6	-6.6	-6.5
Merchandise trade balance (% of GDP)	-6.3	-6.6	-6.5	-6.3	-6.1	-6.0	-5.8	-6.3	-6.7	-6.4	-6.6	-6.7	-6.6
Balance on invisibles (% of GDP)	-0.1	0.1	-0.2	-0.4	-0.5	-0.7	-0.9	0.5	-0.3	0.0	0.1	0.1	0.1
Export volume 2/	7.3	11.1	9.8	8.8	8.7	9.0	9.0	3.2	8.0	18.5	8.6	11.1	10.6
Import volume 2/	6.9	8.8	7.3	6.1	5.8	6.2	6.3	3.5	13.5	11.1	8.3	8.6	8.3
Saving and investment (as a share of GDP)													
Gross national saving	13.4	14.2	14.2	14.5	14.7	14.9	15.1	13.6	13.2	14.1	14.1	14.1	14.3
General government	-0.6	-0.1	-0.2	0.1	0.3	0.5	0.9	-1.2	-0.5	0.3	-0.3	-0.2	-0.2
Private	14.0	14.2	14.4	14.4	14.4	14.4	14.3	14.9	13.7	13.8	14.5	14.3	14.4
Personal	-0.3	-0.4	0.2	0.8	1.3	1.7	2.2	-1.1	-0.4	-1.0	-0.6	-0.2	0.0
Business	14.3	14.7	14.2	13.5	13.2	12.7	12.1	16.0	14.1	14.8	15.0	14.5	14.4
Gross domestic investment	20.1	20.7	20.9	21.2	21.4	21.6	21.8	19.9	20.5	20.7	20.7	20.7	20.8

Sources: Haver Analytics; and Fund staff estimates.
1/ Contributions to growth.
2/ NIPA basis, goods.

Table 2. Economic Performance of Major Industrial Countries

	1998	1999	2000	2001	2002	2003	2004	2005	Projection 2006	2007
	(Annual change, in percent)									
Per capita GDP										
United States	3.0	3.3	2.5	-0.3	0.6	1.7	3.2	2.6	2.6	2.1
Euro Area	2.6	2.6	3.3	1.5	0.4	0.2	1.5	0.8	1.7	1.6
Japan	-2.0	-0.4	2.7	0.1	-0.1	1.6	2.2	2.7	2.7	2.1
Canada	3.2	4.7	4.3	0.7	1.9	1.0	1.9	2.0	2.0	2.1
G-7 countries	1.9	2.4	2.9	0.4	0.5	1.3	2.5	2.0	2.2	2.0
Real GDP										
United States	4.2	4.4	3.7	0.8	1.6	2.7	4.2	3.5	3.5	3.1
Euro Area	2.8	2.9	3.8	1.9	0.9	0.7	2.1	1.3	2.0	1.9
Japan	-1.8	-0.2	2.9	0.4	0.1	1.8	2.3	2.7	2.8	2.1
Canada	4.1	5.5	5.2	1.8	3.1	2.0	2.9	2.9	3.1	3.0
G-7 countries	2.6	3.1	3.6	1.1	1.2	1.9	3.1	2.6	2.8	2.6
Real domestic demand										
United States	5.3	5.3	4.4	0.9	2.2	3.0	4.7	3.6	3.7	3.1
Euro Area	3.6	3.6	3.3	1.2	0.4	1.3	2.0	1.5	2.1	1.9
Japan	-2.2	-0.1	2.5	1.2	-0.6	1.2	1.5	2.6	2.3	2.1
Canada	2.5	4.2	4.7	1.2	3.5	4.7	4.0	4.6	3.5	3.0
G-7 countries	3.3	3.8	3.7	1.1	1.4	2.3	3.3	2.7	2.7	2.5
GDP deflator										
United States	1.1	1.4	2.2	2.4	1.7	2.0	2.6	2.8	2.8	2.0
Euro Area	1.6	0.9	1.5	3.1	2.6	2.0	1.9	1.7	1.9	2.2
Japan	-0.1	-1.3	-1.7	-1.2	-1.6	-1.6	-1.2	-1.3	0.0	0.4
Canada	-0.4	1.7	4.1	1.1	1.0	3.3	3.1	3.1	3.0	1.7
G-7 countries	1.0	0.8	1.2	1.8	1.4	1.5	1.8	1.7	1.9	1.8
	(In percent of GDP)									
General government financial balance 1/										
United States	0.4	0.9	1.6	-0.4	-3.8	-5.0	-4.7	-3.8	-3.3	-3.4
Euro Area	-2.3	-1.3	-1.0	-1.9	-2.6	-3.0	-2.7	-2.3	-2.3	-2.1
Japan	-5.6	-7.5	-7.7	-6.4	-8.2	-8.1	-6.6	-5.8	-5.7	-5.4
Canada	0.1	1.6	2.9	0.7	-0.1	0.0	0.7	1.7	1.3	1.1
G-7 countries	-1.4	-1.1	-0.3	-1.7	-4.0	-4.9	-4.4	-3.8	-3.5	-3.4
Gross national saving										
United States	18.3	18.1	18.0	16.4	14.2	13.4	13.4	13.4	14.2	14.2
Euro Area	21.4	21.4	21.1	21.2	20.7	20.5	21.2	20.9	21.1	21.5
Japan	29.2	27.4	27.8	26.9	25.9	26.2	26.4	26.8	26.9	26.9
Canada	19.1	20.7	23.6	22.2	21.3	21.7	22.9	23.4	24.5	24.7
G-7 countries	20.7	20.2	20.2	19.2	17.8	17.4	17.6	17.6	18.0	18.2
Fixed investment										
United States	16.4	16.8	17.1	16.3	15.0	15.1	16.0	16.7	17.2	17.4
Euro Area	20.3	20.9	21.4	20.9	20.2	20.1	20.2	20.4	20.8	21.0
Japan	25.9	25.5	25.2	24.7	23.3	22.9	22.9	23.2	23.7	23.9
Canada	19.9	19.8	19.2	19.6	19.5	19.6	20.1	20.5	20.8	21.2
G-7 countries	19.0	19.2	19.3	18.7	17.7	17.5	17.9	18.4	18.8	19.0
Current account balance										
United States	-2.4	-3.2	-4.2	-3.8	-4.5	-4.8	-5.7	-6.3	-6.5	-6.7
Euro Area	0.3	-0.5	-1.5	-0.3	0.8	0.5	0.6	-0.3	0.0	0.2
Japan	3.1	2.6	2.6	2.1	2.9	3.2	3.8	3.6	3.2	2.9
Canada	-1.2	0.3	2.7	2.3	1.8	1.5	2.2	2.2	3.1	2.9
G-7 countries	-0.2	-0.9	-1.6	-1.2	-1.0	-1.0	-1.1	-1.7	-1.9	-1.9

Sources: IMF, *World Economic Outlook;* and Fund staff estimates.
1/ National accounts basis.

Table 3. Balance of Payments
(Billions of U.S. dollars, unless otherwise indicated)

	1999	2000	2001	2002	2003	2004	2005
Current account	-300	-415	-389	-472	-528	-665	-792
Percent of GDP	-3.2	-4.2	-3.8	-4.5	-4.8	-5.7	-6.3
Goods and services	-263	-378	-363	-421	-495	-611	-717
Merchandise trade	-346	-452	-427	-482	-547	-665	-783
Exports	684	772	719	682	713	808	895
Imports	-1,030	-1,224	-1,146	-1,165	-1,261	-1,473	-1,677
Services	83	75	64	61	52	54	66
Receipts	282	299	286	292	303	344	381
Payments	-199	-224	-222	-231	-250	-290	-315
Income	14	21	25	12	37	28	11
Receipts	294	351	288	271	303	375	475
Payments	-280	-330	-263	-258	-266	-347	-463
Unilateral transfers	-50	-59	-51	-64	-69	-82	-86
Government transfers	-14	-17	-12	-17	-22	-23	-31
Private transfers	-37	-42	-40	-46	-47	-58	-55
Capital account transactions, net	-5	-1	-1	-1	-3	-2	-4
Financial account	236	486	400	503	538	582	785
Private capital	181	445	378	391	258	190	566
Direct investment	65	162	25	-70	-86	-111	101
Outflows	-225	-159	-142	-154	-150	-244	-9
Inflows	289	321	167	84	64	133	110
Securities	155	267	313	357	182	353	513
Outflows	-122	-128	-91	-49	-147	-147	-180
Inflows	277	395	403	405	329	499	693
Net U.S. bank flows	-16	-16	-17	58	84	-25	-33
Nonbank capital flows	-21	32	58	46	78	-27	-14
U.S. official reserves	9	0	-5	-4	2	3	14
Foreign official assets	44	43	28	116	278	388	199
Other items	3	-1	0	0	1	2	6
Statistical discrepancy	69	-70	-10	-29	-8	85	10

Source: Haver Analytics.

Table 4. Indicators of External and Financial Vulnerability
(In percent of GDP, unless otherwise indicated)

	1998	1999	2000	2001	2002	2003	2004	2005
External indicators								
Exports of goods and services (percent change)	-0.1	3.5	10.8	-6.1	-3.0	4.2	13.4	10.7
Imports of goods and services (percent change)	5.3	12.0	17.8	-5.6	2.1	8.3	16.7	13.0
Terms of trade (percent change)	2.9	-2.1	-4.6	2.8	1.5	-1.3	-1.7	-4.0
Current account balance	-2.4	-3.2	-4.2	-3.8	-4.5	-4.8	-5.7	-6.3
Capital and financial account balance	0.8	2.5	4.9	3.9	4.8	4.9	4.9	6.3
Of which:								
Net portfolio investment	0.5	2.3	3.1	3.3	4.5	4.2	6.3	5.9
Net foreign direct investment	0.4	0.7	1.7	0.2	-0.7	-0.8	-0.9	0.8
Net other investment	-0.1	-0.4	0.2	0.4	1.0	1.5	-0.4	-0.4
Official reserves (billion dollars)	81.8	71.5	67.6	68.7	79.0	85.9	86.8	65.1
Central bank foreign liabilities (billion dollars)	0.2	0.1	0.3	0.1	0.1	0.2	0.1	0.1
Official reserves (months of imports)	0.9	0.7	0.6	0.6	0.7	0.7	0.6	0.4
Net international investment position 1/	-12.2	-11.2	-16.1	-23.1	-23.4	-21.6	-21.7	...
Of which: General government debt 2/	13.9	12.2	11.6	12.1	13.8	15.8	18.2	...
External debt-to-exports ratio	1.0	0.8	1.3	1.9	2.2	2.1	2.2	…
External interest payments to exports (percent) 3/	22.7	22.6	24.8	24.1	21.2	18.1	20.5	26.4
Nominal effective exchange rate (percent change)	9.1	-0.3	2.6	5.2	0.0	-6.4	-4.9	-2.7
Real effective exchange rate (percent change)	7.1	-1.0	3.3	5.6	-0.2	-6.4	-4.6	-1.5
Financial market indicators								
General government gross debt	66.2	62.8	57.1	56.6	58.9	61.8	62.5	62.9
Three-month Treasury bill yield (percent)	4.9	4.8	6.0	3.5	1.6	1.0	1.4	3.2
Three-month Treasury bill yield (percent, real)	3.3	2.5	2.5	0.6	0.0	-1.2	-1.2	-0.2
Equity market index								
(percent change in S&P500, year average)	24.2	22.3	7.6	-16.4	-16.5	-3.2	17.3	6.8
Banking sector risk indicators (percent unless otherwise indicated) 4/								
Total assets (in billions of dollars)	5,443	5,735	6,246	6,552	7,077	7,601	8,414	9,040
Total loans and leases to assets	59.5	60.8	61.1	59.3	58.7	58.3	58.3	59.5
Total loans to deposits	87.9	91.1	91.3	88.7	88.6	88.0	87.7	88.6
Problem loans to total loans and leases 5/	1.0	1.0	1.1	1.4	1.5	1.2	0.9	0.8
Nonperforming assets to assets	0.7	0.6	0.7	0.9	0.9	0.8	0.6	0.5
Loss allowance to:								
Total loans and leases	1.8	1.7	1.7	1.9	1.9	1.7	1.5	1.3
Noncurrent loans and leases	183.2	178.0	149.4	132.4	127.2	145.7	174.7	170.5
Return on equity	13.9	15.3	14.0	13.1	14.5	15.3	13.7	12.9
Return on assets	1.2	1.3	1.2	1.2	1.3	1.4	1.3	1.3
Total capital to risk-weighted assets	12.2	12.2	12.1	12.7	12.8	12.8	12.6	12.3
Core capital ratio	7.5	7.8	7.7	7.8	7.8	7.9	7.8	7.9

Sources: IMF, *International Financial Statistics;* Federal Deposit Insurance Corporation; and Haver Analytics.
1/ With FDI at market value.
2/ Excludes foreign private holdings of U.S. government securities other than Treasuries.
3/ External interest payments: income payments on foreign-owned assets (other private payments plus U.S. government payments).
4/ FDIC-insured commercial banks.
5/ Noncurrent loans and leases.

Table 5. Fiscal Indicators

(Fiscal years; in percent of GDP except where otherwise indicated)

			Projection					
	2004	2005	2006	2007	2008	2009	2010	2011
FY 2007 Budget, Administration								
Outlays	19.9	20.1	20.8	20.1	19.4	19.1	19.0	19.1
Debt service	1.4	1.5	1.7	1.8	1.9	1.9	1.9	1.9
Other	18.5	18.6	19.1	18.3	17.5	17.2	17.1	17.2
Revenue	16.3	17.5	17.5	17.6	17.8	17.7	17.9	17.9
Unified balance	-3.6	-2.6	-3.3	-2.6	-1.5	-1.4	-1.1	-1.2
Primary balance	-2.2	-1.1	-1.6	-0.8	0.3	0.5	0.8	0.7
Unified balance exc. social security	-4.9	-4.0	-4.6	-4.0	-3.0	-2.9	-2.7	-2.8
Unified balance (billion dollars)	-412.0	-318.0	-424.0	-354.0	-224.0	-208.0	-183.0	-205.0
Debt held by the public	37.2	37.3	38.5	39.0	38.5	37.9	37.2	36.5
FY 2007 Budget, Adjusted for Staff's Budget and Economic Assumptions 1/								
Outlays	19.9	20.1	20.2	20.6	20.4	20.1	20.0	20.0
Debt service	1.4	1.5	1.6	1.7	1.8	1.9	1.8	1.8
Other	18.5	18.6	18.6	18.9	18.6	18.3	18.3	18.3
Revenue	16.3	17.5	18.0	18.1	18.1	18.1	18.1	18.3
Unified balance	-3.6	-2.6	-2.3	-2.6	-2.3	-2.0	-1.9	-1.8
Primary balance	-2.2	-1.1	-0.6	-0.8	-0.5	-0.2	-0.1	0.0
Unified balance exc. social security	-4.9	-4.0	-3.6	-4.0	-3.7	-3.6	-3.4	-3.3
Unified balance (billion dollars)	-412.0	-318.0	-296.0	-353.6	-329.2	-313.7	-307.5	-303.9
Debt held by the public	37.2	37.3	37.3	38.0	38.4	38.7	38.7	38.6
Memorandum items:								
Structural unified balance 2/	-3.4	-2.5	-2.2	-2.5	-2.2	-2.0	-1.9	-1.8
Primary structural unified balance	-2.0	-1.0	-0.6	-0.8	-0.5	-0.1	-0.1	0.0
Administration's economic projections (in percent, calendar-year basis)								
Real GDP growth	4.2	3.5	3.4	3.3	3.3	3.1	3.1	3.1
CPI inflation	2.7	3.4	3.0	2.4	2.4	2.4	2.4	2.5
Three-month Treasury bill rate	1.4	3.2	4.2	4.2	4.3	4.3	4.3	4.3
Central government balance (calendar-year basis) 3/	-3.5	-2.7	-2.4	-2.7	-2.4	-2.1	-2.0	-1.7
General government balance (calendar-year basis) 3/	-4.7	-4.0	-3.5	-3.6	-3.3	-3.1	-2.9	-2.5

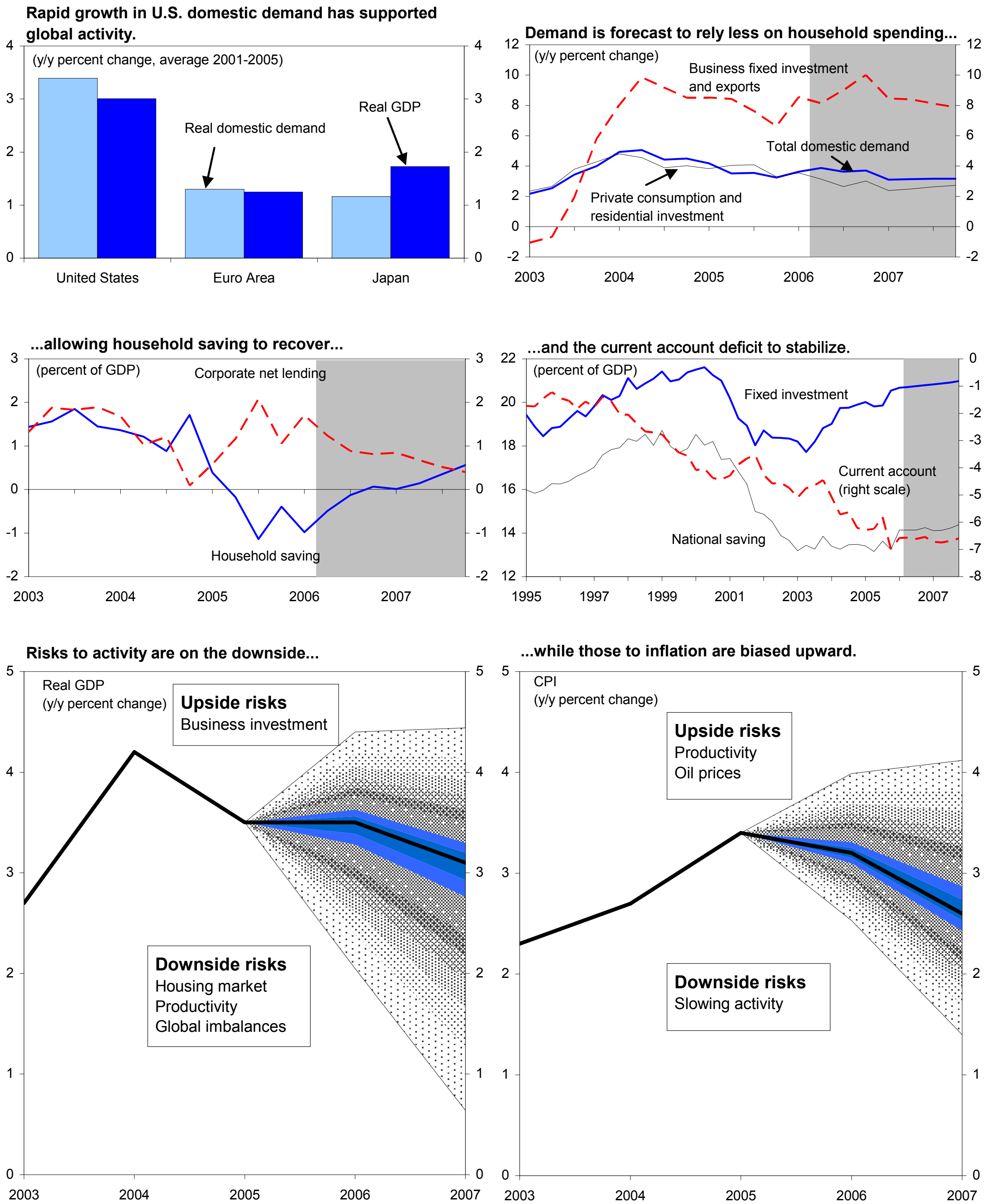
Sources: FY 2007 Budget of the U.S. Government (February 6, 2006); and Fund staff estimates.

1/ Staff projections are based on the Administration's budget adjusted for differences in macroeconomic projections; staff estimates of the cost of ongoing operations in Iraq; some additional non-defense discretionary expenditure; and continued AMT relief beyond FY2007. The projections also assume that PRA's are not introduced.

2/ As a percent of potential GDP, based on proposed measures, under IMF staff's economic assumptions.

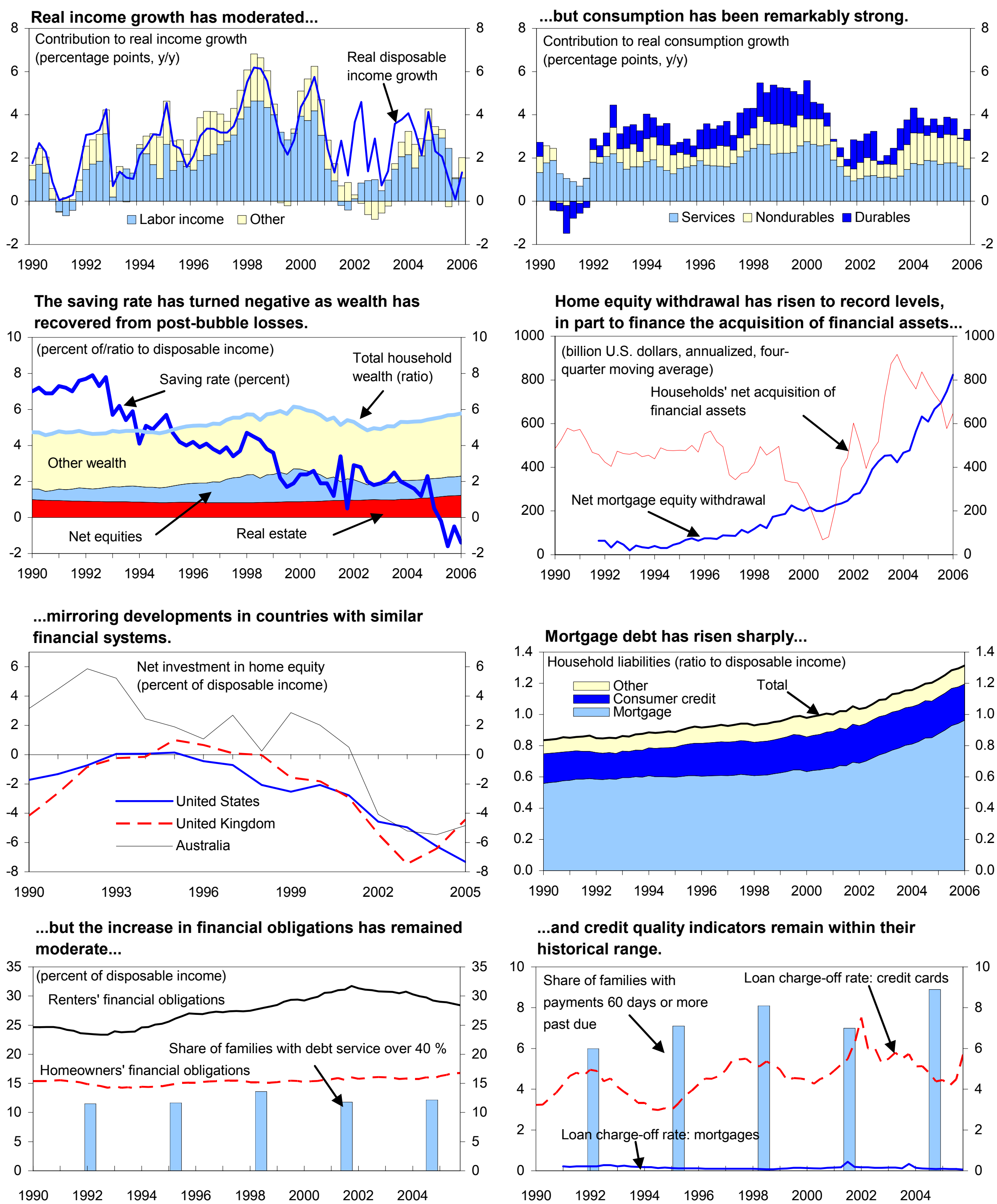
3/ On a national accounts basis. The projections use Fund staff budget and economic assumptions.

Figure 1. Economic Activity: Recent Developments and Outlook



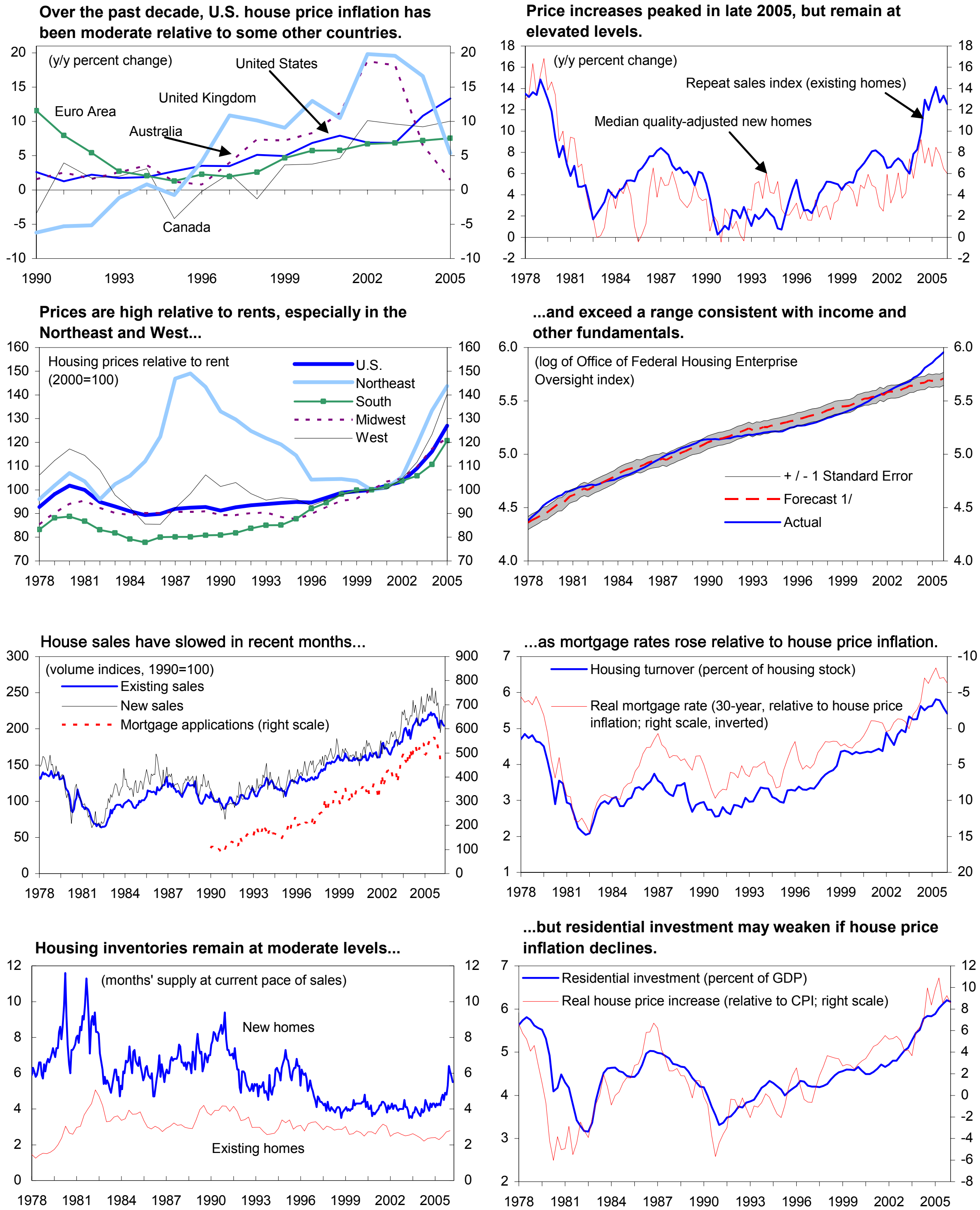
Sources: Haver Analytics; International Monetary Fund, *World Economic Outlook;* and Fund staff estimates.

Figure 2. Household Activity and Balance Sheets



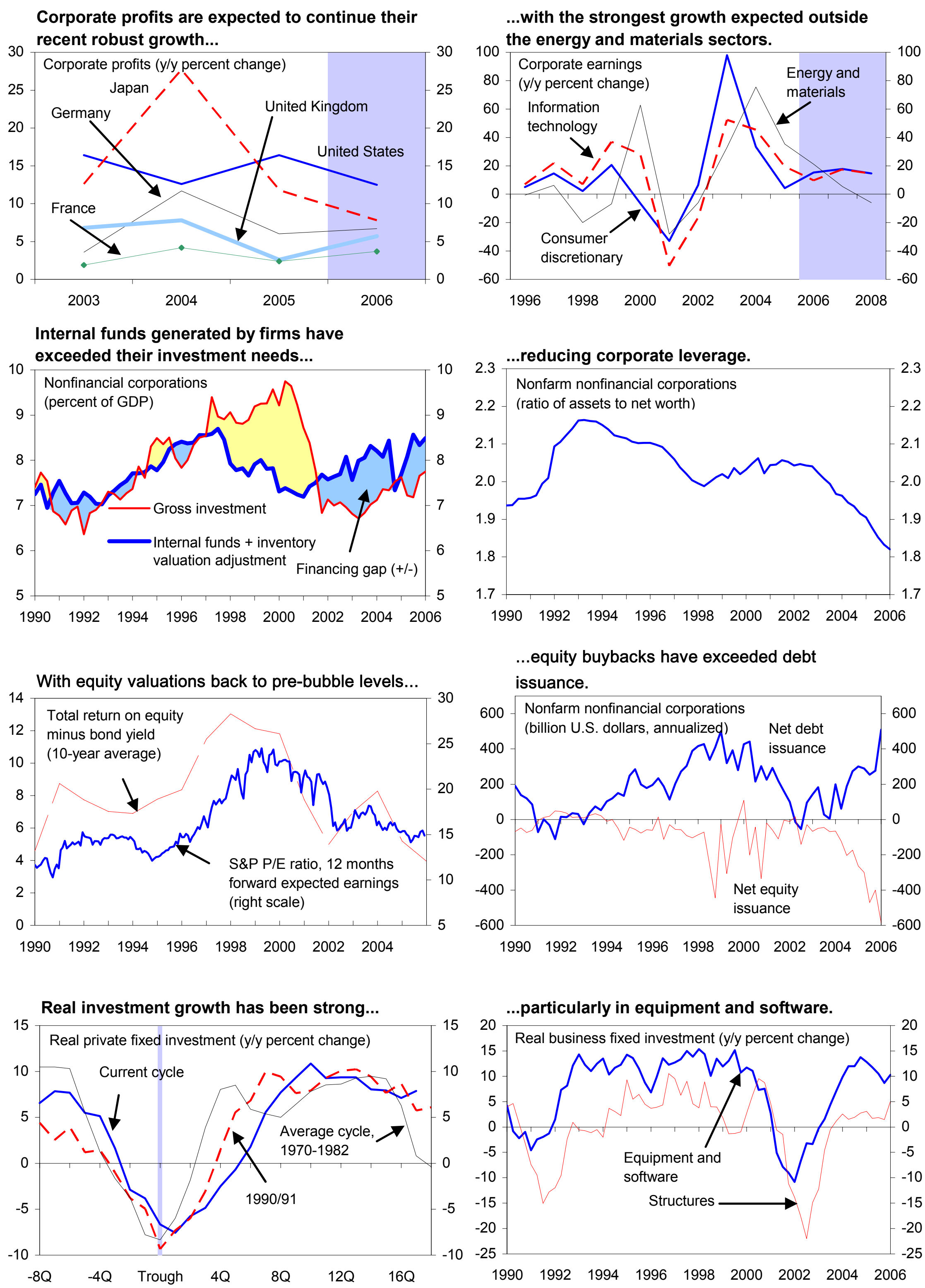
Sources: Federal Reserve Board, *Survey of Consumer Finances;* Haver Analytics; Australian Bureau of Statistics; Bank of England; and Fund staff calculations.

Figure 3. Housing Market Indicators



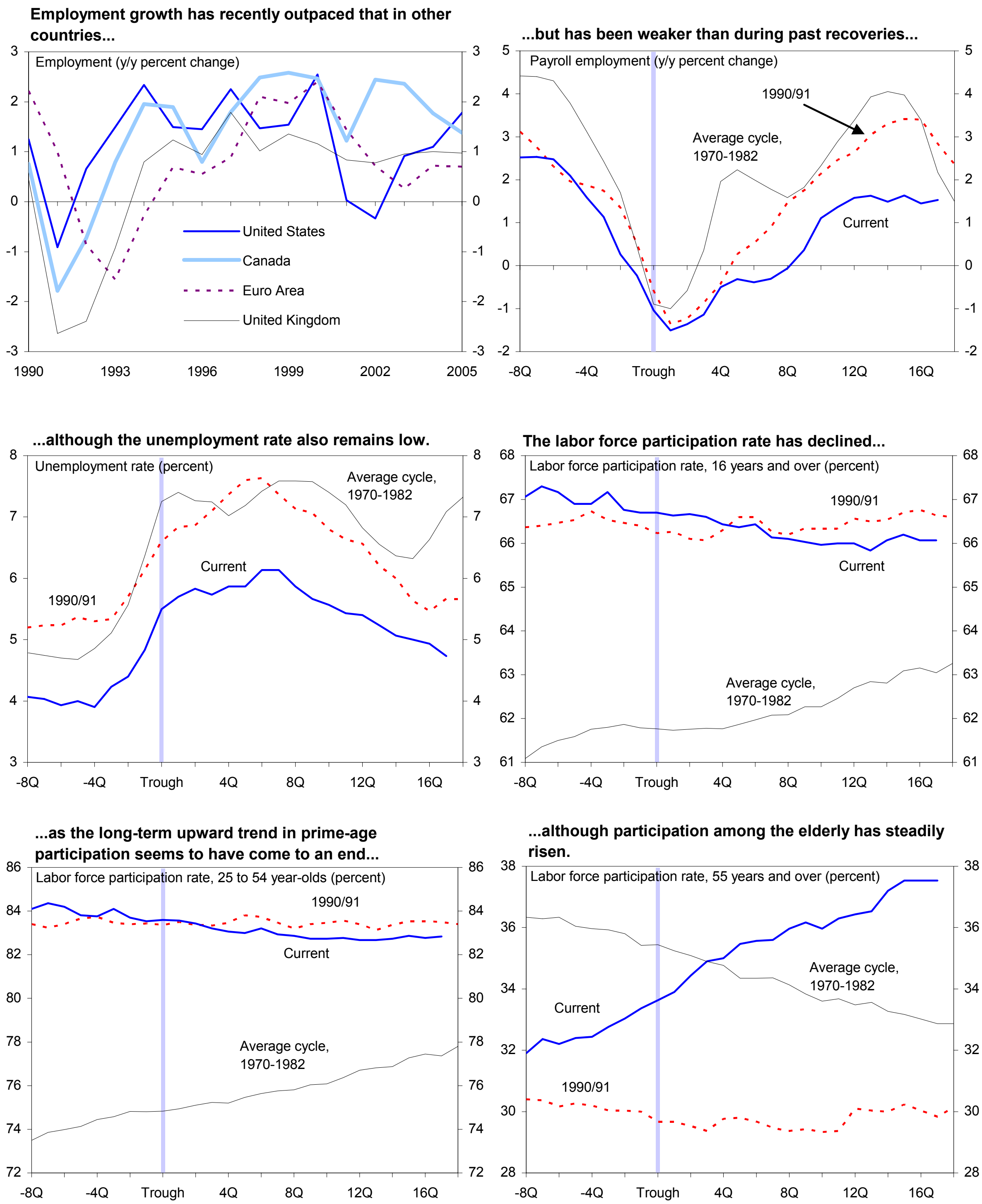
Sources: Haver Analytics; National Sources; and Fund staff calculations.
1/ See Chapter 2 of *United States: Selected Issues* (IMF Country Report 03/245) for a description of the methodology.

Figure 4. Corporate Sector Indicators



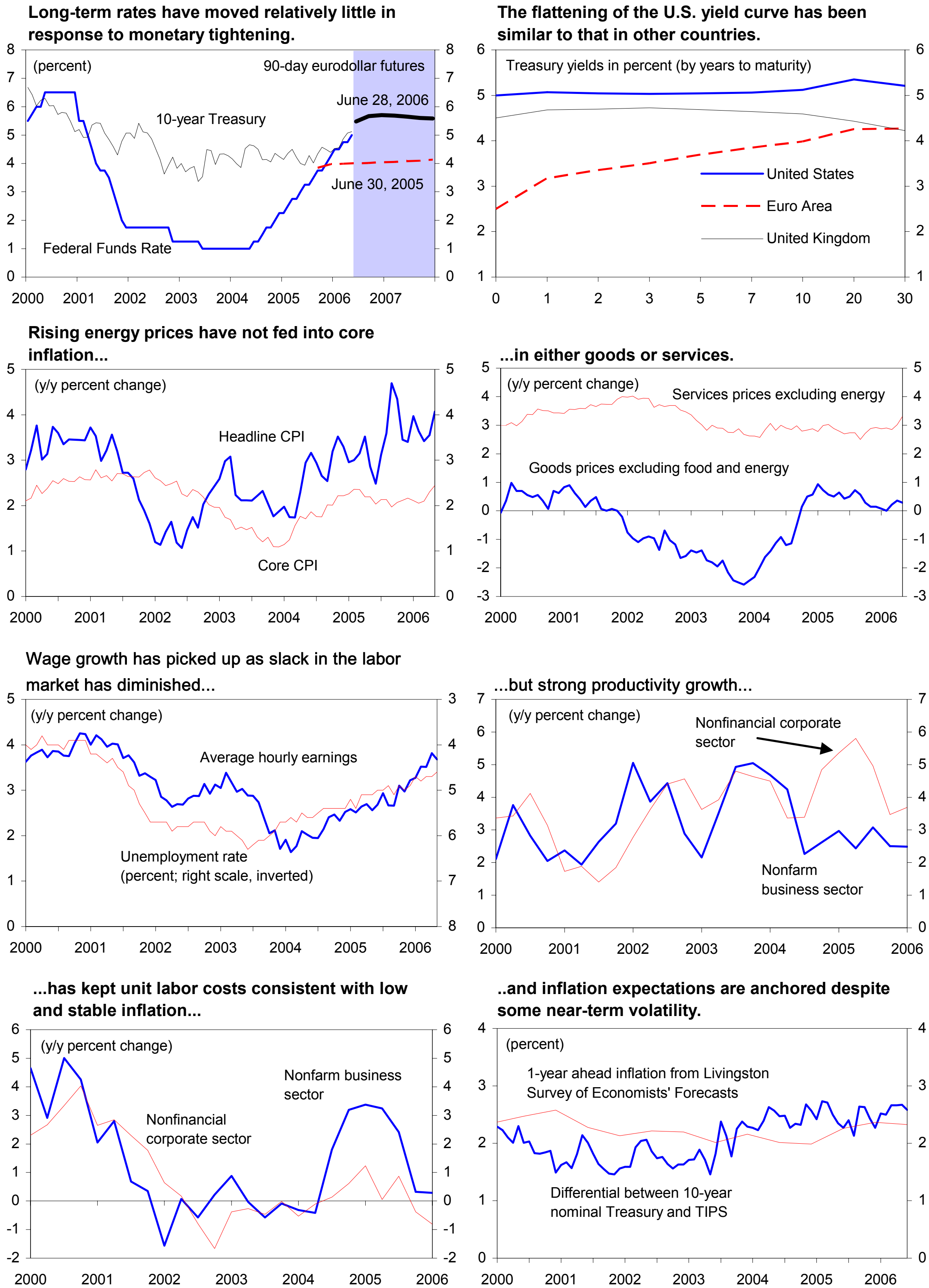
Sources: Haver Analytics; Thomson One Analytics; Consensus Forecasts; and Fund staff calculations.

Figure 5. Labor Market Indicators



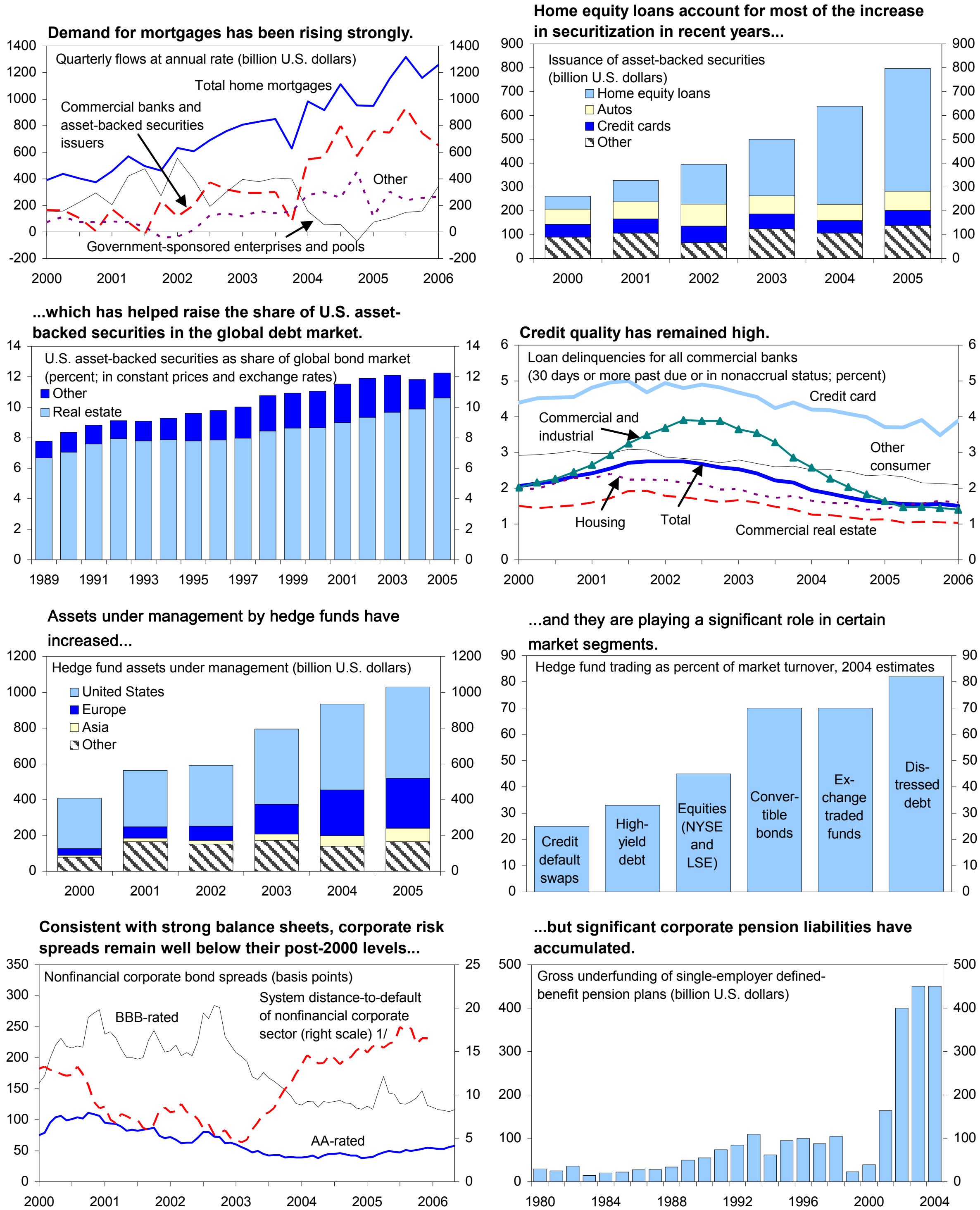
Sources: Haver Analytics; World Economic Outlook; and Fund staff calculations.

Figure 6. Monetary Policy Indicators



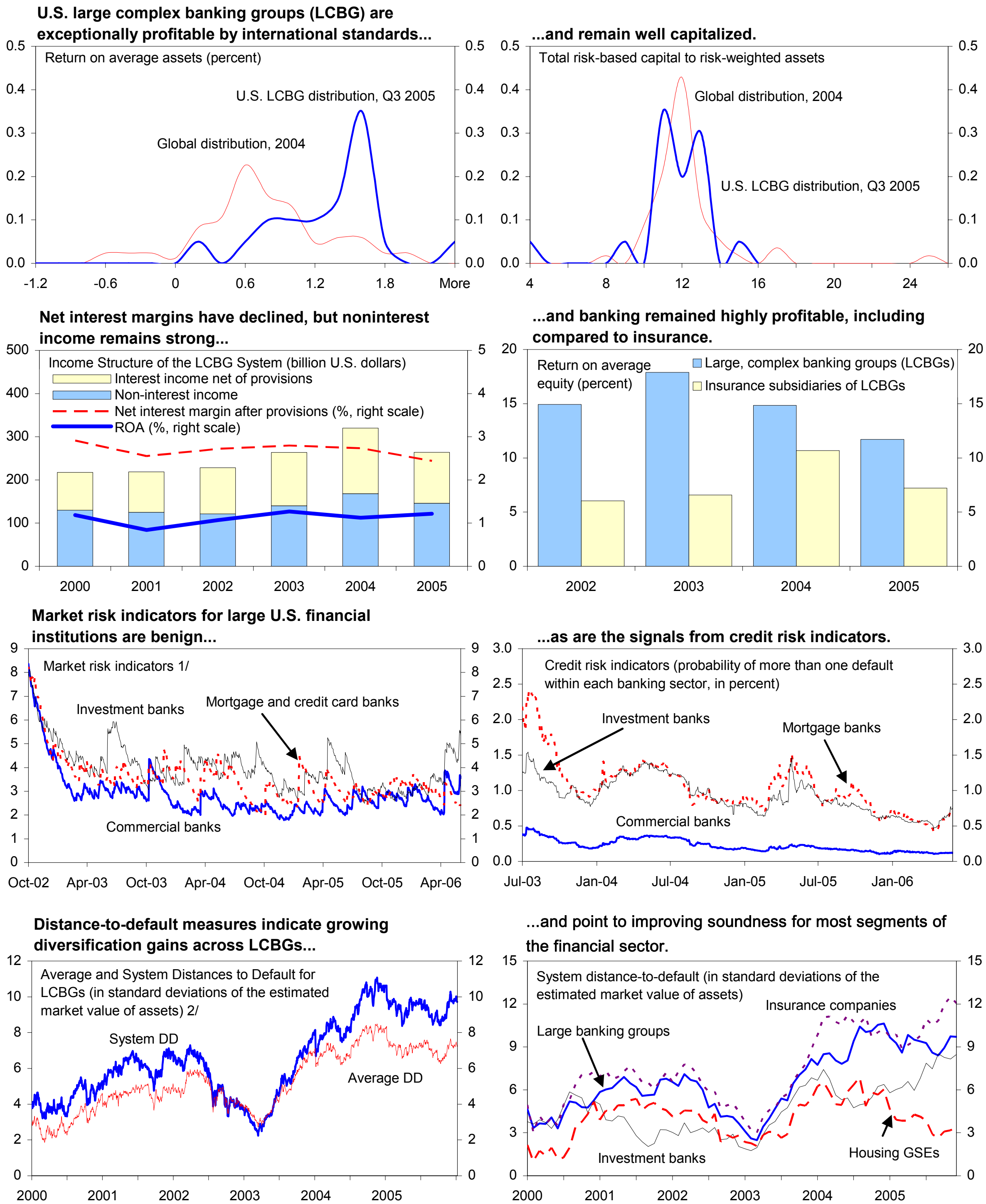
Sources: Bloomberg L.P.; Haver Analytics; and Fund staff calculations.

Figure 7. Financial Market Trends



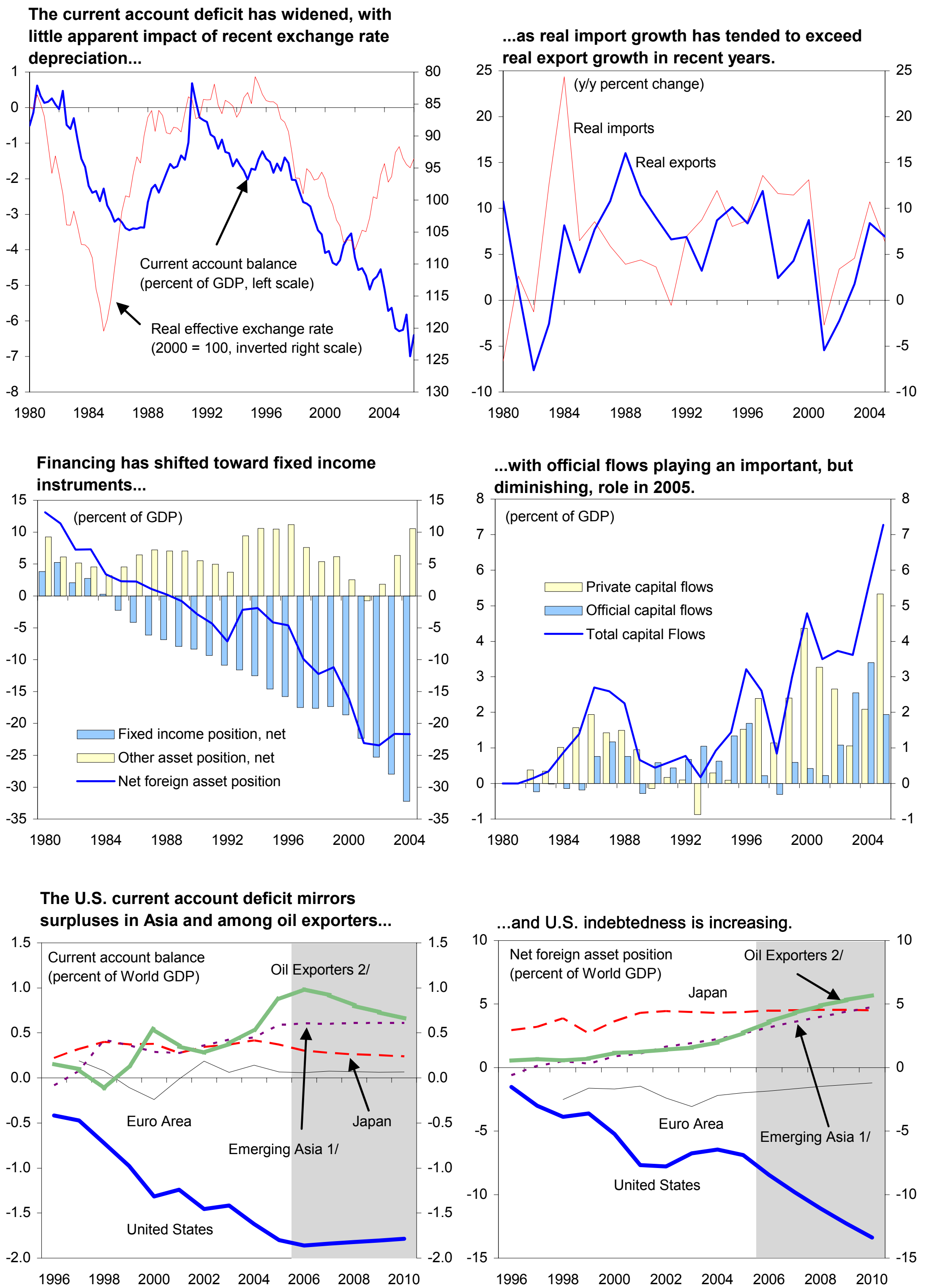
Sources: Haver Analytics; J.P. Morgan; Bank for International Settlements; Securities Industry Association; Moody's Investor Services; Merrill Lynch; Pension Benefit Guaranty Corporation; Datastream; and Fund staff calculations.
1/ For a discussion of distance-to-default measures, see Chapter 6 of *United States: Selected Issues* (IMF Country Report 04/228).

Figure 8. Financial Sector Soundness Indicators



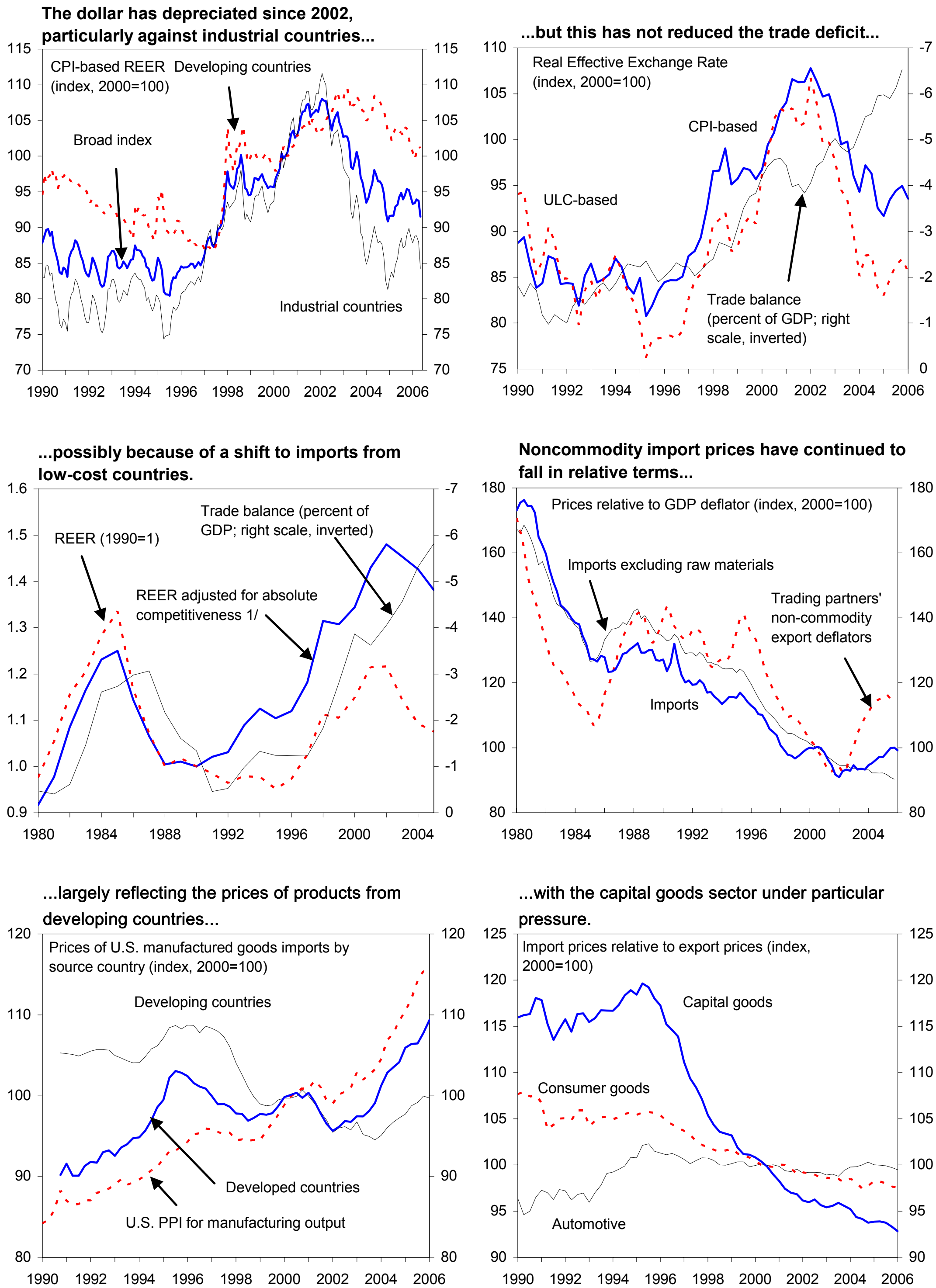
Sources: Bankscope; Datastream; Bloomberg L.P.; and Fund staff estimates.
1/ Value-at-Risk without market effects for portfolio of equities issued by subset of banks, in percent.
2/ For a discussion of distance-to-default measures, see Chapter 6 of *United States: Selected Issues* (IMF Country Report 04/228).

Figure 9. External Developments



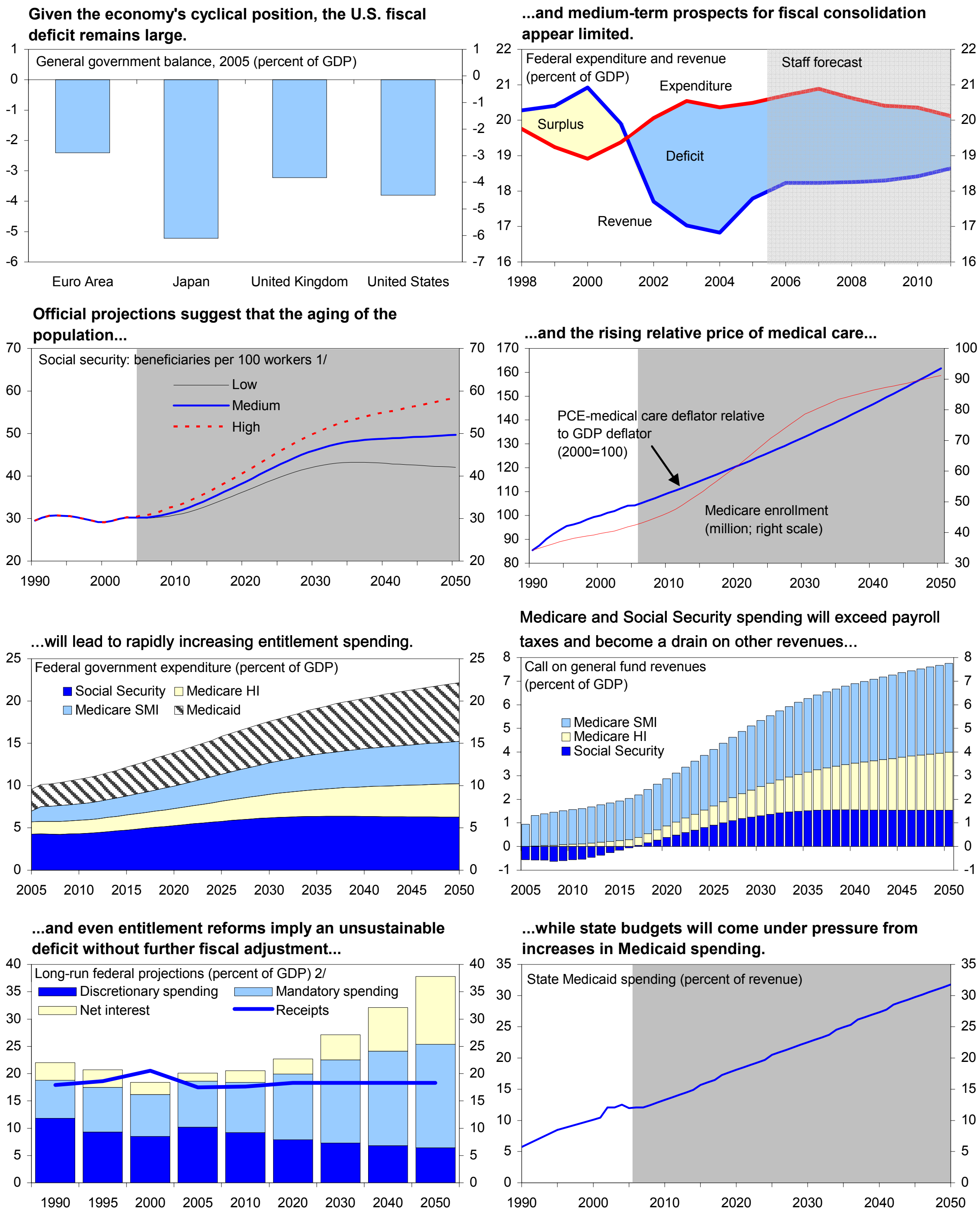
Sources: Haver Analytics; International Financial Statistics; Lane and Milesi-Ferreti (2006); and Fund staff estimates.
1/ China, Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan Province of China, and Thailand.
2/ Algeria, Angola, Azerbaijan, Bahrain, Republic of Congo, Ecuador, Equatorial Guinea, Gabon, I.R. of Iran, Kuwait, Libya, Nigeria, Norway, Oman, Qatar, Russia, Saudi Arabia, Syrian Arab Republic, Turkmenistan, United Arab Emirates, Venezuela, and the Republic of Yemen.

Figure 10. Indicators of International Competitiveness



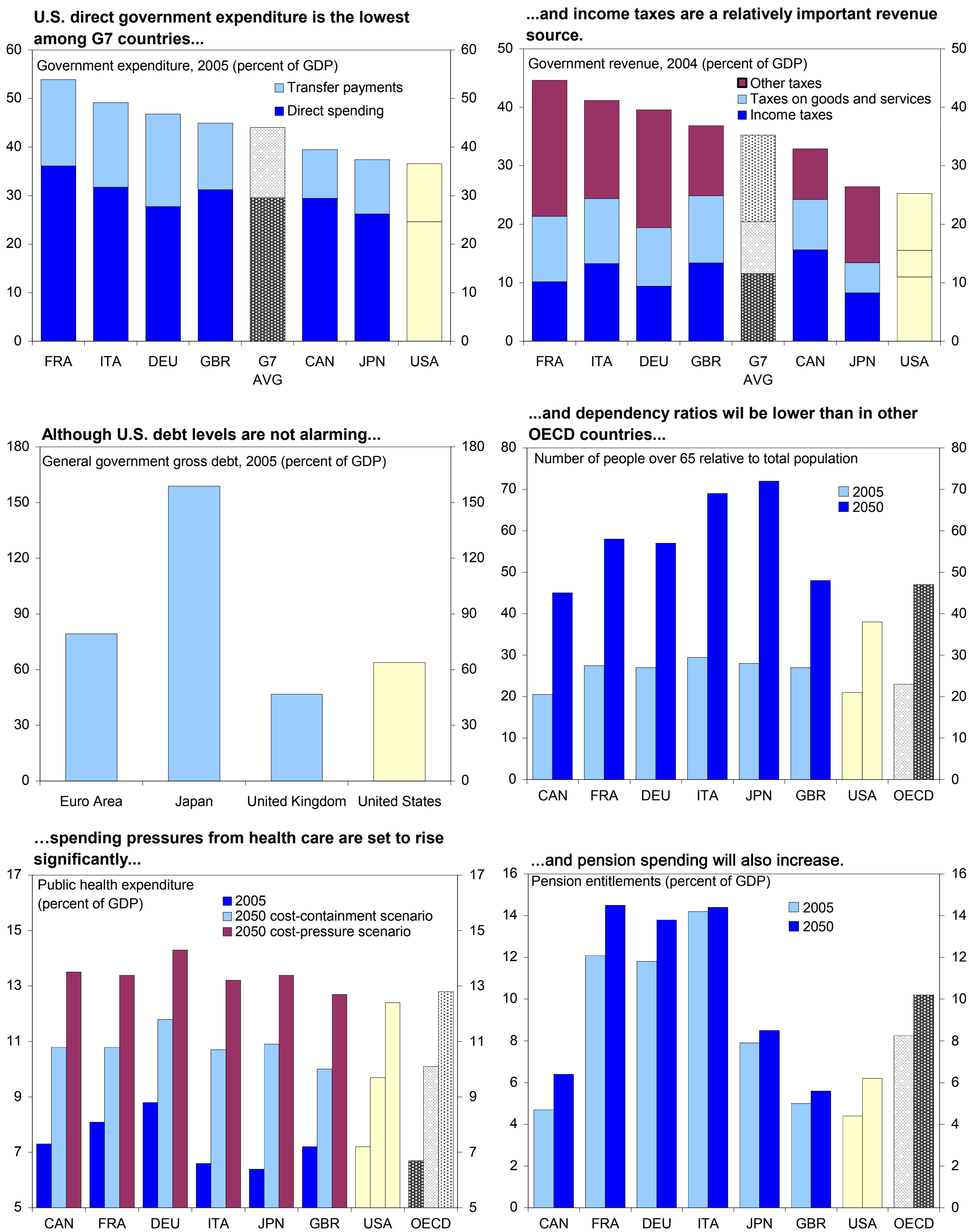
Sources: Haver Analytics; IMF, *World Economic Outlook;* and Fund staff calculations.
1/ Trade-weighted index using deviations from PPP to measure competitiveness.

Figure 11. Fiscal Indicators



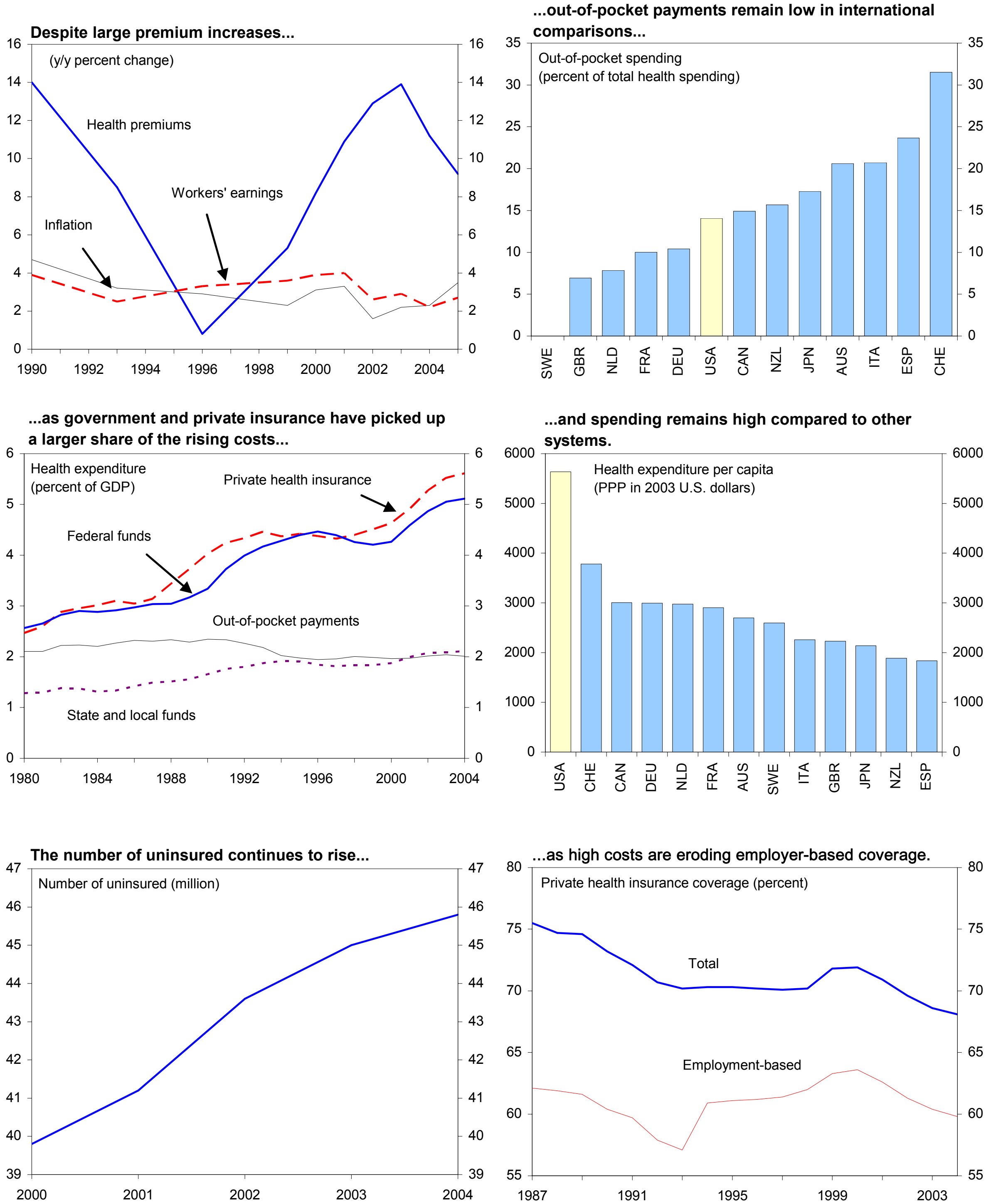
Sources: Haver Analytics; OECD; Social Security and Medicare Boards of Trustees; Congressional Budget Office (CBO); Office of Management and Budget; and Fund staff calculations.
1/ The three paths are based on differing demographic assumptions.
2/ CBO projections, December, 2005.

Figure 12. Fiscal Indicators in an International Setting



Sources: OECD; and IMF, *World Economic Outlook.*

Figure 13. Health Care Indicators



Sources: U.S. Department of Health and Human Services; OECD; Health Research and Educational Trust; and Kaiser Family Foundation.

Understanding Fan Charts

The fan charts in Figure 1 summarize staffs' assessment of the overall impact of risks to baseline GDP growth and CPI inflation forecasts. The uncertainty around the baseline (which reflects the "most likely" outcome) is captured by the fan chart's width, while the balance of risks—up or down—is reflected in its asymmetry. For example, the growth fan chart is negatively skewed, suggesting downside risk to staff's baseline growth forecast.

Two key inputs are required to construct a fan chart:

- ***A measure of the inherent reliability of the baseline forecast***. Staff used the standard deviation of the forecast error, calculated from the growth forecast errors in the April *World Economic Outlook* over 1992–2005.
- ***The balance of risks to the baseline forecast***. Staff assessed four risks to baseline growth, stemming from the housing market, labor productivity, financial conditions (all of which were assessed to produce downside risks to growth), and corporate spending (an upside risk). Staff also considered the impact of unlikely "discontinuous" events with large effects on growth—an Avian flu pandemic, other geopolitical risks (including a sharp spike in oil prices), and a disorderly unwinding of global imbalances. The balance of risks for 2006 implies that the average (mean) forecast for growth is ¼ percent below the staff's most likely (mode) forecast, and this difference rises further in 2007.

To provide a sense of the assumptions underpinning a specific risk imbedded in the growth fan chart, it is useful to elaborate on the risks to growth stemming from the U.S. housing market in 2006—the largest "continuous" risk to the baseline forecast. The baseline growth forecast assumes real house price growth will slow to 5 percent in 2006, implying a drag on GDP growth from the housing market of approximately ½ percent in 2006 and in 2007.

Staff then assessed two extreme but equally likely outcomes in the housing market. A *downside* risk is that nominal house prices will remain unchanged over the next year (real prices fall moderately) and residential investment growth turns negative. In this case, assuming a larger housing wealth effect of 10 cents in the dollar owing to a rapid slowdown in home equity withdrawal, GDP growth is expected to fall by 1 percent relative to the 2006 baseline. Staff also considered an *upside risk* that house price inflation and activity in 2006 remains the same as in 2005, implying a ½ percentage point higher GDP growth than in the baseline forecast.

Risks to inflation were considered to be on the upside. The downside risks associated with the potential for lower activity were offset by the potential boost to unit labor costs from slower-than-expected productivity growth. The upside risk comes from adding the possibility that high oil costs would be passed through to prices.

SUMMARIES OF BACKGROUND WORK ISSUED AS WORKING PAPERS

1. Is Housing Wealth an 'ATM'? The Relationship between Household Wealth, Home Equity Withdrawal, and Saving Rates

by Vladimir Klyuev and Paul Mills (WP/06/162)

The increase in U.S. home equity withdrawal (HEW) in recent years is often associated with the decline of the U.S. household saving rate. HEW is net new household borrowing secured on dwellings in excess of actual investment in housing. HEW increased from around 1 percent of U.S. net disposable income in the early 1990s to 9 percent in 2005—a period during which the ratio of household saving to disposable income fell from 7 percent to minus 0.5 percent. Some analysts have therefore argued that U.S. households have mainly used HEW to finance consumption, whereas others contend that HEW has been used to acquire financial assets, with lower saving a consequence of rising household wealth.

The paper analyzes the relationship between HEW, household wealth, and the saving rate for four countries. Given similar trends in home ownership, personal wealth and saving in the United States, Australia, Canada, and the United Kingdom, the paper investigates whether developments in these countries can shed light on the future path for U.S. HEW and household saving.

Trends in HEW

All countries have experienced considerable financial innovation, which has improved access to home equity. Mortgage market innovations in all four countries mean that, to varying degrees, borrowing constraints on middle- and low-income households have been relaxed, the cost of refinancing has fallen, and housing equity can be accessed at lower transactions costs. This is illustrated by the increasing share of secured credit in household debt in the United States. The increase in the liquidity of home equity is also likely to reduce the volatility of consumption and increase the attractiveness of owning a home by making it a more readily accessible store of value.

However, HEW does not appear to have played a consistent role across countries:

- ***While the decline in personal saving has been relatively similar, HEW trends have differed markedly across countries***. In the United States, HEW has been on an upward trend since the mid-1990s, consistent with the stylized fact that HEW tends to rise with housing market turnover and real house price inflation. HEW has exhibited a more cyclical pattern in the U.K. and Australia, with the latter also showing some trend increase. In Canada, the household sector in aggregate has almost never withdrawn equity from their housing assets.
- ***Survey evidence indicates that HEW is used for a variety of purposes, with consumer spending taking only a modest share***. Evidence from the United States,

> the U.K., and Australia indicates that acquisition of financial assets and repayment of other debts constituted the principal uses of HEW, with about 15-25 percent of withdrawn equity being used to finance consumption. In these surveys, a similar amount is used for home improvement, which is counted as residential investment and is not included in the national accounts definition of HEW.

The link between HEW and the net acquisition of financial assets by households is less clear in the aggregate data. Unlike the synchronous rise in HEW and decline in the personal saving rate, the acquisition of financial assets in the United States, Australia, and the United Kingdom has not exhibited a clear trend. In Canada, household saving declined against the background of growing home equity injection and a declining flow into net financial assets.

Regression results

Regression results indicate that HEW does not affect household saving rates in the long run, including in the United States. In the long run, the personal saving rates are largely determined by the ratio of household net worth to disposable income, the real interest rate, and the inflation rate. A time trend, probably reflecting financial market liberalization and innovation, also helps to explain the path of the U.S. saving rate.

Regressions do suggest, however, that HEW may have a notable short-run effect on saving. Changes in HEW are estimated to lead to a 15–20 cents in the dollar temporary offset on U.S. household saving, consistent with the survey evidence, although the impact is not statistically significant. Results for other countries vary, with the U.K. regression indicating a larger (and significant) effect, while the effects in Australia and Canada are estimated to be somewhat smaller than in the in the United States and insignificant.

Policy implications

Accessing housing wealth through HEW appears to have a short-term impact on household saving, while long-term trends are dominated by changes in household wealth and real interest rates. This presumably reflects the fact that different forms of wealth are increasingly fungible over time. One implication is that mortgage market innovation—such as lower transaction costs and easier access to home equity—may well increase the level and volatility of HEW, but there should be some benefit to macroeconomic stability from allowing households to more effectively smooth consumption over time.

Turning to the current conjecture, the likely fall in HEW as the housing market cools should support some rise in the U.S. household saving rate. Recent experience in the U.K. and Australia indicates that HEW could fall significantly as the housing market decelerates. Was HEW to rapidly revert to its long-term average of around 1 percentage point, regression coefficients imply a temporary boost to household saving of 1 percentage point or so, combined with a negative impact on residential investment spending on home improvement.

2. U.S. Inflation Dynamics: What Drives Them Over Different Frequencies?

by Ravi Balakrishnan and Sam Ouliaris (WP/06/159)

As in many other industrialized countries, inflation in the U.S. has remained low since the mid-1990s. This favorable outcome has occurred despite generally robust economic growth and substantial oil and commodity price increases.

The academic literature offers only limited explanation for this decline in inflation. Traditional empirical models tend to over-predict inflation, particularly after the mid-1990s, and most researchers have argued that improved monetary policy credibility and increased globalization have contributed to the decline in price pressures.

The paper seeks to improve the understanding of U.S. inflation dynamics by separating structural from cyclical effects, and by studying the impact of external factors. Using data for 1960-2005, frequency domain decompositions reveal that there has been a smooth, secular decline in underlying inflation that started around 1980. The paper also finds a reduction in the size and volatility of the business cycle component of inflation over a similar period, with indications that the growing impact of globalization has played a role in this development.

Two models are used to analyzing the inflation-output tradeoff. The traditional Phillips curve (TPC) focuses on the role of lagged inflation and the output gap on inflation. The forward-looking New Keynesian Phillips Curve approach places more emphasis on expected future inflation and movements in marginal producer costs.

Traditional Phillips Curve

The TPC model enhances the understanding of cyclical inflation movements but still over predicts inflation. The model produces relatively good forecasts for the business cycle component of inflation. However, even after incorporating external shocks to capture the impact of imported inflation—proxied by movements in the terms of trade—much of the trend decline in inflation is unexplained. This suggests that the decline in inflation since the 1980s is a structural, as opposed to cyclical, phenomenon.

Several factors are likely to contribute to the model's shortcomings. Apart from ignoring forward-looking inflation expectations, possible shifts in the expectation formation process—for example due to enhanced U.S. monetary policy credibility—may also play a role. Moreover, significant measurement error in the output gap estimate, especially in view of the apparent increase in structural productivity growth during the second half of the 1990s, may have contributed to the upward bias in inflation projections.

New Keynesian Phillips Curve

The New Keynesian Phillips Curve (NKPC) model offers theoretical improvements over the traditional Phillips curve approach. To address some of the shortcomings inherent in TPC models, these models use forward-looking inflation expectations and focus on changes in marginal costs—which should directly affect producers' pricing decisions—rather than measures of the output gap.

Although the NKPC also falls short of explaining the decline in structural inflation, the results suggest that the link between production costs and inflation has weakened over time. Using the labor share in GDP as a proxy for marginal production costs, we find that the relationship between inflation and marginal costs breaks down in the late 1990s—around the same time the TPC model starts to over-predict inflation. This finding is robust to changes in the definition of the labor share, such as stripping out stock options from labor income.

External variables improve the fit of the NKPC, providing support to the hypothesis that trade and global factor markets have helped to reduce inflation. The basic model was extended by introducing imported intermediate goods and allowing desired price mark-ups to vary with the business cycle and the degree of competition. This improved the overall performance of the model, although the impact and significance of external variables are evident mainly in the cyclical component.

Policy implications

The paper finds that downward price pressures related to globalization appear to be largely cyclical in nature, suggesting that their beneficial impact on inflation could wane earlier than expected. The decomposition of inflation into its cyclical component and secular trend components reveals that excess demand, terms-of-trade shocks, and competitive pressures linked to globalization operate mainly over the cycle. The result for globalization is particularly important, as it suggests that competitive effects coming from low-cost producers and higher global competition are unlikely to keep inflation low on a permanent basis.

This suggests that preserving and strengthening monetary policy credibility will be key to cementing the secular decline in inflation. Given the limited role identified for other factors, higher credibility not only appears to have contributed to the trend decline in inflation but also to have lowered the variability of inflation around its long-run path. Pinning down the structural and cyclical implications of monetary policy credibility will be an important project for future research.

3. U.S. Dollar Risk Premiums and Capital Flows

by Ravi Balakrishnan and Volodymyr Tulin (WP/06/160)

Although the U.S. current account deficit has so far been easily financed, questions about the availability of future financing have been mounting. Following a steady deterioration since the early 1990s, the U.S. current account deficit reached a record 6½ percent of GDP in 2005. While this has been financed without placing any obvious pressure on U.S. interest rates or the dollar, many analysts and policymakers have cautioned that the current trajectory of U.S. net foreign liabilities is unsustainable, suggesting that market sentiment toward U.S. dollar assets could weaken significantly.

The paper sheds light on the attractiveness for U.S. assets by studying dollar risk premiums and linking them to bilateral capital flows. First, bilateral risk premiums on the U.S. dollar are estimated, using an uncovered interest parity framework and Consensus exchange rate forecasts. Second, the paper analyzes the link between capital flows and measured risk premiums for various regions. Finally, the paper uses regression analysis to test whether macroeconomic factors have had an influence on movements in risk premiums.

Risk premiums were estimated at one- and two-year horizons for the dollar against the pound sterling, the Canadian dollar, the euro, and the yen. These series were also used to construct "global" dollar risk premium measures.

Results

Dollar risk premiums have generally been negative in recent years.[12] This is consistent with investors buying U.S. assets for reasons other than expected returns, such as the presence of a wider range of financial instruments, or liquidity or security preferences. However, premiums have exhibited large fluctuations against the Japanese yen and the euro:

- The risk premium vis-à-vis the euro declined to about –10 percent in 2000, but has now moved closer to zero.
- The risk premium against the yen has generally been positive, but turned negative in recent years—consistent with studies that find Japanese home bias declining from extremely high levels in the past.
- The overall risk premium has largely remained negative in recent years. Rising expectations of dollar depreciation have only been partly offset by growing interest differentials in favor of the United States.

[12] For the purpose of this paper, a dollar risk premium is defined as the difference in one or two-year interest rates on U.S. and foreign assets, adjusted for expected changes in the exchange rate. A negative premium implies that investors accept a negative expected return by investing in U.S. interest-bearing assets.

These trends coincided with a substantial increase in capital flows into the United States in recent years. The rise in U.S. net liabilities has occurred mostly through increases in fixed income securities, which were purchased largely by investors in the euro area, Japan, and emerging Asian economies. European investors acquired mainly corporate bonds and equity, whereas Japan and emerging Asia invested primarily into treasury bonds. The coincidence of riskier investment patterns and—on occasion—strongly negative risk premiums on the dollar against the euro suggests that European investors may have had a greater risk appetite than Asian investors as far as U.S. assets have been concerned.

Fluctuations in dollar sentiment seem to be largely unrelated to macroeconomic developments. Regressions of risk premiums on variables such as debt sustainability indicators and U.S.-foreign growth differentials generally yielded incorrectly signed or insignificant coefficients.

On the other hand, differences in regional risk appetites, and the aftermath of the Asia crisis, appear to have had a measurable influence on dollar sentiment. In particular, an increase in risk appetites in the U.K. and the euro area—as measured by investors' revealed preference for purchasing corporate bonds over safer Treasury assets—tends to go hand in hand with a decline in risk premiums on the dollar.

Policy implications

The constellation of negative risk premiums and record capital inflows could suggest that investors may favor U.S. investments for structural reasons. The paper found that measures that influence expected returns—such as relative growth prospects—appear to have not been particularly important. One possible explanation could be that the Asian crisis created a large pool of savings searching for low-risk investment opportunities, which were provided by relatively deep, liquid, and innovative U.S. financial markets. Moreover, continued inflows of European funds into the United States suggest that investors are attracted by the wide array of instruments with different risk/return characteristics that only U.S. markets currently offer.

Looking forward, the allocative efficiency of U.S financial markets could mitigate the risks of a disorderly unwinding of global current account imbalances. To be sure, there is the risk that foreign investors will begin to demand a sharp increase in relative compensation for dollar assets without a rapid dollar depreciation. However, the likelihood of such an adverse scenario is reduced by the dollar's role as global reserve currency; the recent improvement in economic prospects in other regions; and by the continued attractiveness of the U.S. financial system, assuming that continued innovation retains its advantage over other financial markets.

4. How Might a Disorderly Resolution of Global Imbalances Affect Global Wealth?
by Francis E. Warnock (WP/06/170)

The widening U.S. current account deficit and the associated large positions that foreigners have amassed in U.S. securities have garnered much attention. This paper addresses the question how a disorderly adjustment that involves a marked shift in investor preferences away from U.S. assets might impact the wealth of residents in a wide range of foreign countries. To provide a sense of the orders of magnitude involved, a stylized scenario is analyzed in which there is a simultaneous decline in the value of the dollar against all other currencies, accompanied by a fall in U.S. bond and equity prices.

Very similar results are found using two surveys of international investment positions with different strengths and weaknesses:

- ***The comprehensive U.S. benchmark liabilities survey*** is of extremely high quality, but liabilities are subject to a custodial center bias from the use of third-country custodians. If, for example, a German resident holds a U.S. corporate bond through a custodian in Luxembourg, the survey will attribute the holdings to Luxembourg. The survey can only access the first foreign address, not that of the ultimate holder.
- ***The IMF's December 2004 Coordinated Portfolio Investment Survey*** (CPIS) does not yet have the same level of overall quality, since many of the participants are still refining their survey techniques. However, as it compiles results from individual country's asset surveys, it suffers less from the custodial center bias.

A disorderly adjustment is illustrated by assuming a simultaneous 10 percent decline in the U.S. currency and prices in equity and bond markets. The combination of all three markets moving in the same direction is indicative of a shift in investor preferences. However, the calculations are based on the assumption that the scenario would impact U.S. markets only, which may be regarded as somewhat unlikely.

The impact would be to lower the rest of the world's wealth by about 5 percentage points of GDP. In aggregate, foreigners have accumulated large positions in U.S. bonds and equities—roughly $5 trillion by mid-2004—with considerable variation in exposure across countries. The analysis suggests that for every 10 percent drop in U.S. bond prices and in the exchange value of the dollar, aggregate wealth losses for the rest of the world would amount to 2½ percentage points of their GDP. If, in addition, U.S. equity markets also declined by 10 percent, foreigners would incur losses of another 1½ percentage points of GDP. Including losses through the rest of the world's exposure to dollar-denominated bonds issued by foreign countries, brings the total loss to nearly 5 percentage points of GDP.

These losses are about half as large as those experienced by U.S. residents. A 10 percent decrease in U.S. equity and bond markets would lead to a decrease in U.S. wealth of almost

11 percentage points of GDP. Partially offsetting this would be the 2 percentage point gain from the currency appreciation on U.S. investors' foreign portfolio holdings.

The exposure of the rest of the world to U.S. assets has increased rapidly over time, reflecting rapid internationalization of asset markets as well as large U.S. external deficits. Aggregate losses from U.S. assets based on the disorderly scenario discussed above would have been 1 percentage point of foreign GDP in 1994, 3 percentage points in 2000, and 4 percentage points as of 2004. Examining the impact across more than 50 countries illustrates that the increased exposure to U.S. securities markets over the past decade has been broadly based.

The exposure to U.S. assets is similar for developed countries and for emerging markets, but for emerging markets reserve holdings are more important. Foreign countries, and especially emerging markets, are more exposed to U.S. bonds than to U.S. equities. While the average overall exposure of developed countries and emerging markets is very similar (when normalized by GDP), the exposure of the public sector is much larger for emerging markets. The analysis of reserves positions suggests that public sector losses in emerging markets could amount to about 2¾ percentage points of GDP.

Exposures vary significantly across individual countries. Excluding financial centers where losses are artificially high due to large custodial bias (Belgium, Hong Kong, Luxembourg, Singapore, and parts of the Caribbean), countries with high losses include Ireland (14½ percent of GDP), Taiwan and the Netherlands (8 percent), Canada, Norway, Sweden, and the United Kingdom (5–6 percent), and China, Japan, and Middle East oil exporters (4–4½ percent). These countries could also incur additional losses through custodial centers.

Policy implications

Rapidly growing holdings of foreign assets have increased the potential for international wealth spillovers. While global wealth effects from a significant depreciation in the dollar and fall in the value of U.S. asset prices were trivial as late as of the mid-1990s, these effects have quadrupled and become systemically important. As a result, the impact of a sudden adverse shock to U.S. asset prices on foreign wealth could be as large as half the impact on U.S. wealth (relative to foreign and U.S. GDP, respectively).

The similarity of the exposures of emerging markets and developed countries underlines growing links within the international monetary system. Emerging Asia and, more recently, oil exporters have become important sources of capital inflows to the United States. One important difference, however, is that for emerging markets most of the losses would be experienced by governments, while in the developed world the impact would be primarily on the private sector.

5. Moving to Territoriality? Implications for the United States and the Rest of the World

by Peter Mullins (WP/06/161)

The Report of President's Advisory Panel on Federal Tax Reform includes a suggestion to move the corporation tax from its present worldwide basis to a territorial basis. Under the worldwide tax system, profits earned abroad are taxed in the United States when they are repatriated, but with a credit for foreign taxes paid. Under the territorial tax system, profits earned abroad would be exempt in the United States. The paper considers the implications of such a reform for the United States and the rest of the world.

Impact on the United States

Advocates of territorial taxation argue that it would increase the competitiveness of U.S. firms in foreign markets. This is because foreign earnings of U.S. firms would not be taxed at U.S. corporate rates, which are relatively high by international comparison. Other arguments used to support territoriality include: removing a distortionary incentive to retain profits offshore, which could increase domestic investment; eliminating some avoidance opportunities; and greater simplicity.

Opponents argue that territoriality will encourage U.S. firms to invest abroad rather than in the United States. In their view, the gains from simplification would be minimal, as many of the current complex rules would still apply under a territorial system, and some existing problems (such as transfer pricing) would be exacerbated.

The potential benefits to the United States from adopting a territorial system are not clear cut. Against this background, there may be merit in an often proposed alternative that would retain the worldwide system but remove the current deferral of tax until repatriation (and hence the bias against this behavior) and tightening foreign tax crediting rules.

Impact on the foreign countries

The rest of the world's interest in a move by the United States to a territorial system would partly depend on its impact on U.S. FDI abroad. The United States is the leading source of FDI, accounting for around 20 percent of the worldwide stock, and relatively small changes could have a large impact on some other countries. Recipient countries would benefit to the extent that increased U.S. FDI inflows would not displace FDI from elsewhere, leading to a net gain in revenue.

The impact on foreign tax revenues is potentially sizable. The amount of revenue at stake is significant as foreign taxes paid by U.S. companies on foreign source income amounted to $44½ billion in 2001, of which about a third accrued to developing countries.

In considering the implications for the rest of the world, the paper addresses three key questions:

- ***Would the territorial system change the level and location of U.S. FDI?*** The empirical evidence suggests that a U.S. move to a territorial system could lead to changes in the *location* of FDI (in response to differences in national tax rates) but would leave the overall *level* of U.S. FDI roughly unchanged. This result reflects a number of factors, including the impact of other tax changes associated with the move to a territorial system—such as limits on expense deductibility and foreign tax cross-crediting; the tax exemption already provided under the current system (largely through tax deferral); and the possibility that increased U.S. FDI would replace non-U.S. FDI.
- ***Would the territorial system encourage tax competition to attract U.S. FDI?*** To the extent that countries are already competing to attract investment from other countries with territorial systems, the additional impact on tax competition may be limited. However, some countries that are currently setting tax rates to "soak up" U.S. foreign tax credits may move to a territorial system, which could encourage others to reduce rates to attract more FDI.
- ***Would other countries follow the United States lead and move to a territorial system?*** Except in the Latin American region, many emerging markets and developing countries have generally shifted toward territorial taxation, and adoption by the United States could provide further encouragement in this direction. However, given the scope for abuse under a territorial system (e.g., related to transfer pricing), the revenue impact could be negative for countries without strong administrative systems in place. Moreover, most double tax treaties provide for taxes on multinational corporations to be collected by the source country. Therefore, U.S. treaty partners may feel under pressure to reduce their tax rates in order to attract U.S. FDI.

Policy implications

A move to territoriality may have tax revenue implications for the United States. The direct effect of exempting foreign source income would be to reduce tax revenues, although the Tax Panel and other analysts argue that the proposal would be largely revenue-neutral or even increase revenues. This is due to the possible increase in investment in the United States as a result of earlier profit repatriation, as well as the effect of other proposed tax changes associated with the territorial system.

A move by the United States could also intensify tax competition amongst developing countries. Although countries already competing for FDI from other destinations would be less affected, countries where U.S. FDI has traditionally been most important could experience additional pressures on revenues.

Table 1. United States: Net Foreign Asset Position Sustainability Framework, 2001–2011

(In percent of GDP, unless otherwise indicated)

		Actual					Projections						
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	**NFA-stabilizing non-income current account 5/**
1	**Baseline: Net Foreign Asset Position**	-23.1	-23.4	-21.3	-20.9	-20.4	**-26.5**	**-31.9**	**-37.0**	**-41.9**	**-46.5**	**-50.1**	**-0.2**
2	Change in net foreign asset position	-7.0	-0.3	2.1	0.5	0.5	-6.1	-5.4	-5.1	-4.8	-4.6	-3.6	
3	Identified external liability-creating flows (4+8)	3.6	4.3	3.9	4.7	5.7	6.2	6.9	7.1	7.3	7.5	7.6	
4	Current account deficit excluding income flows	3.6	4.4	4.3	5.4	6.2	6.6	7.0	7.3	7.5	7.7	7.8	
5	Deficit in balance of goods and services	3.6	4.0	4.5	5.2	5.7	6.1	5.9	5.7	5.4	5.2	5.0	
6	Exports	9.9	9.3	9.3	9.8	10.2	10.8	11.2	11.6	11.9	12.2	12.6	
7	Imports	13.5	13.4	13.8	15.0	16.0	16.8	17.1	17.2	17.3	17.5	17.6	
8	Automatic debt dynamics 1/	0.0	0.1	0.4	0.7	0.5	0.4	0.1	0.2	0.2	0.2	0.2	
9	Contribution from nominal interest rate	-0.5	-0.6	-0.6	-0.6	-0.7	-0.9	-1.2	-1.4	-1.7	-1.9	-2.1	
10	Contribution from real GDP growth	0.1	0.4	0.6	0.8	0.7	0.7	0.8	1.0	1.1	1.3	1.4	
11	Contribution from price changes 2/	0.4	0.4	0.5	0.5	0.6	0.6	0.5	0.6	0.7	0.8	0.9	
12	Residual (2-3) 3/	-3.4	4.0	6.0	5.2	6.2	0.1	1.5	2.0	2.4	2.9	4.0	
	Net foreign liabilities-to-exports ratio (in percent)	-232.3	-251.1	-228.8	-212.6	-199.7	-246.1	-284.3	-320.1	-352.1	-379.7	-397.9	
	Scenario with key variables at their historical averages 4/						**-26.5**	**-28.2**	**-29.5**	**-30.2**	**-30.5**	**-29.7**	**-0.5**
	Key Macroeconomic Assumptions Underlying Baseline												
	Real GDP growth (in percent)	0.8	1.6	2.7	4.2	3.5	3.5	3.1	3.2	3.2	3.2	3.2	
	GDP deflator in US dollars (change in percent)	2.4	1.7	2.0	2.6	2.8	2.8	2.0	2.0	2.0	2.0	2.0	
	Nominal external interest rate (in percent)	2.9	2.8	2.8	3.3	3.7	4.6	4.7	4.7	4.8	4.8	4.8	
	Growth of exports (US dollar terms, in percent)	-6.0	-3.0	4.6	12.7	10.7	12.1	9.7	8.5	8.3	8.4	8.3	
	Growth of imports (US dollar terms, in percent)	-5.5	2.1	8.5	16.2	13.0	12.4	7.0	5.9	5.9	6.1	6.3	
	Current account balance, excluding interest payments	-3.6	-4.4	-4.3	-5.4	-6.2	-6.6	-7.0	-7.3	-7.5	-7.7	-7.8	

1/ Derived as $[r - g - \rho(1+g) + \varepsilon\alpha(1+r)]/(1+g+\rho+g\rho)$ times previous period debt stock, with r = nominal effective interest rate on external debt; ρ = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, ε = nominal appreciation (increase in dollar value of domestic currency), and α = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price changes is defined as $[-\rho(1+g)]/(1+g+\rho+g\rho)$ times previous period debt stock. ρ increases with a rising GDP deflator.

3/ Line includes the impact of exchange rate changes.

4/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

5/ Long-run, constant balance that stabilizes the net foreign asset ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Table 2. United States: Public Sector Debt Sustainability Framework, 2001–2011

(In percent of GDP, unless otherwise indicated)

	Actual					Projections						
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	**Debt-stabilizing primary deficit 9/**
1 **Baseline: Public sector debt 1/**	38.3	41.0	43.8	45.3	46.0	**46.7**	**47.9**	**48.9**	**49.4**	**49.8**	**49.8**	**-0.1**
o/w foreign-currency denominated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2 Change in public sector debt	-1.2	2.7	2.8	1.5	0.6	0.7	1.3	0.9	0.6	0.4	0.0	
3 Identified debt-creating flows (4+7+12)	-1.6	1.7	2.2	1.1	0.6	-0.1	0.5	0.1	-0.2	-0.4	-0.8	
4 Primary deficit	-2.7	1.0	2.2	2.1	1.3	0.6	0.5	0.2	-0.2	-0.3	-0.7	
5 Revenue and grants	30.7	28.3	27.5	27.3	28.5	29.4	29.5	29.7	29.7	29.8	30.1	
6 Primary (noninterest) expenditure	28.0	29.2	29.7	29.4	29.8	29.9	30.1	29.9	29.5	29.5	29.4	
7 Automatic debt dynamics 2/	1.1	0.8	0.0	-1.0	-0.8	-0.6	-0.1	-0.1	0.0	-0.1	-0.1	
8 Contribution from interest rate/growth differential 3/	1.1	0.8	0.0	-1.0	-0.8	-0.6	-0.1	-0.1	0.0	-0.1	-0.1	
9 Of which contribution from real interest rate	1.4	1.4	1.1	0.8	0.8	0.9	1.3	1.4	1.5	1.4	1.5	
10 Of which contribution from real GDP growth	-0.3	-0.6	-1.1	-1.7	-1.5	-1.5	-1.4	-1.5	-1.5	-1.5	-1.5	
11 Contribution from exchange rate depreciation 4/	0.0	0.0	0.0	0.0	0.0	...	...	...	...	...	...	
12 Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
13 Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
14 Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
15 Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
16 Residual, including asset changes (2-3) 5/	0.5	0.9	0.5	0.4	0.1	0.8	0.8	0.8	0.8	0.8	0.8	
Public sector debt-to-revenue ratio 1/	124.7	145.1	159.2	165.8	161.6	158.8	162.3	164.5	166.4	167.1	165.5	
Gross financing need 6/	19.9	25.1	26.2	26.5	25.1	23.0	23.4	23.6	23.5	23.6	23.3	
in billions of U.S. dollars	2018.9	2631.8	2869.6	3115.2	3135.1	3051.4	3275.9	3468.1	3650.9	3845.5	4006.5	
Scenario with key variables at their historical averages 7/						**46.7**	**46.1**	**45.5**	**44.9**	**44.4**	**43.8**	**0.2**
Scenario with no policy change (constant primary balance) in 2006-2011						**46.7**	**49.5**	**51.6**	**53.8**	**55.9**	**58.1**	**0.9**
Key Macroeconomic and Fiscal Assumptions Underlying Baseline												
Real GDP growth (in percent)	0.8	1.6	2.7	4.2	3.5	3.5	3.1	3.2	3.2	3.2	3.2	
Average nominal interest rate on public debt (in percent) 8/	6.1	5.5	4.9	4.6	4.7	4.9	5.1	5.1	5.2	5.1	5.1	
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	3.7	3.8	2.9	1.9	1.9	2.1	3.1	3.1	3.2	3.1	3.1	
Nominal appreciation (increase in US dollar value of local currency, in percent)	0.0	0.0	0.0	0.0	0.0	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	2.4	1.7	2.0	2.6	2.8	2.8	2.0	2.0	2.0	2.0	2.0	
Growth of real primary spending (deflated by GDP deflator, in percent)	5.2	6.0	4.5	3.2	4.7	4.1	3.5	2.6	2.1	3.1	2.8	
Primary deficit	-2.7	1.0	2.2	2.1	1.3	0.6	0.5	0.2	-0.2	-0.3	-0.7	

1/ General government net debt.

2/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; α = share of foreign-currency denominated debt; and ε = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

3/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi(1+g)$ and the real growth contribution as -g.

4/ The exchange rate contribution is derived from the numerator in footnote 2/ as $\alpha\varepsilon(1+r)$.

5/ For projections, this line includes exchange rate changes.

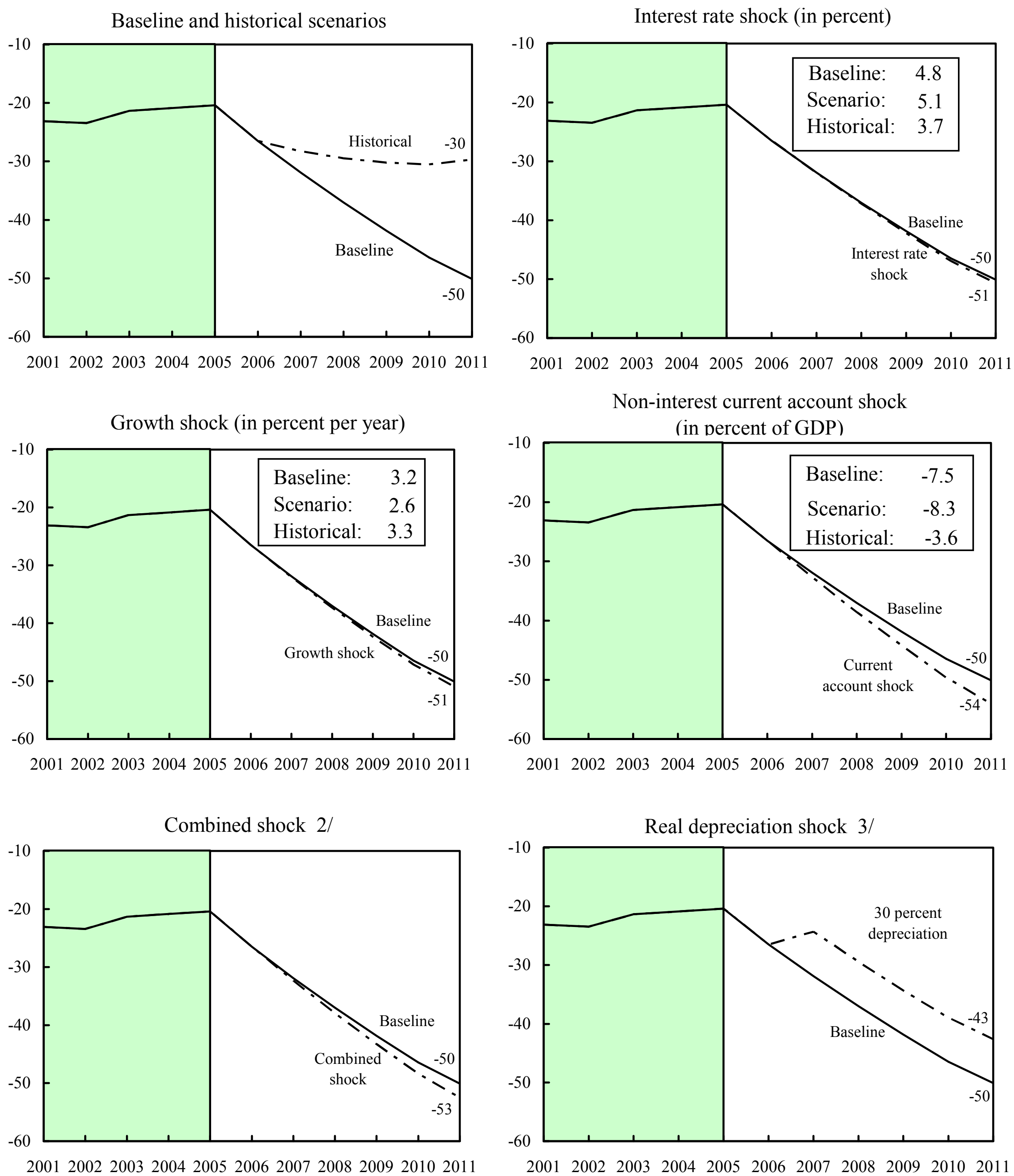
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.

7/ The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.

8/ Derived as nominal interest expenditure divided by previous period gross debt stock.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Figure 1. United States: Net Foreign Asset Sustainability: Bound Tests 1/
(Net foreign assets in percent of GDP)



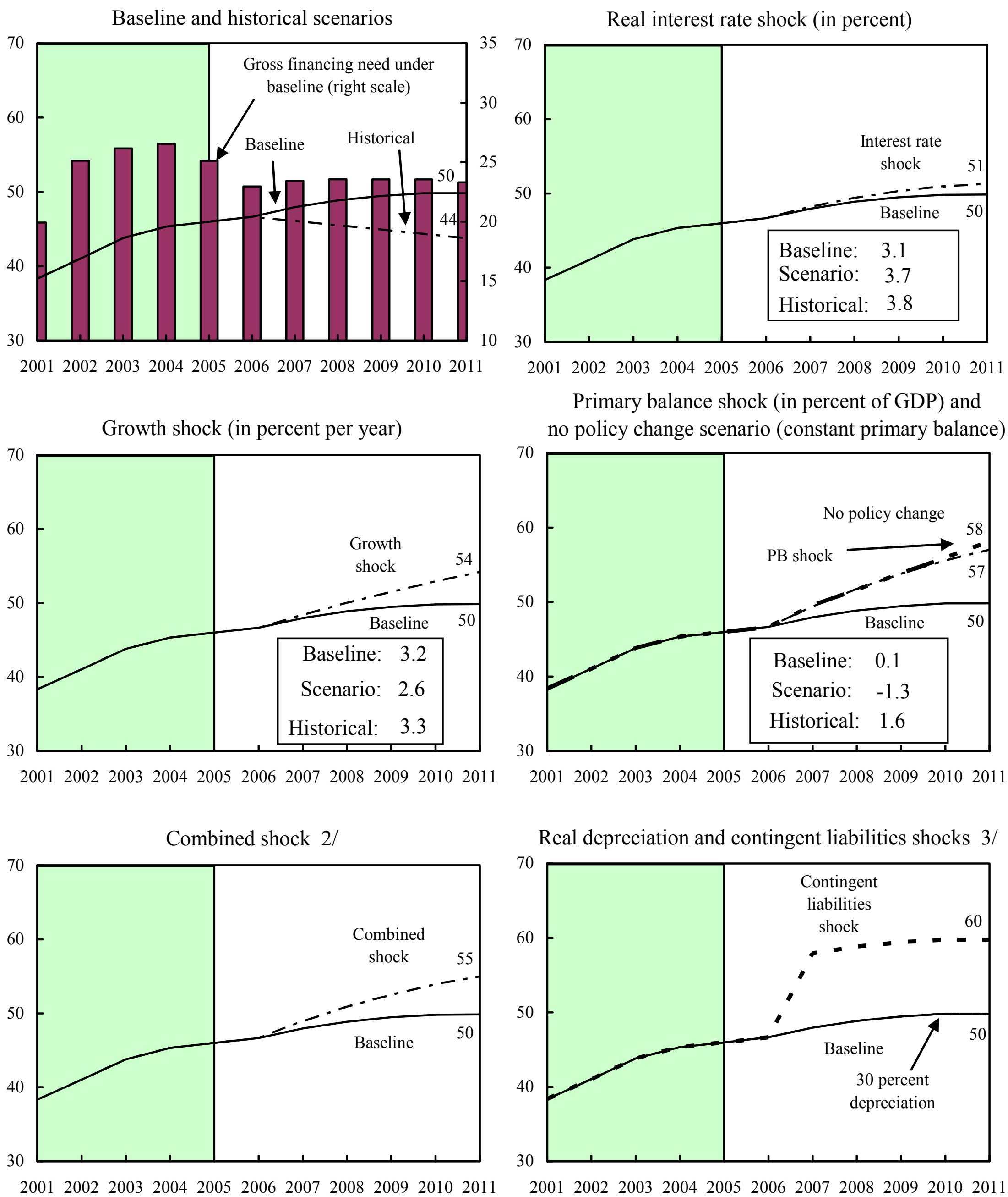
Source: Fund staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

3/ One-time real depreciation of 30 percent occurs in 2007.

Figure 2. United States: Public Debt Sustainability: Bound Tests 1/
(Public debt in percent of GDP)



Source: Fund staff estimates.

1/ Shaded areas represent actual data.Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.

3/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2006, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

United States: Fund Relations
(As of May 31, 2006)

I. **Membership Status**: Joined 12/27/45; Article VIII

II. General Resources Account:	SDR Million	Percent Quota
Quota	37,149.30	100.0
Fund holdings of currency	32,727.88	88.1
Reserve position in Fund	4,419.44	11.9

III. SDR Department:	SDR Million	Percent Allocation
Net cumulative allocation	4,899.53	100.0
Holdings	5,825.20	118.9

IV. **Outstanding Purchases and Loans**: None

V. **Financial Arrangements**: None

VI. **Projected Obligations to Fund**: None

VII. **Exchange Rate Arrangements:** The exchange rate of the U.S. dollar floats independently and is determined freely in the foreign exchange market.

VIII. **Payments Restrictions**: The United States maintains restrictions on payments and transfers for current international transactions to the Balkans, Belarus, Cote d'Ivoire, Cuba, Democratic People's Republic of Korea, Iraq, Islamic Republic of Iran, Liberia, Myanmar, Sudan, Syrian Arab Republic, and Zimbabwe and has notified the Fund of these restrictions under Decision No. 144–(52/51). The United States restricts the sale of arms and petroleum to the National Union for the Total Independence of Angola (UNITA) and to the territory of Angola and has prohibitions against transactions with international narcotics traffickers. The United States notified the Fund under Decision No. 144–(52/51) on August 2, 1995 of the imposition of further restrictions on current transactions with Islamic Republic of Iran. On March 21, 2002, the United States notified the Fund of exchange restrictions related to the financing of terrorism. The United States has lifted restrictions previously imposed with respect to Libya.

IX. **Article IV**. The 2005 Article IV consultation was concluded in July 2005 and the Staff Report was published as IMF Country Report 05/245. A fiscal ROSC was completed in the context of the 2003 consultation.

Statistical Issues

Statistical Issues: Comprehensive economic data are available for the United States on a timely basis. The quality, coverage, periodicity, and timeliness of U.S. economic data are considered to be good both in the context of the Article IV consultation and for purposes of ongoing surveillance. The United States has subscribed to the Special Data Dissemination Standard (SDDS) and its metadata are posted on the Dissemination Standard Bulletin Board (DSBB).

United States: Table of Common Indicators Required for Surveillance

(As of June 23, 2006)

	Date of latest observation	Date received	Frequency of data[6]	Frequency of reporting[6]	Frequency of publication[6]
Exchange rates	same day	same day	D	D	D
International reserve assets and reserve liabilities of the monetary authorities[1]	Jun. 16	Jun. 20	W	W	W
Reserve/base money	Jun. 21	Jun. 22	B	W	W
Broad money	May 2006	Jun. 15	M	W	W
Central bank balance sheet	Mar. 31, 2006	Jun. 8	Q	Q	Q
Interest rates[2]	Same day	Same day	D	D	D
Consumer price index	May 2006	Jun. 14	M	M	M
Revenue, expenditure, balance and composition of financing[3] – general government[4]	2006 Q1	Apr. 28	Q	Q	Q
Revenue, expenditure, balance and composition of financing[3] – central government	May 2006	Jun. 12	M	M	M
Stocks of central government and central government-guaranteed debt	May 2006	Jun. 6	M	M	M
External current account balance	2006 Q1	Jun. 16	Q	Q	Q
Exports and imports of goods and services	Apr. 2006	Jun. 9	M	M	M
GDP/GNP	2006 Q1	Apr. 28	Q	Q	Q
Gross External Debt[5]	Mar. 31, 2006	Jun. 8	Q	Q	Q

[1]Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2]Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3]Foreign, domestic bank, and domestic nonbank financing.
[4]The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5]Including currency and maturity composition.
[6]Daily (D), Weekly(W), Biweekly(B), Monthly(M), Quarterly (Q), Annually (A); NA: Not Available.

Statement by the IMF Staff Representative
July 24, 2006

1. ***This note reports on information that has become available since the staff report was issued***. The topics covered include the recent economic and financial market developments, monetary policy prospects, and the budget outlook. They do not affect the staff appraisal.

Recent economic and financial market developments

2. ***Recent developments continue to point to a gradual slowing in activity***. June payroll employment rose by only 121,000, but with stronger growth in the household employment survey, the unemployment rate remained steady at 4.6 percent. Indicators continue to suggest that the housing market is cooling, with weaker housing starts and building permits in June. Retail sales retreated 0.1 percent and producer and consumer sentiment have both softened. However, industrial production increased 0.8 percent in June, and relatively strong export growth helped keep the trade deficit broadly stable at $63.8 billion in May, suggesting an upside risk to the staff's estimate of real net exports.

3. ***Core CPI inflation again exceeded expectations in June***. The 12-month increase in overall and core consumer prices ticked up to 4.3 percent and 2.6 percent, respectively, with the increase in core inflation slightly above market expectations. While 12-month core producer price inflation was stable and in line with expectations at 1.9 percent, headline PPI inflation rose to 4.8 percent and hourly wage growth accelerated to close to 4 percent in June. However, spreads between conventional and inflation-indexed 10-year bonds remained stable at around 2.6 percent, suggesting that inflation expectations remain relatively well anchored.

4. ***U.S. financial markets have softened in response to signs of slowing activity***. Long-term bond yields have decreased by about 10 basis points to just over 5 percent and equity prices have fallen by 1½ to 2 percent since end-June. Market expectations regarding the near-term course of monetary policy have remained broadly unchanged, with futures prices suggesting a roughly 50 percent probability of a 25 basis point hike in the federal funds rate at the early August meeting of the Federal Open Markets Committee.

Monetary and fiscal developments

5. ***The Federal Reserve's semi-annual Monetary Policy Report (MPR) was presented to Congress on July 19 by Chairman Bernanke***. The MPR projects that core PCE inflation (which has been running around a ¼ percentage point lower than core CPI inflation) will likely ease from around 2¼–2½ percent in 2006 (fourth quarter on fourth quarter) to slightly above 2 percent in 2007. Economic growth is projected to moderate from around 3¼–3½ percent this year (again fourth quarter on fourth quarter) to around 3–3¼ percent in 2007. Both forecasts are broadly in line with staff projections. The Chairman acknowledged the

recent rise in core inflation but appeared confident that, with growth slowing, inflation would ease later in the year, prompting markets to rally.

6. ***The Administration's Mid-Session Review sharply lowered the forecast budget deficit for this year to a level consistent with staff projections***. Reflecting buoyant and broad-based revenue growth through June, the Administration lowered its projection for the FY 2006 unified federal deficit (ends this September 30) to $296 billion (2¼ percent of GDP), from its February estimate of $423 billion (3¼ percent of GDP), leaving the forecast identical to the staff's. The strong revenue growth, together with expectations of further compression in the expenditure ratio beyond FY 2008 owing to higher growth, have also led the Administration to reduce projected deficits for FY2007–11 by ¼–½ percent of GDP (Table), with the unified federal deficit projected to fall below 1 percent of GDP by FY 2010.

7. ***The Mid-Session Review emphasized the need to address the long-term fiscal challenge posed by the unsustainable growth in entitlement spending.*** It noted that "...entitlement spending in Social Security, Medicare, and Medicaid is growing faster than the economy and the Nation's ability to pay for this spending. No plausible amount of cuts to discretionary programs or tax increases can avert this major fiscal challenge," underscoring the urgent need for entitlement reform.

United States: Unified Budget

(Percent of fiscal year GDP)

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
FY 2007 Mid-Session Review[1]							
Outlays	20.1	20.6	20.1	19.4	18.9	18.7	18.8
Net interest expense	1.5	1.7	1.8	1.8	1.8	1.8	1.8
Revenue	17.5	18.3	17.7	18.1	17.9	18.0	18.1
Unified balance	-2.6	-2.3	-2.4	-1.3	-1.0	-0.8	-0.7
FY 2007 Budget							
Outlays	20.1	20.8	20.1	19.4	19.1	19.0	19.1
Net interest expense	1.5	1.7	1.8	1.9	1.9	1.9	1.9
Revenue	17.5	17.5	17.6	17.8	17.7	17.9	17.9
Unified balance	-2.6	-3.3	-2.6	-1.5	-1.4	-1.1	-1.2
Differences							
Outlays		-0.2	0.0	0.0	-0.2	-0.3	-0.3
Net interest expense		0.0	0.0	-0.1	-0.1	-0.1	-0.1
Revenue		0.8	0.1	0.3	0.2	0.1	0.2
Unified balance		1.1	0.2	0.2	0.4	0.3	0.5
Staff Forecast							
Unified Balance		-2.3	-2.6	-2.3	-2.0	-1.9	-1.8
Difference from Mid-Session Review		0.0	-0.2	-1.0	-1.0	-1.1	-1.1

Source: Office of Budget and Management

[1] In contrast to the FY 2007 budget (released February 2006), the mid-session review includes a $108 billion allowance for the costs of operations in Iraq and Afghanistan in FY 2008-11.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL RELATIONS DEPARTMENT

Public Information Notice (PIN) No. 06/82
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International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2006 Article IV Consultation with the United States

On July 24, 2006, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with the United States.[1]

Background

The U.S. economy continued to grow strongly over the last year even in the face of a withdrawal of monetary stimulus and high oil prices. Household spending remained the principal driver of the expansion, spurred by mortgage borrowing and double-digit house price inflation. However, employment and wage growth remained modest, and the household saving ratio moved further into negative territory. As a result, and despite strong business saving and an improvement in the fiscal balance, the current account deficit reached a new record high.

Household consumption and residential investment have grown an average ½ percentage point faster than GDP since the 2001 recession, financed in large part through home equity withdrawal, stimulated by rapid house price inflation as well as innovative mortgage instruments, low refinancing costs, and easy access to tax-advantaged home equity loans. However, U.S. house prices now appear to be overvalued and with signs that market conditions are cooling, the housing market is no longer likely to provide significant support to household spending.

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

During the past year, business investment also remained robust, supported by declines in capital goods prices, the economic expansion, and high profits, even in the face of higher interest rates. U.S. businesses have generally used high profits and low interest rates to strengthen balance sheets and accumulate cash holding, suggesting that the fundamentals for investment remain strong.

With sustained strong growth and recent hikes in oil and commodity prices, resource utilization has increased and headline inflation remained high. Although core CPI inflation had been relatively subdued, in recent months the core rate has risen sharply, exceeding 2½ percent in June (12-month rate). At the same time, the unemployment rate—at just above 4½ percent in June—remains at the low end of most estimates of the NAIRU, and capacity utilization reached its long-run average. Nevertheless, unit labor costs have remained contained, reflecting solid productivity growth and modest wage gains.

The current account deficit has widened on higher oil prices and solid import demand, and stood at about 6½ percent of GDP in the first quarter of 2006. Nevertheless, the dollar remained broadly stable, and the U.S. net foreign liability position barely deteriorated in 2005, reflecting the valuation effects of the relative strength of foreign equity markets.

U.S. financial markets have provided important support to the expansion and facilitated the U.S. economy's ability to access foreign saving. Financial market innovation—including securitization and credit risk transfer techniques—contributed to low credit risk spreads and improved the pricing and allocation of credit risk. The increased activity of hedge funds has enhanced price discovery and liquidity in many of the new markets. At the same time, banks remained well-capitalized and highly profitable despite changing market conditions. While bank revenues continued to depend on the real estate market, widespread securitization has helped reduce vulnerabilities to regional shocks, and a range of indicators suggest that systemic risks are at a low ebb.

Against this background, the Federal Reserve Board continued to gradually withdraw monetary stimulus, raising the federal funds rate to 5 percent by the time of the Article IV discussions and further to 5¼ percent after the June 28-29 meeting of the Federal Market Open Committee (FOMC). On the fiscal front, federal tax revenues remained buoyant and expenditure discipline has been maintained, suggesting that the FY 2006 federal budget deficit is likely to outperform initial budget estimates and fall modestly to 2¼ percent of GDP. Looking forward, the Administration appears on track for achieving its goal of halving the federal budget deficit earlier than FY 2009.

The staff's baseline scenario for the short-term outlook is for a "soft landing," with growth easing to potential and inflation remaining contained. The housing market is likely to cool in response to high valuations and tightening financial conditions, reducing the impetus from consumption and residential investment, but strong fundamentals should continue to support business investment. The external deficit is likely to remain wide, but the drag on activity from net exports will lessen as growth abroad strengthens. On the supply side, solid productivity growth should accommodate wage gains while containing price pressures.

There appear to be competing risks to this outlook. The possibility of a more abrupt slowdown in the housing market, disappointments on the productivity front, and a disorderly adjustment to global imbalances, as well as the risk of higher oil prices more than offset the upside potential for business investment. Avian flu and geopolitical events represent further and more difficult to quantify downside risks. In contrast, inflation risks—which mainly stem from supply effects—seem mostly on the upside. These include the possibility of a larger-than-anticipated productivity slowdown pushing up unit labor costs, and the potential for pass-through of high commodity and oil prices.

Executive Board Assessment

Executive Directors agreed with the thrust of the staff appraisal. They noted that—despite a significant withdrawal of monetary stimulus, high energy prices, and other shocks—the U.S. economy continues to be a key engine of global growth, supported by strong productivity increases. Encouragingly, buoyant tax revenues are likely to keep the FY 2006 federal deficit well below initial budget estimates. Also, Directors commended the Federal Reserve for the measured pace of its monetary tightening which, accompanied by a clear communications policy, has helped keep inflationary expectations in check while avoiding a pronounced slowdown in activity.

Looking forward, Directors saw good prospects for a soft landing of the economy, with growth likely to ease to a more sustainable rate and inflation to remain contained. However, most Directors cautioned that risks to activity are on the downside, reflecting a cooling housing market, higher energy prices, and a negative household saving rate. At the same time, these Directors observed that the recent pick up in core inflation and expectations, coupled with a further drop in the unemployment rate, suggests a risk of a build up in price pressures.

Given these competing risks, Directors observed that the Federal Reserve will need to steer an especially delicate course that limits downside risks to activity while ensuring that inflation expectations remain anchored. In such circumstances, future policy decisions would depend heavily on evolving views on the outlook as well as the importance of ensuring that inflation expectations are kept in check.

Directors remarked that the Fed's communications strategy in recent years has been highly effective. Nonetheless, a number of Directors suggested that there could be merit in the Fed providing a more explicit statement of its inflation objective, noting that this could help further anchor inflation expectations without undermining confidence in the Fed's commitment to its broader mandate. In this context, some Directors remarked that a formal inflation target might bring little additional gain to the Fed's well-established credibility, while having implications for the Fed's other policy objectives. Directors looked forward to a further consideration of these issues, and welcomed the recent establishment of a committee to examine the Fed's overall communication policy, including refining the definition of price stability. Some Directors also observed that providing more frequent *Monetary Policy Reports* with a greater focus on future developments could further increase the Fed's high level of transparency.

Directors recognized that the U.S. financial sector has proven innovative and resilient in recent years, and noted that the financial system appears well-positioned as the credit cycle turns. At the same time, Directors saw important areas where further reform could help enhance the financial system's resilience and efficiency. These included tightening the supervision of the housing Government Sponsored Enterprises (GSEs), reforming rules for defined-benefit pension plan, and possibly moving to consolidate supervision and regulation of insurance companies. Directors welcomed the authorities' willingness to undertake an IMF Financial Sector Assessment Program, which they considered could provide further insights on these challenges, as well as a good framework for further analysis of the systemic role of the U.S. financial markets. It would be similarly beneficial to publish a regular *Financial Stability Report*.

Directors cautioned that demographic and other pressures continue to threaten long-term fiscal sustainability and economic prospects, especially given the need to accommodate the increased demands on public health and retirement systems from an aging population. They therefore welcomed the authorities' recognition of the importance of fiscal consolidation, including entitlement reform. With buoyant revenues supporting deficit reduction, most Directors suggested that the time is opportune to establish a more ambitious medium-term fiscal anchor. In particular, they noted that balancing the budget, excluding the Social Security surplus, within the next five years would set the federal debt ratio on a firm downward path. This would reduce the burden on future generations of providing health care and retirement income to the baby boom generation, while also providing the needed room to develop and phase in the reforms required to place entitlement systems on a more sustainable basis. It was observed that this would require consolidation of around ¾ percentage point of GDP a year. Such consolidation would provide a helpful boost to national saving and multilateral efforts to narrow global imbalances while having a manageable impact on U.S. and global demand. A few Directors cautioned that too rapid a fiscal consolidation could lower U.S. and global growth.

Several Directors observed that planned expenditure discipline may be difficult to sustain, especially in light of pressures to fund defense commitments and other emergency priorities. To help contain spending pressures, these Directors suggested there could be merit in re-introducing caps on discretionary outlays, as well as pay-as-you-go (PAYGO) requirements covering both entitlement spending and tax measures.

Although controlling outlays should remain central to deficit reduction, most Directors suggested that revenue measures should not be ruled out. They cautioned that it may be difficult to sustain the significant reductions in marginal tax rates of recent years while meeting the fiscal burden from population aging. They agreed that the priority should be on reforms that broaden the revenue base by reducing tax preferences, including those for mortgage interest payments, employers' contributions to health insurance plan premiums, and state and local tax payments, as suggested by the President's Advisory Panel. A number of Directors also agreed that consideration could be given to consumption-based indirect taxes—such as a national sales tax, a VAT, or energy taxation—that would maintain revenue buoyancy as workers retire.

Directors stressed the importance of re-invigorating the momentum for entitlement reform, and welcomed the proposed bipartisan commission to review this issue, which will be tasked with preparing proposals for reforming all three major entitlement programs to address future shortfalls. They noted that useful reform options have already been suggested—including for "progressive price indexation"—and that the key challenge now is to build the necessary consensus around a package of measures that would place the Social Security system on a more sustainable basis. However, concrete proposals will also be required to address Medicare and Medicaid funding gaps, especially given that with the addition of the new prescription drug benefit, the financial shortfall of the Medicare system dwarfs that of Social Security. While high-deductible health plans and other measures may help improve incentives, with health spending as a ratio-to-GDP well above the OECD average, Directors suggested that fundamental reform of the U.S. health care system would seem to be necessary.

At a more systemic level, and in light of the high U.S. current account deficit, Directors noted the risks in the medium term of a disorderly unwinding of global imbalances. While several Directors considered such risks to be relatively low, Directors agreed that the United States has a key role to play in supporting the cooperative strategy for an orderly resolution of global imbalances laid out by the International Monetary and Financial Committee in April 2006. In particular, they underscored the importance of boosting U.S. national saving, through ambitious fiscal consolidation, while also preserving the resilience and flexibility of the U.S. economy. Directors also generally considered that delaying the inevitable adjustment would mean continued increases in U.S. external indebtedness, and heighten the risk of a sharp disruption to exchange rates, financial markets, and growth—both domestically and abroad. In this context, they looked forward to the results of the multilateral consultations surveillance initiative, for the U.S. and other participating countries.

Directors agreed that leadership by the United States remains key to global trade liberalization, especially given the growing urgency of achieving an ambitious conclusion to the Doha Round negotiations. At the same time, most Directors cautioned that care would be needed to resist domestic protectionist sentiment and to ensure that bilateral trade initiatives complement rather than substitute multilateral approaches. While welcoming recent increases in U.S. overseas development assistance, Directors called on the authorities to boost such assistance further, noting that it remains one of the lowest among industrial countries as a proportion of gross national income.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

Table 1. United States: Selected Economic Indicators

(Annual change in percent, unless otherwise noted)

	1999	2000	2001	2002	2003	2004	2005
NIPA in constant prices 1/							
Real GDP	4.4	3.7	0.8	1.6	2.7	4.2	3.5
Net exports 2/	-1.0	-0.9	-0.2	-0.7	-0.5	-0.7	-0.3
Total domestic demand	5.3	4.4	0.9	2.2	3.0	4.7	3.6
Final domestic demand	5.4	4.5	1.8	1.8	3.0	4.4	3.9
Private final consumption	5.1	4.7	2.5	2.7	2.9	3.9	3.5
Public consumption expenditure	3.1	1.7	3.1	4.3	3.0	2.1	1.5
Gross fixed domestic investment	8.2	6.1	-1.7	-3.5	3.3	8.4	7.2
Private	8.3	6.5	-3.0	-5.2	3.6	9.7	8.1
Public	7.5	3.6	4.9	5.1	2.0	2.3	3.0
Change in business inventories 2/	-0.1	-0.1	-0.9	0.4	0.0	0.3	-0.3
GDP in current prices 1/	6.0	5.9	3.2	3.4	4.8	7.0	6.4
Employment and inflation							
Unemployment rate (percent)	4.2	4.0	4.7	5.8	6.0	5.5	5.1
CPI inflation	2.2	3.4	2.8	1.6	2.3	2.7	3.4
GDP deflator	1.4	2.2	2.4	1.7	2.0	2.6	2.8
Financial policy indicators							
Unified federal balance (billions of dollars)	126	236	128	-158	-378	-413	-318
In percent of FY GDP	1.4	2.4	1.3	-1.5	-3.5	-3.6	-2.6
General government balance (NIPA, billions of dollars)	79	159	-39	-397	-543	-554	-478
In percent of CY GDP	0.9	1.6	-0.4	-3.8	-5.0	-4.7	-3.8
Balance of payments							
Current account balance (billions of dollars)	-300	-415	-389	-472	-528	-665	-792
In percent of GDP	-3.2	-4.2	-3.8	-4.5	-4.8	-5.7	-6.3
Merchandise trade balance (billions of dollars)	-346	-452	-427	-482	-547	-665	-783
In percent of GDP	-3.7	-4.6	-4.2	-4.6	-5.0	-5.7	-6.3
Invisibles (billions of dollars)	46.2	37.3	38.2	9.86	19.8	0.12	-8.8
In percent of GDP	0.5	0.4	0.4	0.1	0.2	0.0	-0.1
Saving and investment (as a share of GDP)							
Gross national saving	18.1	18.0	16.4	14.2	13.4	13.4	13.4
Gross domestic investment	20.6	20.8	19.1	18.4	18.5	19.6	20.1

Source: Haver Analytics; and IMF staff estimates.

1/ National accounts data as available at the time of the July 24, 2006 Executive Board discussion.
2/ Contribution to growth.

INTERNATIONAL MONETARY FUND

Staff Country Reports

December 2006
IMF Country Report No. 06/432

United States: Report on the Observance of Standards and Codes—FATF Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism

This Report on the Observance of Standards and Codes on the FATF Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism for the United States was prepared by the Financial Action Task Force on Money Laundering (FATF), using the assessment methodology adopted by the Financial Action Task Force in February 2004 and endorsed by the Executive Board of the IMF in March 2004. The views expressed in this document are those of the FATF and do not necessarily reflect the views of the government of the United States or the Executive Board of the IMF.

A copy of the full assessment report can found on the website of the FATF at http://www.fatf-gafi.org/dataoecd/44/9/37101772.pdf

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

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Financial Action Task Force
Groupe d'action financière

UNITED STATES OF AMERICA

Report on Observance of Standards and Codes
FATF Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism

September 2006

REPORT ON OBSERVANCE OF STANDARDS AND CODES

FATF Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism

UNITED STATES OF AMERICA

1. Background Information

1. This Report on the Observance of Standards and Codes for the *FATF 40 +9 Recommendations for Anti-Money Laundering and Combating the Financing of Terrorism* was prepared by the Financial Action Task Force (FATF). This report provides a summary[1] of the AML/CFT measures in place in the United States (U.S.) as 5 May 2006 (shortly after the on-site visits). The report describes and analyses those measures and provides recommendations on how certain aspects of the system could be strengthened. The views expressed in this document are the views of the FATF, but do not necessarily reflect the views of the Boards of the IMF or World Bank.

2. The U.S. has significantly strengthened its overall AML/CFT measures since its last mutual evaluation (June 1997), implementing a very large number of statutory amendments and structural changes. The most high-profile development was the enactment of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act). The U.S. authorities are committed to identifying, disrupting, and dismantling money laundering and terrorist financing networks. They seek to combat money laundering and terrorist financing on all fronts, including by aggressively pursuing financial investigations. These efforts have produced impressive results in terms of prosecutions, convictions, seizures, asset freezing, confiscation and regulatory enforcement actions. Overall, the U.S. has implemented an effective AML/CFT system, although there are remaining concerns in relation to some of the specific requirements for undertaking customer due diligence, the availability of corporate ownership information, and the requirements applicable to certain designated non-financial businesses and professions (DNFBPs).

2. Legal System and Related Institutional Measures

3. Sections 1956 and 1957 of Title 18 of the United States Code criminalize four different types of money laundering: basic money laundering; international money laundering (where criminal proceeds are moved in or out of the U.S.); money laundering in the context of an undercover "sting" case (where the money being laundered has been represented by a law enforcement officer as being criminal proceeds); and knowingly spending greater than USD 10,000 in criminal proceeds. The U.S. has adopted a list approach to define the scope of predicate offenses. The list includes a wide range of predicate offenses in almost all of the 20 designated categories of offenses set out in the Glossary to the FATF 40 Recommendations. However, only 12 out of the 20 designated categories of offences are covered by U.S. law as predicate offenses for money laundering if they occurred in another country. Criminal sanctions for money laundering are effective and dissuasive (e.g. a fine of not more than USD 500,000 or twice the value of the property involved in the transaction and/or imprisonment for up to 20 years). The U.S. proactively investigates and prosecutes money laundering cases and has a record of successful prosecutions and convictions over a number of years. At the federal level, in fiscal year 2005, the U.S. convicted 1,075 defendants of 18 USC 1956/1957 money laundering violations. Additional money laundering convictions have been obtained at the state level. While there are a few deficiencies in the criminalization of money laundering, particularly in relation to the coverage of foreign predicate offences, this record demonstrates that the system is working effectively overall.

[1] A copy of the full Mutual Evaluation Report can be found on the FATF website: www.fatf-gafi.org.

4. Title 18 also creates four autonomous federal offenses which deal directly with financing of terrorism or terrorist organizations: providing material support for commission of certain terrorism related offenses; providing material support or resources to a designated foreign terrorist organization (FTO); providing or collecting terrorist funds; and concealing or disguising either material support to FTOs or funds used or to be used for terrorist acts. These offenses are each predicate offenses for money laundering. Additionally, violations of Executive Order 13224 (EO 13224) which prohibits, among other things, the contribution of funds to certain designated persons and organizations are de facto terrorist financing offenses. Together, these offenses cover all of the conduct required by the United Nations Convention for the Suppression of the Financing of Terrorism (1999). Penalties include fines and significant terms of imprisonment. The U.S. has convicted 54 persons of terrorist financing offenses and an additional 72 cases are pending.

5. The Bank Secrecy Act (BSA), which was substantially amended by the USA PATRIOT Act in 2001, provides the basis for most of the preventive measures applied to the financial sector and other businesses, as discussed in section 3 below.

6. The U.S. has parallel civil and criminal forfeiture systems, which provide for the forfeiture of both the instrumentalities and proceeds of crime. The combination of both confiscation proceedings provides for effective asset recovery. Administrative forfeiture can also be applied under certain conditions. Some enhancements could be made to an otherwise effective regime, including extending the range of predicate offenses and allowing for equivalent value pre-trial seizure. The U.S. has made a priority of the recovery of criminal assets and is systematically and vigorously pursuing seizure and confiscation. The amounts seized and forfeited are substantial, totaling USD 767.4 million in 2005.

7. Overall, the U.S. has built a solid and well-structured system aiming at effective implementation of the UN sanctions under S/RES/1267(1999) and S/RES/1373(2001). A designation under EO 13224 puts U.S. persons on notice that they are prohibited from having dealings with those specific persons, must block their assets and must report these actions to the Office of Foreign Assets Control (OFAC) which administers and enforces the EO 13224 sanctions and certain other terrorism-related programs targeting specific groups. However, while the obligation under S/RES/1267(1999) is to freeze the assets of those persons designated by the UN's 1267 Committee, the U.S. has not specifically included the individual Taliban names in EO 13224. Instead, it has simply designated the Taliban as an entity, whereby all individuals involved in that organization are deemed to be included. The implementation in this manner of the obligations resulting from S/RES/1267(1999) raises the question as to whether and to what extent a country can deviate from the text of a UN Security Council Resolution when implementing its obligations.

8. As of 19 August 2005, the U.S. had frozen/blocked a total of USD 281,372,910 of terrorist-related assets (including over USD 264,935,075 related to the Taliban). OFAC uses to good effect the powerful legal and structural means at its disposal to fulfill its mission with respect to specifically targeted terrorist groups. However, a real challenge lies in effecting compliance given the sheer number of persons and entities affected by the designations. Monitoring of compliance by the less or non-regulated sectors (such as DNFBPs) and the state-regulated industries is problematic, and will require further efforts.

9. The U.S. financial intelligence unit is the Financial Crimes Enforcement Network (FinCEN), located within Treasury. Created in 1990, it is one of the founding members of the Egmont Group. Overall, FinCEN substantially meets the requirements of Recommendation 26; however, there are a few issues that should be addressed to improve its effectiveness and strengthen its role in the AML/CFT chain. FinCEN receives a very large number of reports annually—over 14 million in 2004, including over 600,000 suspicious activity reports (SARs). About 30% of the reports are currently received electronically, and FinCEN is working towards increasing electronic filing substantially. At present, given the volume of reports received, FinCEN devotes its analytical resources to those SARs considered most valuable to law enforcement (in particular, those related to suspected terrorist financing activity). FinCEN provides broad and, in some circumstances, direct access to its databases by certain law

enforcement agencies, but this must be properly managed to maintain FinCEN's key role within the AML/CTF chain, including its analytical functions and ability to study ML/FT methods, trends and typologies. Additionally, because some agencies hold the position that they are better able to make their own analysis of BSA data, FinCEN should focus on the challenge of promoting the added-value of its analytical products to law enforcement. Although FinCEN provides various types of guidance and general feedback to domestic financial institutions and DNFBPs regarding the detection and reporting of suspicious activity, further efforts are required, given that the quality of SARs varies substantially from institution to institution. Additionally, FinCEN should ensure that terrorism-related information in requests from foreign FIUs is not shared with law enforcement without the prior authorization of the foreign FIU (in accordance with the international principles of information exchange established by the Egmont Group).

10. The U.S. has designated law enforcement authorities that have responsibility for ensuring that ML/FT offenses are properly investigated. These authorities have adequate powers, are producing good results and seem to be working effectively. Investigatory jurisdiction for the crime of money laundering rests by statute with the Department of Justice (which is the central authority for the investigation and prosecution of federal laws in the U.S., including the federal ML/FT offenses), the Treasury, the Department of Homeland Security, and the U.S. Postal Service. The FBI investigates money laundering relating to the many predicate crimes over which it has jurisdiction, while the DEA investigates money laundering specifically as it relates to the proceeds of drug trafficking. Immigration and Customs Enforcement (ICE) and Customs and Border Protection (CBP) focus on deterring, interdicting, and investigating ML/FT threats arising from the movement of people and goods into and out of the U.S. ICE investigates financial crime related to cross-border activities and in 2005 made 1,569 arrests for money laundering-related offences, 248 of which were for violation of 18 USC 1956/1957. The Internal Revenue Service Criminal Investigation (IRS-CI) has investigative jurisdiction for all money laundering crimes and for currency reporting violations under the BSA, except for those involving cross-border activities. IRS-CI conducts about 1,600 money laundering investigations each year. Additionally, many law enforcement agencies have units that specialize in investigating the proceeds of crime and are staffed with trained financial investigators. Numerous interagency working groups and task forces also specialize in ML/FT investigations, including the High Intensity Financial Crime Areas and the FBI-led multi-agency Joint Terrorism Task Forces. Law enforcement authorities have all of the normal search and seizure powers, as well as powers to use special investigative techniques such as wiretaps, controlled delivery, undercover techniques and Geographic Targeting Orders.

11. With respect to cross-border cash transfers, the U.S. has implemented a declaration and disclosure system that applies to incoming or outgoing physical transportations (by person, by container, or by mail) of cash and monetary instruments exceeding USD 10,000. The data collected on the declaration forms is maintained in a computerized database which is available to all competent authorities involved in AML/CFT enforcement (including FinCEN). These systems are enforced through intelligence-driven targeting, inbound and outbound surprise examinations, random checks and increased scrutiny of courier hubs. Persons who make false disclosures or declarations are subject to a wide range of criminal, civil and administrative sanctions, including seizure and forfeiture of the funds involved. Overall, these measures are working effectively. From 2001 through February 2005, ICE arrested more than 260 individuals and seized more than USD 107 million in relation to bulk cash smuggling violations.

3. Preventive Measures - Financial Institutions

12. Following the enactment of the USA PATRIOT Act in 2001, AML/CFT obligations have been extended across most of the key sectors of the U.S. financial services industry, which is very large, diverse and complex. The authorities have mostly applied a risk-based approach in determining which sectors should be subject to various AML requirements, and how covered financial institutions should apply their AML/CFT obligations. The vast majority of depository institutions are subject to the full range of BSA/AML requirements, including requirements to implement internal controls and procedures (the AML Program requirement), a Customer Identification Program (CIP), recordkeeping,

and reporting of suspicious activities. In the securities sector, brokers and futures commission merchants are subject to similar requirements, but investment advisers and commodity trading advisors (some of which, as asset managers, meet the FATF definition of a "financial institution") are not currently required to implement such measures. Life insurers (since May 2006) and money services businesses (MSBs) are required to establish AML Programs and file SARs, but are not subject to the CIP rules. There is no explicit federal requirement on insurance companies to verify the identity of each customer and form a reasonable belief that it knows the customer's true identity. Insurance agents and brokers are integrated into the AML Programs of their insurance company principals.

13. At the heart of the preventive measures is the requirement for financial institutions in the banking, securities, insurance and MSB sectors to establish AML Programs which must include, at a minimum: the development of internal policies, procedures and controls; the designation of a compliance officer; an ongoing employee training program; and, independent testing of BSA/AML compliance.

14. Overall, the U.S. regulations address in detail a substantial number of the FATF requirements on customer due diligence (CDD), but certain key elements of the FATF standards are not fully addressed by statute, although, in certain sectors, these elements are addressed by other enforceable means, such as the examination manual that has been developed by the Federal Banking Agencies. Covered entities in banking and securities sectors are required to implement a CIP, which must include risk-based procedures for verifying the identity of each customer to the extent reasonable and practical, and must enable the financial institution to form a reasonable belief that it knows the true identity of each customer. Core identification information must be collected at the time the customer seeks to open the account and must be verified within a reasonable time (generally considered to be no more than 30 days) after the account is established. In addition, financial institutions must identify and verify the identity of occasional customers prior to undertaking large currency transactions, purchasing certain financial instruments, or ordering wire transfers. The CIP must include procedures for responding to circumstances in which the financial institution cannot form a reasonable belief that it knows the customer's true identity (e.g. closing the account, placing restrictions on an account's use while verification is being undertaken, etc.). The identification procedures do not necessarily apply retroactively to existing customers, but are expected to be applied on a risk-sensitive basis to such customers.

15. There is no explicit legal obligation to undertake ongoing due diligence in all cases. The U.S. authorities interpret the suspicious activity reporting obligations as necessarily requiring institutions to have policies and procedures in place to undertake ongoing due diligence generally. This is based on the fact that the SAR regulations require financial institutions to report any transaction that "is not the sort in which the particular customer would normally be expected to engage, and the bank knows of no reasonable explanation for the transaction after examining the available facts."

16. The CIP rules do not require a financial institution to look through a customer to establish the identity of the beneficial owners in all cases. A financial institution is required to look through a non-individual customer to individuals with authority or control over the account when the financial institution cannot verify the customer's true identity using standard verification methods. Explicit statutory requirements to identify the beneficial owner before or during the course of establishing a business relationship apply in relation to certain private banking accounts opened or maintained for a foreign person, and correspondent accounts provided to certain non-U.S. banks and other financial institutions. In addition to the general risk-based approach, financial institutions are required by regulation to apply ongoing monitoring to certain correspondent and private banking accounts. The obligation more generally to undertake ongoing monitoring of accounts is implicit within the suspicious activity reporting (SAR) requirements.

17. MSBs do not maintain what would typically be considered account relationships with their customers. The obligation to obtain and verify the customer's name and address is triggered when a

customer buys a monetary instrument involving currency in amounts of USD 3,000 to USD 10,000 inclusive, or makes a funds transfer of USD 3,000 or more.

18. Banks and securities firms are required by regulation to establish enhanced due diligence procedures with respect to private banking accounts valued at USD 1 million or more held by, or on behalf of, a non-U.S. person. Within this context they must also have procedures to identify politically exposed persons (PEPs), including ascertaining the identity of the nominal and beneficial owners of, and the source of the funds deposited into, the account. This rule does not apply to insurance companies and MSBs. The scope of the PEP requirement has been circumscribed by the narrow definition of private banking and the value threshold, but more general guidance, which was issued prior to this rule, remains in force and does not contain these limitations.

19. Covered financial institutions are required to apply enhanced due diligence when providing correspondent banking services for certain statutorily defined foreign banks. Such procedures must include taking reasonable steps to ascertain the identity of the foreign bank's owners, including the nature and extent of their individual ownership interests. Senior management must approve the overall enhanced due diligence procedures to be applied to correspondent accounts; however, there is no explicit requirement that the opening of individual correspondent accounts should involve senior management approval. Regulations prohibit the provision of correspondent banking services to foreign shell banks, either directly or indirectly through another foreign bank's account.

20. There are extensive BSA record-keeping requirements across most of the financial sector, but these are less complete for the insurance sector. With respect to wire transfers, the U.S. currently implements a USD 3,000 threshold for detailed record-keeping purposes. Above this level the ordering financial institution is required to obtain, verify and maintain the identity of the originator and obtain and maintain a record of the originator's name, address and account number. In the case of an established customer, financial institutions may rely on information obtained and recorded pursuant to customer identification and verification procedures required pursuant to account opening regulatory requirements. This originator information must be sent with the payment message in accordance with the "Travel Rule". Intermediary financial institutions must pass on as much of the originator information as is received with the payment message. Beneficiary financial institutions must implement risk-based procedures to handle wire transfers that are not accompanied by complete originator information. The U.S. currently does not comply with the FATF standards relating to the threshold level (now required to be USD 1,000) and batch transfers, although it should be noted that, under the interpretative note to Special Recommendation VII, countries have until then end of December 2006 to implement these measures.

21. Banks, securities firms, insurance companies and MSBs (except check cashers) are required to report suspicious transactions to FinCEN, which receives a very substantial number of such reports each year. In addition, a broad range of businesses and entities are required to report large cash transactions of USD 10,000 or more. Federal law provides protection from civil liability for all SAR reports made to the appropriate authorities, and "tipping off" is prohibited. However, the U.S has implemented a USD 5,000 threshold (USD 2,000 for MSBs) for mandatory reporting, which conflicts with the FATF standard that requires the reporting of all suspicious transactions, regardless of the amount. This impacts, in particular, the effectiveness of the reporting requirement with respect to terrorist financing-related transactions, as the importance of tracking relatively low-value transactions has been highlighted in this field. In addition, the SAR reporting requirement has not yet been extended to investment advisers and commodity trading advisors.

22. Countermeasures are available and have been applied by the U.S. with respect to foreign jurisdictions and entities. Such measures include designating jurisdictions of primary money laundering concern, and prohibiting the opening or maintaining of correspondent accounts with financial institutions in such jurisdictions. The U.S. uses a number of channels to advise financial institutions about concerns in the AML/CFT systems of other countries.

23. The U.S. has an extensive, but complex regulatory framework. FinCEN has core responsibility for administering the regulatory regime under the BSA, but it has formally delegated its authority to examine financial institutions for compliance with the BSA to eight federal functional and financial regulatory agencies. In certain cases, this authority has been further delegated to the self-regulatory authorities. Although some parts of the financial services sector are regulated for safety and soundness purposes at state level only, there has been no delegation of BSA compliance responsibilities to the state authorities. However, cooperation between federal and state authorities is generally close.

24. The Federal Banking Agencies have sought to standardize their BSA examination procedures, and in June 2005 published a common procedures manual, which also serves as extensive guidance to financial institutions. Examinations carried out by state banking agencies under the cooperative agreements with the federal authorities are also conducted in accordance with the common manual. Between 1 October 2004 and 30 September 2005, the Federal Banking Agencies and the IRS (with respect to its responsibilities for certain depository institutions) undertook a total of 10,409 BSA/AML examinations and put in place a total of 71 formal enforcement actions due to BSA violations. The securities regulators, who have not published their examination manual, undertook over 2,400 BSA examinations over the same period.

25. The insurance industry is subject to state rather than federal regulation for safety and soundness purposes, but responsibility for oversight of compliance with BSA requirements has been given to the IRS. At the time of the on-site visit, the IRS had not yet commenced its AML/CFT examination of the insurance sector, since insurers have been given until 2 May 2006 to implement the AML Programs requirement and begin filing SARs as required by the new final rules.

26. In the MSB sector, the U.S. has implemented a federal registration system. As of 5 April 2006, 24,884 MSBs had registered with FinCEN; however, a 1997 study estimated that up to 200,000 MSBs may be operating in the U.S. It should be noted that part of this number are not required to register. Identifying and tracing unregistered MSBs poses a major challenge to the authorities and will have significant resource implications for the IRS as the competent authority for this sector. Additionally, 46 states have MSB licensing requirements, but these are not uniform. It is a federal offense to operate a money transmitting business in contravention of any applicable state licensing requirements; to fail to register with FinCEN; or to transport or transmit funds that are known to have been derived from a criminal offense or intended to be used to promote or support unlawful activity. The IRS is responsible for ensuring that MSBs register with FinCEN and for conducting AML/CFT compliance examinations. The IRS has undertaken approximately 6,500 BSA compliance examinations (including 3,712 in 2005) across the range of businesses for which it is responsible, including MSBs. The level of compliance by some agents in certain geographical areas is relatively low, and the ability/willingness of some MSBs to expend resources on ensuring compliance is limited.

27. In general, the regulators have broad legal authority and adequate powers to supervise, conduct examinations, acquire information and conduct enforcement proceedings against financial institutions and their employees for AML compliance failures. There is clear evidence that these powers are used extensively and on a regular basis. While examination authority for BSA compliance has been delegated to the federal functional regulators, FinCEN applies directly its enforcement powers under the BSA. Additionally, the federal functional regulators have broad authority to impose concurrent and independent administrative sanctions against the financial institutions, for example, those found to be in violation of the AML Program requirement. Sanctions may be imposed against a partner, director, officer, or employee of a financial institution, as well as against the financial institution itself. The sanctions regime is wide-ranging in terms of the options available, and institutions that have been found to be deficient have faced severe financial penalties.

4. Preventive Measures – Designated Non-Financial Businesses and Professions (DNFBPs)

28. The application of AML requirements to DNFBPs is limited, but measures are being taken to expand their obligations.

29. Casinos are subject to the BSA requirements relating to suspicious activity and large cash transaction reporting, record keeping and the establishment of AML Programs (i.e. internal controls). These requirements apply to state-licensed casinos (both land-based and riverboat), tribal casinos and state-licensed and tribal card clubs. Gaming establishments with a gross annual revenue of USD 1 million or less do not fall within the BSA definition of "casino" and are, therefore, not subject to these requirements. Internet gaming is prohibited in the U.S.

30. State/territory-licensed casino gaming operations are found in fourteen jurisdictions, each of which has a gaming regulator. The state gaming commissions typically investigate the qualifications of each applicant seeking a gaming license, issue casino licenses, promulgate regulations (including relating to internal controls), investigate violations of these regulations, and initiate regulatory compliance actions against licensees.

31. Tribal gaming is present in 27 states across the U.S. Many tribal gaming commissions have been established to oversee tribal gaming and are typically semi-autonomous or independent agencies of tribal governments. Tribal governments are required to submit their gaming ordinances or resolutions as well as any management contracts for the operation of gaming activities to the National Indian Gaming Commission (NIGC) for approval. The NIGC is authorized to conduct background investigations of primary management officials and key employees of a gaming operation, conduct audits, review and approve tribal gaming ordinances and management contracts, promulgate federal regulations, investigate violations of these gaming regulations, and undertake enforcement actions (including the assessment of fines and issuance of closure orders).

32. Casinos are required to collect, verify and record the customer's name, address and social security number when there is: a deposit of funds, account opened or line of credit extended; a transaction for or through a customer's deposit or credit account; an extension of credit in excess of USD 2,500; an advice, request or instruction with respect to a transaction involving persons, accounts or places outside the U.S., regardless of residency; a transaction with a face value of USD 3,000 or more; and transmittals of funds in excess of USD 3,000. Casinos are required to obtain information on the purpose and intended nature of the business relationship, and conduct ongoing due diligence, when customers open credit or check cashing accounts. They are also required to retain copies of certain records for a period of five years, including customer identification records and any supporting documentation or business records in support of all SARs that are filed.

33. FinCEN has delegated examination responsibility to the IRS for state/territory licensed casino gaming operations as well as tribal casinos.2 Casinos are subject to civil and criminal penalties for violations of the BSA. The existing AML/CFT obligations appear to be implemented effectively in the casino sector, but the overall obligations with respect to CDD do not fully match those required of financial institutions.

34. Dealers in precious metals, stones or jewels were required to establish an AML Program (with generally the same elements as those required in the financial sectors) by 1 January 2006. Civil and criminal penalties are available for non-compliance. There are no obligations similar to those of the financial sector with respect to CDD measures, record keeping and suspicious transaction reporting. The IRS (which has been delegated examination authority for this sector) has indicated that it will commence AML compliance examination of dealers in precious metals, stones and jewels by mid-2006.

35. Accountants, lawyers, other legal professionals, real estate agents, and trust and company service providers (other than trust companies, which are subject to the same requirements as banks) are not currently subject to AML/CFT requirements (other than the large cash transaction reporting requirements).

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[2] In the case of Nevada casinos, the IRS has examination responsibility for BSA compliance for Nevada casinos with between USD 1 million and USD 10 million in gross gaming revenues, examination responsibility for SAR compliance for all Nevada casinos, and backup examination authority for all Nevada casinos. FinCEN retains civil enforcement authority over all Nevada casinos.

5. Legal Persons and Arrangements & Non-Profit Organisations

36. The U.S. authorities rely primarily on an investigatory approach to satisfy the requirements for access to adequate, accurate and timely information on the beneficial ownership and control of legal persons in order to investigate money laundering. At both the federal and state level there is a range of investigatory powers available to law enforcement and certain regulators to compel the disclosure of ownership information. These are generally sound and widely used, but the system is only as good as the information that is available to be acquired. For those companies whose shares are not quoted on the exchanges (i.e. the vast majority of the 13 million active legal entities in the U.S.), the information available within the jurisdiction is often minimal with respect to beneficial ownership. In the case of the states whose procedures were reviewed in the course of this evaluation (Delaware and Nevada), the company formation procedures and reporting requirements are such that the information on beneficial ownership may not, in most instances, be adequate, accurate or available on a timely basis. This is a vulnerability for the U.S. AML/CFT system.

37. With respect to legal arrangements, the U.S. recognizes trusts which are legal entities that are created under state law. The U.S. relies on the investigative approach to satisfy the requirements for access to accurate and current information on the beneficial ownership and control of trusts. Although it is acknowledged that the investigatory powers are generally sound and widely used, again, the system is only as good as the information that is available to be acquired. Virtually all U.S. states recognizing trusts have purposely chosen not to regulate them like other corporate vehicles. There are tax filing requirements imposed on trusts by the IRS and the IRS has access to some beneficial owner information when distributions are made to the beneficiary or income is earned by the trust, but can only share this information with law enforcement agencies in the course of an on-going investigation that has criminal tax implications. Otherwise, law enforcement agencies can only access the information by obtaining an order from a judge, which can be readily obtained.

38. The NPO sector is monitored by the federal government and state authorities. Transparency is facilitated by federal tax laws, which provide that most information reported by tax-exempt NPOs to the IRS is available to the public. Tax exempt organizations are examined by the IRS for compliance with the tax laws and to ensure that applicants for tax exempt status are not persons who have been designated as terrorists. The other main transparency mechanisms include the certification program for USAID and self-regulation managed by umbrella and watchdog organizations. The U.S. states and the District of Columbia oversee the fund-raising practices of charities domiciled or operating in their jurisdictions. Thirty-nine U.S. states require any charity to register before soliciting funds within the state, no matter where the charity is domiciled. Overall, the measures which have been implemented to ensure that the NPO sector cannot be abused by terrorists or terrorist financiers are working effectively. U.S. authorities at both state and federal levels take action against illegitimate or fraudulent charities, including where they are able to demonstrate that these charities have been established to facilitate terrorist financing.

6. National and International Co-operation

39. Overall, the U.S. has implemented sufficient policy- and operational-level mechanisms to facilitate interagency cooperation and coordination at all levels nationally. However, the law enforcement arena appears to be fragmented. The U.S. authorities have tried to overcome this problem by, among other initiatives, undertaking a series of important reorganizations, the effectiveness of which cannot yet be measured since they are still in the relatively early days. At the operational level, there is much overlap between the jurisdictions of the various law enforcement agencies. This creates the need for more refined coordination. The joint task force model seems to be generally effective, provided that it is appropriately resourced and developed.

40. The capability and willingness of the U.S. for cross-border cooperation generally, and on AML/CFT specifically, is quite evident. Although based primarily on treaties and multilateral conventions allowing for extensive assistance, mutual legal assistance may also be granted in response

to and on the sole ground of letters rogatory and through direct letters of request by Ministries of Justice. Most of the bilateral treaties entered into by the U.S. contain no dual criminality requirement as a condition for granting assistance. For the treaties with dual criminality provisions, those provisions are mostly limited to requests for assistance requiring compulsory or coercive measures.

41. The system for providing international cooperation in relation to freezing, seizure and confiscation is notable for its flexibility which assists in achieving maximum efficiency. Assistance in tracing and identifying assets normally does not necessitate formal proceedings and can mostly be done in an informal way via police-to-police communication. If for some reason an MLA request cannot directly be complied with in its own right, the U.S. authorities can seek implementation by initiating their own procedures based on a violation of U.S. statutes, with the only condition that the underlying activity can be translated in a criminal act punishable under U.S. law. It is U.S. policy and practice to share the proceeds of successful forfeiture actions with countries that made possible, or substantially facilitated, the forfeiture of assets under U.S. law.

42. The U.S. extradition regime, based on a network of treaties supplemented by conventions, is underpinned by a solid legal framework allowing for an efficient and active use of the extradition process. The shift from rigid list-based treaties to agreements primarily based on dual criminality has given the system much more flexibility and opportunities. The possibility for the U.S. to extradite its own nationals is an additional asset that can assist in dealing with issues of double jeopardy, jurisdiction and coordination. The statistics provided show an active use of the extradition process by the U.S. authorities, both in ML and TF. As with mutual legal assistance, the limitation to the ML offense in terms of predicate criminality may constitute a negative element in the light of the dual criminality condition. Indeed, if (in case of a non U.S. listed underlying offense) the facts cannot be translated to a criminal conduct punishable under U.S. law, the dual criminality principle will not be met and extradition may be obstructed or prohibited. Dual criminality does not affect terrorism-related extradition procedures, as the scope of terrorism related offenses is quite broad under U.S. law and largely corresponds with the definitions provided in the Terrorist Financing Convention.

43. The U.S. has implemented mechanisms that allow its FIU, law enforcement agencies and regulators to provide their foreign counterparts with a wide range of international cooperation. Similar mechanisms exist to facilitate international cooperation diagonally (e.g. from FIU to law enforcement, or from law enforcement to regulator). In general, exchanges of information concerning money laundering or terrorist financing may be provided promptly, either spontaneously or upon request, and without unduly restrictive conditions. Additionally, many U.S. agencies (including the FIU) are authorized to make inquiries or conduct investigations on behalf of their foreign counterparts.

7. Resources and statistics

44. Overall, authorities seem to be well-equipped, staffed, resourced and trained. However, there are concerns about the availability of resources within the IRS to undertake comprehensive examinations of the large number of institutions for which it is responsible (MSBs, insurance companies, non-federally regulated credit unions, credit card operators, casinos and card clubs, and dealers in precious metals and stones). It is clearly the case that the IRS needs to be allocated significantly more resources simply to address the MSB sector.

Table 1: Ratings of Compliance with FATF Recommendations

The rating of compliance vis-à-vis the FATF Recommendations should be made according to the four levels of compliance mentioned in the 2004 Methodology [Compliant (C), Largely Compliant (LC), Partially Compliant (PC), Non-Compliant (NC)], or could, in exceptional cases, be marked as not applicable (na).

Forty Recommendations	Rating	Summary of factors underlying rating[3]
Legal systems		
1. ML offense	**LC**	• The list of domestic predicate offenses does not fully cover 2 out of the 20 designated categories of offenses specifically (insider trading and market manipulation, and piracy). • The list of foreign predicate offenses does not cover 8 out of the 20 designated categories of offenses. • The definition of "transaction" in s.1956(a)(1) means that mere possession as well as concealment of proceeds of crime , does not constitute the laundering of proceeds. • The definition of "property" in relation to the section 1956(a)(2) offense (international money laundering) only includes monetary instruments or funds.
2. ML offense–mental element and corporate liability	**C**	• The Recommendation is fully observed.
3. Confiscation and provisional measures	**LC**	• Where the proceeds are derived from one of the designated categories of offenses that are not domestic or foreign predicate offenses for ML, a freezing/seizing or confiscation action cannot be based on the money laundering offense. • Property of equivalent value which may be subject to confiscation cannot be seized/restrained.
Preventive measures		
4. Secrecy laws consistent with the Recommendations	**C**	• This Recommendation is fully observed.
5. Customer due diligence	**PC**	• No obligation in law or regulation to identify beneficial owners except in very specific circumstances (i.e. correspondent banking and private banking for non-U.S. clients). • No explicit obligation to conduct ongoing due diligence, except in certain defined circumstances. • Customer identification for occasional transactions limited to cash deals only. • No requirement for life insurers issuing covered insurance products to verify and establish the true identity of the customer, (except for those insurance products that fall within the definition of a "security" under the federal securities laws). • No measures applicable to investment advisers and commodity trading advisors. • Verification of identity until after the establishment of the business relationship is not limited to circumstances where it is essential not to interrupt the normal course of business. • No explicit obligation to terminate the business relationship if verification process cannot be completed. • The effectiveness of applicable measures in the insurance sector (which went into force on 2 May 2006) cannot yet be assessed.
6. Politically exposed persons	**LC**	• Measures relating to PEPs do not explicitly apply to MSBs, the insurance sector, investment advisers and commodity trading advisors.

[3] These factors are only required to be set out when the rating is less than Compliant.

7. Correspondent banking	**LC**	• No obligation to require senior management approval when opening individual correspondent accounts.
8. New technologies & non face-to-face business	**LC**	• No explicit provision requiring life insurers MSBs, or investment advisers and commodity trading advisors to have policies and procedures for non-face-to-face business relationships or transactions.
9. Third parties and introducers	**LC**	• No explicit obligation on relying institution to obtain core information from introducer. • No measures have been applied to investment advisers and commodity trading advisors, or the insurance sector.
10. Record keeping	**LC**	• Life insurers of covered products are only required to keep limited records of SARs, Form 8300s, their AML Program and related documents.
11. Unusual transactions	**LC**	• In the insurance, and MSB sectors, there is no specific requirement to establish and retain (for five years) written records of the background and purpose of complex, unusual large transactions or unusual patterns of transaction that have no apparent or visible economic or lawful purpose (outside of the SAR, CTR and Form 8300 requirements). • No measures have been applied to investment advisers and commodity trading advisors.
12. DNFBP – R.5, 6, 8-11	**NC**	• Casinos are not required to perform enhanced due diligence for higher risk categories of customer, nor is there a requirement to undertake CDD when there is a suspicion of money laundering or terrorist financing (R.5). • Accountants, dealers in precious metals and stones, lawyers and real estate agents are not subject to customer identification and record keeping requirements that meet Recommendations 5 and 10. • None of the DNFBP sectors is subject to obligations that relate to Recommendations 6, 8 or 11 (except for casinos in relation to R.11).
13. Suspicious transaction reporting	**LC**	• The existence of a USD 5,000 threshold for reporting suspicious activity. • No measures have been applied to investment advisers and commodity trading advisors. • The effectiveness of measures in the insurance and mutual funds sectors cannot yet be assessed.
14. Protection & no tipping-off	**C**	• The Recommendation is fully observed.
15. Internal controls, compliance & audit	**LC**	• AML Program requirements have not been applied to certain non-federally regulated banks, investment advisers and commodity trading advisors. • It is not yet possible to assess the effectiveness of these measures in the insurance sector. • There is no obligation under the BSA for financial institutions to implement employee screening procedures.
16. DNFBP – R.13-15 & 21	**NC**	• Casinos are the only DNFBP sector that is required to report suspicious transactions; however, there is a threshold on that obligation. • Accountants, lawyers, real estate agents and TCSPs are not subject to the "tipping off" provision or protected from liability when they choose to file a suspicious transaction report. • Accountants, lawyers, real estate agents and TCSPs are not required to implement adequate internal controls (i.e. AML Programs). • Dealers in precious metals, precious stones, or jewels are required to implement AML programs; however, the effectiveness of implementation cannot yet be assessed. • There are no specific obligations on accountants, lawyers, real estate agents or TCSPs to give special attention to the country advisories that FinCEN has issued and which urge enhanced scrutiny of financial transactions with countries that have deficient AML controls.

17. Sanctions	**LC**	• Some banking and securities participants are not subject to all AML/CFT requirements and related sanctions at the federal level. • The effectiveness of the measures in the insurance sector can not yet be assessed. • There are concerns about how effectively sanctions are applied in the MSB sector given the current level of the IRS's resources.
18. Shell banks	**C**	• The Recommendation is fully observed.
19. Other forms of reporting	**C**	• The Recommendation is fully observed.
20. Other NFBP & secure transaction techniques	**C**	• This Recommendation is fully observed.
21. Special attention for higher risk countries	**LC**	• In the insurance sector, there is no specific requirement to establish and retain written records of transactions with persons from/in countries that do not or insufficiently apply the FATF Recommendations. • No measures have been applied to investment advisers and commodity trading advisors.
22. Foreign branches & subsidiaries	**LC**	• BSA requirements do not apply to the foreign branches and offices of domestic life insurers issuing and underwriting covered life insurance products.
23. Regulation, supervision and monitoring	**LC**	• Some securities sector participants are not subject to supervision for AML/CFT requirements. • The effectiveness of the measures in the insurance sector can not yet be assessed. • Concerns about IRS examination resources.
24. DNFBP - regulation, supervision and monitoring	**PC**	• There is no regulatory oversight for AML/CFT compliance for accountants, lawyers, real estate agents or TCSPs. • The supervisory regime for Nevada casinos is currently not harmonized with the BSA requirements.
25. Guidelines & Feedback	**C**	• The Recommendation is fully observed.
Institutional and other measures		
26. The FIU	**LC**	• The effectiveness of FinCEN, is impeded by: - perceptions concerning the value of its products and the risk that over-emphasis on FinCEN's network function will weaken its place in the AML/CFT chain; - the handling of the huge amount of 14 million reports of which 70% are still filed in a paper format; - the fact that SAR filing is only done in 30-60 days after detection; and - insufficient adequate/timely feedback to reporting institutions. • Since terrorism-related information in requests from foreign FIUs is shared with law enforcement—for networking—without the prior authorization of the foreign FIU, the U.S. does not act in accordance with international principles of information exchange established by the Egmont Group.
27. Law enforcement authorities	**C**	• The Recommendation is fully observed.
28. Powers of competent authorities	**C**	• The Recommendation is fully observed.
29. Supervisors	**C**	• This Recommendation is fully observed.
30. Resources, integrity and training	**LC**	• The IRS is not adequately resourced to conduct examinations of the entities that it is responsible for supervising, in particular, the MSB and insurance sectors.

31. National co-operation	**LC**	• There remains a gap between the policy level and operational level law enforcement work. • More refined coordination is needed amongst law enforcement agencies with overlapping jurisdictions.
32. Statistics	**LC**	• Freezing, seizing and confiscation statistics are not specified into ML and TF related seizures and confiscations. • No statistics on TF related confiscations. • FinCEN collects and maintains substantial valuable statistical BSA data, which can be used to provide a partial picture of the effectiveness of the U.S. AML/CFT regime; however, FinCEN's data would need to be coupled with that of other federal agencies and departments in order to produce a comprehensive view of overall effectiveness of U.S. AML/CFT systems. • MLA and extradition statistics are not broken down annually, and do not show the time required to respond to a request.
33. Legal persons – beneficial owners	**NC**	• While the investigative powers are generally sound and widely used, there are no measures in place to ensure that there is adequate, accurate and timely information on the beneficial ownership and control of legal persons that can be obtained or accessed in a timely fashion by competent authorities. • There are no measures taken by those jurisdictions which permit the issue of bearer shares to ensure that bearer shares are not misused for money laundering.
34. Legal arrangements – beneficial owners	**NC**	• While the investigative powers are generally sound and widely used, there is minimal information concerning the beneficial owners of trusts that can be obtained or accessed by the competent authorities in a timely fashion.
International Co-operation		
35. Conventions	**LC**	• Not all conduct specified in Article 3 (Vienna) and Article 6 (Palermo) has been criminalized, and there is no a sufficiently comprehensive list of foreign predicates related to organized criminal groups as required by Article 6(2)(c) (Palermo).
36. Mutual legal assistance (MLA)	**LC**	• Dual criminality may impede MLA where the request relates to the laundering of proceeds that are derived from a designated predicate offense which is not covered.
37. Dual criminality	**C**	• This Recommendation is fully observed.
38. MLA on confiscation and freezing	**LC**	• Dual criminality may impede MLA where the request relates to the laundering of proceeds that are derived from a designated predicate offense which is not covered.
39. Extradition	**LC**	• Dual criminality may impede extradition where the request relates to the laundering of proceeds that are derived from a designated predicate offense which is not covered. • List-based treaties do not cover ML.
40. Other forms of co-operation	**C**	• This Recommendation is fully observed.
Nine Special Recommendations	**Rating**	**Summary of factors underlying rating**
SR.I Implement UN instruments	**LC**	• Not all UN1267 designations are transposed in the OFAC list.
SR.II Criminalize terrorist financing	**C**	• This Recommendation is fully observed.
SR.III Freeze and confiscate terrorist assets	**LC**	• Compliance monitoring in non-federally regulated sectors (e.g. insurance, MSBs) is ineffective. • Not all S/RES/1267(1999) designations are transposed in the OFAC list.
SR.IV Suspicious transaction reporting	**LC**	• The existence of a USD 5,000 threshold for reporting suspicious activity. • No measures have been applied to investment and commodity trading

		advisers. • The effectiveness of measures in the insurance and mutual funds sectors cannot yet be assessed.
SR.V International co-operation	**LC**	• List-based treaties do not cover FT.
SR VI AML requirements for money/value transfer services	**LC**	• The limitations identified under Recommendation 5, 8, 13 and SR.IV with respect to the MSB sector also affect compliance with Special Recommendation VI. • Major concerns with respect to resources of the IRS for monitoring of this sector.
SR VII Wire transfer rules	**LC**	• Threshold of USD 3,000 instead of USD 1,000 as is required by the revised Interpretative Note. • It is not mandatory to include all required originator information on batch transfers.
SR.VIII Non-profit organizations	**C**	• This Recommendation is fully observed.
SR.IX Cross Border Declaration & Disclosure	**C**	• The Recommendation is fully observed.

Table 2: Recommended Action Plan to Improve the AML/CFT System

AML/CFT System	Recommended Action (listed in order of priority)
1. General	
2. Legal System and Related Institutional Measures	
2.1 Criminalization of Money Laundering (R.1 & 2)	• Expand the list of foreign predicate offenses to include all of the domestic predicate offenses (including piracy, market manipulation and insider trading). • Amend the list of SUA to include the offenses of piracy, market manipulation and insider trading. • Take legislative measures to ensure that the definition of "transaction" is broadened to cover all conduct as required by the Vienna and Palermo Conventions. • Take legislative measures to ensure that the scope of the section 1956(a)(2) offense is broadened include proceeds other than funds or monetary instruments.
2.2 Criminalization of Terrorist Financing (SR.I)	• There are no recommendations for this section.
2.3 Confiscation, freezing and seizing of proceeds of crime (R.3)	• Extend domestic and foreign predicates to fully cover all 20 categories of predicate offenses listed in the Glossary to the FATF 40 Recommendations. • Take measures to ensure that property which may be subject to equivalent value confiscation may be seized/restrained to prevent its being dissipated.
2.4 Freezing of funds used for terrorist financing (SR.III)	• Take further efforts to improve compliance monitoring of all targeted entities, particularly the state-regulated sectors and DNFBPs. • Given that the reliability of the 1267 list has been improved through successive rounds of corrections and additions of identifiers, the U.S. should consider revising its approach to listing the Taliban as an entity, rather than including individual names, particularly where those names have sufficient identifiers.
2.5 The Financial Intelligence Unit and its functions (R.26)	• FinCEN should invest in a faster and more efficient reporting system with a preference to: (1) mandatory e-filing for all reporting institutions, and (2) the use of a single form for all reporting institutions. • FinCEN should ensure that it receives adequate and continual feedback from law enforcement agencies using the BSA-direct system so that it does not lose its important position within the AML/CTF chain. • FinCEN should improve its guidance and feedback with a view to improving the quality of reports filed by reporting entities. • FinCEN should also ensure that its information and guidance for reporting entities is combined and/or coordinated with the law enforcement agencies and regulators that issue similar or related material. • FinCEN should focus on the challenge of promoting the added-value of its analytical products to law enforcement. • Law enforcement agencies should work at the operational level to change their perceptions concerning the value of FinCEN's products (i.e. by promoting within their agencies a broader use of FinCEN's ability to produce operational and/or strategic analysis). • The U.S. should handle terrorism-related information received in requests from foreign FIUs in accordance with international principles of information exchange.

2.6 Law enforcement, prosecution and other competent authorities (R.27 & 28)	• There are no recommendations for this section.
2.7 Cross Border Declaration & Disclosure	• Further invest in the detection and investigation as well as the resources, techniques and methods to counter outgoing cross-border transportations of cash or any negotiable bearer instrument. • Focus on conducting thorough border checks of people, vehicles, trains, cargo, etc., without allowing the level of thoroughness to be dictated by the volume of traffic waiting to cross the border.
3. Preventive Measures – Financial Institutions	
3.1 Risk of money laundering or terrorist financing	• Extend AML/CFT measures to investment advisers and commodity trading advisors, and the limited number of depository institutions that are currently not covered.
3.2 Customer due diligence, including enhanced or reduced measures (R.5 to 8)	• Introduce a primary obligation to identify the beneficial owners of accounts (which may, of course, be implemented on a risk-based approach with respect to low-risk customers or transactions). • Implement a CIP requirement for the insurance sector. • Introduce an explicit obligation that financial institutions should conduct ongoing due diligence, rather than rely on an implicit expectation within the SAR requirements and on the existing guidance. • In the case of occasional transactions, extend the customer identification obligation to non-cash transactions. • Other than with respect to non-face-to-face business, securities transactions, and life insurance business, limit the circumstances in which institutions may open an account prior to completing the verification process, and introduce a presumption that institutions should close an account whenever the verification cannot be completed, for whatever reason. If necessary, accompany this with some form of indemnification against other conflicting statutes. • Introduce an explicit requirement that the opening of individual correspondent accounts should involve senior management approval. • Extend AML/CFT obligations (including the PEPs requirements) to investment advisers and commodity trading advisors, in line with those applicable to the rest of the securities industry. • Publish confirmation that, despite the promulgation of the final section 312 rule, the 2001 Guidance on PEPs remains in force and that it applies to all relevant financial institutions. • Introduce an explicit requirement for the life insurance and MSB sectors to address the specific risks associated with non-face to face business relationships or transactions. • Extend the obligation for AML Programs and CIP (as applicable) to all depository institutions to remove the historical anomaly.
3.3 Third parties and introduced business (R.9)	• Introduce a requirement that the relying bank or other financial institution should obtain immediately from the introducing institution details relating to the identity of the account holder, the beneficial owner, and the reason for which the account is being opened. • Extend such measures to investment advisers and commodity trading advisors, and the insurance sector (including insurance agents and brokers).
3.4 Financial institution secrecy or confidentiality (R.4)	• There are no recommendations for this section.

3.5 Record keeping and wire transfer rules (R.10 & SR.VII)	• Ensure that NACHA completes its current process of developing and approving a rule that would allow cross-border ACH transfers to meet the new FATF requirements with respect to batch transfers before January 2007. • Ensure that the threshold is lowered to USD 1,000 before January 2007. • Extend full record-keeping requirements to the insurance sector, including insurance brokers and agents. • Consider simplifying the record keeping framework.
3.6 Monitoring of transactions and relationships (R.11 & 21)	• Extend the requirement to establish and retain (for five years) written findings that relate to unusual transactions to those participants in the securities sector that are currently not subject to a requirement to file SARs. • Require insurers to establish and retain written records of transactions with persons from/in countries that do not or insufficiently apply the FATF Recommendations to the extent that this is not already addressed by the AML program and SAR requirements • Extend the requirements to establish and retain written records of transactions with persons from/in countries that do not or insufficiently apply the FATF Recommendations to those participants in the securities sector that are currently not covered.
3.7 Suspicious transaction reports and other reporting (R.13-14, 19, 25 & SR.IV)	• Remove the threshold from the reporting obligation. • Extend the SAR obligations to investment advisers and commodity trading advisors. • Consider imposing direct SAR reporting requirements on independent insurance agents and brokers. • Clarify that confidentiality of SARs applies to the more limited disclosure restrictions under the BSA (i.e. to any person involved in the transaction) to put current practice beyond doubt.
3.8 Internal controls, compliance, audit and foreign branches (R.15 & 22)	• Extend the AML Program requirement to the limited number of non-federally regulated depository institutions that are currently exempted. • Complete the process of extending AML Program requirements to unregistered investment companies, investment advisers and commodity trading advisors. • Ensure that insurance companies are required to apply AML/CFT measures to their foreign branches and subsidiaries. • Require all financial institutions (not just those in the securities sector) to screen prospective employees for high standards.
3.9 Shell banks (R.18)	• There are no recommendations for this section.
3.10 The supervisory and oversight system - competent authorities and SROs. Role, functions, duties and powers (including sanctions) (R.23, 29, 17 & 25)	• In the securities and insurance sectors issue guidance similar to the FFEIC manual. • Extend AML Program requirements to the limited number of uninsured, state-chartered banks and other depository institutions that are currently exempt. • Consider providing more and better resources to examining AML compliance in the privately insured credit union sector. • Ensure that the new AML/CFT measures applicable to the insurance sector are implemented effectively. • Once AML/CFT measures are applied to the investment advisers and commodity trading advisors, ensure that they are effectively supervised, monitored and (if appropriate) sanctioned for compliance. • Ensure that the IRS has sufficient resources to undertake comprehensive examinations of the large number of institutions for which it is responsible.

3.11 Money value transfer services (SR.VI)	• Undertake a thorough review of the workload and resources of the IRS in the area of BSA compliance to ensure that the allocation of responsibilities is delivering the most effective and efficient results (i.e. are other agencies better placed to take on some of these responsibilities?). • Irrespective of any reallocation of responsibilities, it is clearly the case that the IRS needs to be allocated significantly more resources simply to address the MSB sector. • Extend the examination program for agents quite extensively. • Make further efforts to standardize the AML examination procedures both between the states, and between the individual states and the IRS.
4. Preventive Measures – Non-Financial Businesses and Professions	
4.1 Customer due diligence and record-keeping (R.12)	• Explicitly require casinos to perform enhanced due diligence for higher risk categories of customers and to undertake CDD when there is a suspicion of money laundering or terrorist financing. • Extend customer identification, record keeping and account monitoring obligations that are consistent with FATF Recommendations to these sectors as soon as possible. • Extend obligations that relate to Recommendations 6, 8 or 11 to all DNFBPs. (This does not apply to casinos in relation to R.11). • In the short term, a proposed final rule should be issued to expedite the introduction of AML obligations for "persons involved in real estate closings and settlements." • Prepare an advance notice of proposed rulemaking in the near future in relation to the TCSP sector to extend both the AML Program and CIP requirements to this sector.
4.2 Suspicious transaction reporting (R.16)	• Remove the threshold on the SAR reporting obligation for casinos. • Extend the obligation to report suspicious transactions to the other DNFBP sectors. • Accountants, lawyers, real estate agents and TCSP should be made subject to the "tipping off" provision and should be protected from liability when they choose to file a suspicious transaction report. • Accountants, lawyers, real estate agents and TCSP should also be required to implement adequate internal controls (i.e. AML Programs). • Continued work is needed to ensure that dealers in precious metals and stones are aware of their obligation to establish AML Programs and are implementing them effectively. • The U.S. should obligate accountants, lawyers, real estate agents and TCSPs to give special attention to the country advisories that FinCEN has issued and which urge enhanced scrutiny of financial transactions with countries that have deficient AML controls.
4.3 Regulation, supervision and monitoring (R.24-25)	• Accountants, lawyers, real estate agents and TCSPs should be made subject to AML/CFT obligations and appropriate regulatory oversight. • In the case of TCSPs a registration process should be introduced for agents engaged in the business of providing company formation and related services (perhaps with a de minimis threshold to ensure that single company agents are not required to register). • The regulatory regime applied to the casino sector generally appears to be working effectively. However, the work to further harmonize Nevada's regulatory requirements with the BSA should continue as rapidly as possible.
4.4 Other non-financial businesses and professions (R.20)	• Consideration of extending BSA requirements to other sectors should proceed as quickly as possible.

5. Legal Persons and Arrangements & Non-Profit Organizations	
5.1 Legal Persons – Access to beneficial ownership and control information (R.33)	• Undertake a comprehensive review to determine ways in which adequate and accurate information on beneficial ownership may be available on a timely basis to law enforcement authorities for companies which do not offer securities to the public or whose securities are not listed on a recognized U.S. stock exchange. It is important that this information be available across all states as uniformly as possible. It is further recommended that the federal government seek to work with the states to devise procedures which should be adopted by all individual states to avoid the risk of arbitrage between jurisdictions. As the January 2006 threat assessment indicates, the U.S. authorities are well aware of the problems created by company formation arrangements, and have formulated an initial program to try to address the issue. This should be pursued in a shorter timescale than seems to be envisaged at present. In particular, the proposal to bring company formation agents within the BSA framework, and to require them to implement AML Programs and CIP procedures should be taken forward in the very near future.
5.2 Legal Arrangements – Access to beneficial ownership and control information (R.34)	• Implement measures to ensure that adequate, accurate and timely information is available to law enforcement authorities concerning the beneficial ownership and control of trusts.
5.3 Non-profit organizations (SR.VIII)	• Continue to devote resources to preventing the abuse of this sector from terrorist organizations, including ensuring the effective flow of information between competent authorities.
6. National and International Co-operation	
6.1 National co-operation and coordination (R.31)	• Continue to work towards closing the gap that still seems to remain between the policy level and the factual operational law enforcement work. • Consider expanding the HIFCA and HIDTA model, provided that it is appropriately resourced and developed • Law enforcement agencies should take more refined coordination at the operational level, perhaps in the context of the Treasury's recent government-wide analysis on money laundering. Such a study should not lead to the creation of new entities, but rather initiate a discussion on the basic law enforcement framework in a system as complex as that in the U.S.
6.2 The Conventions and UN Special Resolutions (R.35 & SR.I)	• Review the money laundering offenses to ensure all conduct required to be criminalized by the Vienna and Palermo Conventions is covered. • Include "participation in an organized criminal group" as a foreign predicate offense as required by Article 6(2)(c) of the Palermo Convention. • Transpose all S/RES/1267(1999) designations in the OFAC list.
6.3 Mutual Legal Assistance (R.36-38 & SR.V)	• A formal legal basis should be provided to allow for equivalent value seizure upon a foreign request. • Extend the list of domestic and foreign predicate offenses to all 20 designated categories.
6.4 Extradition (R.39, 37 & SR.V)	• Extend the list of domestic and foreign predicate offenses to all 20 designated categories. • Ensure that older, list based extradition treaties that were concluded before the introduction of money laundering and terrorism financing offenses in the respective legislations and that have not been supplemented since do not pose an obstacle to extradition. • Consider allowing extradition according to the principles of the UN TF Convention on an ad hoc and unilateral basis.
6.5 Other Forms of Co-operation (R.40 & SR.V)	• FinCEN should improve the quality of its analytical research reports so that they contain a more practical and deeper level of analysis tailored to the specific investigative needs of the requesting FIU.

7. Other Issues	
7.1 Resources and statistics (R. 30 & 32)	• Ensure that the IRS is adequately resourced to effectively supervise all of the entities that it is responsible for. • Ensure that all of the statistics required by R.32 are collected and maintained. • The statistics held in respect of terrorism and terrorist financing should also focus on the confiscation aspect. • Statistics relating to supervisory actions are not comprehensive. In particular, there are no statistics that measure the supervisory actions that has been taken specifically in relation to the AML/CFT obligations in the MSB sector.