FRBNY Blackbook

RESEARCH AND STATISTICS GROUP

FOMC Background Material

March 2005

CONFIDENTIAL(FR) Class II FOMC

FRBNY BLACKBOOK

March 2005

TABLE OF CONTENTS

EXHIBITS

1. Overview

We have changed our views of the strength of the economy to the upside. The preliminary readings on the first quarter suggest the economy is growing briskly. We have marked up our estimate of 2005:Q1 real GDP growth to over 4%, reflecting gathering momentum in capital spending. At the same time, the increases in core prices at higher frequencies—led by a turnaround in goods—are currently in excess of the FOMC's implicit inflation targets. Looking ahead, the outlook seems to be for growth at or above trend rate for the next two years easily mopping up any remaining slack in the economy.

Various measures of inflation expectations have also moved higher. It is not clear how much of these increases are due to the latest run-up in oil prices and other commodities. The reaction of inflation expectations derived from financial markets to inflation reports should be monitored closely over the next few weeks. Any further increases in TIPS breakeven inflation rates would be worrying.

Our forecast for overall output growth is similar to the Board staff with some differences in the composition. We have a higher inflation profile in 2006 than the Board staff since we do not assume as large a moderation in energy and commodity prices.

There is upside risk to inflation around our central projection (assuming that the funds rate is on a path to above 4% in 2007). This has increased the probability that inflation may come in undesirably high relative to implicit target ranges. If the upside inflation risk continues to increase, the FOMC may soon need to jettison its "measured" tightening of policy and adopt a somewhat more aggressive tone in both its actions and language, indicating to the markets that a somewhat steeper path of interest rate increases in the second half of 2005 than currently priced into markets.

The overall uncertainty around our forecast is still relatively low compared to historical experience. This benign situation also is reflected in the low implied volatility and risk premia priced into financial markets. At the present time this argues against using FOMC statements and actions to assist markets in repricing risk.

2. Recent Developments

U.S.

Summary. The data released since the last FOMC meeting have increased the risks of underlying inflation exceeding implicit goals and the upside risks to real activity. Core inflation indicators for January generally were on the high side, led by further increases in goods price inflation, increasing the risk that the underlying inflation rate may be exceeding 1½%. Real GDP growth in 2004Q4 was revised upward and the indicators suggest growth in 2005Q1 to be about 4½%, notably above our projection before the last FOMC meeting. The January and February employment reports indicate little change in the fundamentals of the labor market.

Inflation. Inflation indicators for January generally were on the high side. The core PCE deflator had a large increase in January as compared to those of the previous two years. More importantly, the 3-, 6-, and 12-month changes were at the higher end of their ranges over the past year. The corresponding changes for the core CPI also have tended toward the higher end of their recent ranges. Recent increases in inflation measures have been led by rising core goods price inflation. Reflecting this, the 12-month change in the core PPI is nearly 2¾%, the highest it has been since 1992. In contrast, core services price inflation has not increased recently. The recent data have increased the risk of underlying inflation exceeding 1½%, although uncertainty about the inflation outlook probably also has increased. There also was an increase in near-term household inflation expectations in the preliminary March Michigan survey, which was probably related to the recent increases in energy prices. However, long-term inflation expectations in the survey were unchanged at a level that has prevailed over the past year.

Real activity. Real GDP growth in 2004Q4 was revised upward to 3.8% (annual rate), and the recent economic indicators suggest that growth in the current quarter could be around 4½%, notably above our projection of 3.3% before the last FOMC meeting. One factor in the upgrade of the current quarter forecast is a higher projection of equipment investment expenditures. Previously, investment spending was expected to slow in 2005Q1 with the December 31 expiration of investment tax incentives. However, strong shipments and orders for nondefense capital goods excluding aircraft point to continued robust growth in these expenditures. The 12-month change in our Tech Pulse index for February remained near that of recent months, indicating the high-tech sector continues to show vigor. Manufacturing production was robust in January and February, and its underlying growth still appears to be around 5% (annual rate). With this, utilization rates have risen notably. Inventory accumulation continued to rise in line with sales, suggesting a modest positive contribution to Q1 GDP growth.

Consumer spending indicators point to some moderation in the growth rate of personal consumption expenditures (PCE) after brisk growth in the second half of 2004, although the recent retail sales data suggest the moderation probably is modest. Most of the moderation can be attributed to a slower pace of auto sales after the extremely strong sales at the end of 2004. In contrast, non-auto retail sales rose fairly strongly in the first two months of the year. The housing market remained robust. Housing starts continued to be strong through February. Home sales slowed some in January, but were still at quite high levels.

Employment. Payroll employment growth averaged 197,000 over January and February, slightly above the average for 2004 and the trend growth rate. Other indicators of the labor market also suggest little change in its fundamental condition. The index of aggregate hours rose moderately in January and February, and the growth of wages remained modest in these months. The moderate growth of aggregate hours combined with our strong output growth forecast suggests that productivity growth in Q1 should be above our 2½% estimate of trend productivity growth. After a downtick in January, the unemployment rate ticked back up to 5.4% in February, near where it has been since mid-2004. However, the labor force participation rate fell to 65.8% in January and February, the lowest it has been since 1988. Research here and at the Board suggests that participation may not rise much over the medium term.

Surveys. Survey data signaled little change in the near-term outlook. Although the ISM manufacturing index declined slightly in the first two months of 2005, both it and the ISM non-manufacturing index remain at levels consistent with solidly positive growth in the activity of their respective sectors. The Empire State and Philadelphia Fed indices also are at levels indicating further growth in manufacturing in those areas. The Michigan and Conference Board measures of consumer confidence were little changed in February, and the preliminary March Michigan index had a small decline. Both indices are within the fairly narrow ranges that have prevailed since early 2004.

Global

Foreign GDP is expected to grow 2.4 percent in 2005, roughly the same pace as last year. The outlook is 0.3 percentage point lower than the forecast before the last FOMC meeting, primarily because of lower projected growth rates for Japan and the euro area.

Industrial Countries. The euro area had weak GDP growth in Q4, but the data on orders, production, and retail sales at the beginning of 2005 have been encouraging. Industrial confidence, though, continued to soften through February. In Japan, January data for production, machinery orders and exports were also reassuring after stagnant growth through most of 2004. The growth forecasts for both regions nevertheless were marked down based on the soft confidence numbers, the unexpectedly weak GDP data for Q4 2004, and a significantly higher oil price assumption. Recent Canadian data have been solid, while the U.K. data point to some vulnerability.

Emerging Economies. Recent data suggest that growth in Emerging Asia outside China has stabilized after some deceleration in H2 2004. In China, both real and monetary data point to a robust start in 2005, even as inflation slows. Strong Q4 GDP data support upgrades to the forecasts for Mexico and Argentina, while mixed developments lead us to keep Brazil's forecast unchanged. Inflation concerns are easing in Mexico, persisting in Brazil, and worsening in Argentina.

Trade

The weakness in export growth that started in Q4 2004 continued to be evident in the January data. The weakness was largely in sales to Asia, especially China and Japan. Nevertheless, longer-term export growth is still fairly robust, with exports in January up 10 percent relative to year-ago levels. With their growth quite strong, imports remain the main driver of the growing trade deficit. They are expected to continue to rise rapidly as long as the domestic economy remains strong.

The net export contribution to GDP growth in Q1 and Q2 of 2005 is projected to be -0.4 and -0.2 percentage point respectively. By comparison, net exports took 1.4 percentage points off GDP in Q4 2004. The moderation in the projected net export drag in Q1, despite strong domestic demand growth, reflects some bounce-back from the sharp slowdown in export growth in Q4 2004.

Financial

Domestic markets

Implied inflation expectations derived from comparing yields on TIIS securities with Treasuries have moved up considerably since the last FOMC (see Exhibit B-1). The 5-year implicit CPI inflation compensation is close to 3%. Analysis of TIPS securities maturing in 2007 and CPI swaps suggests much of the increase is in short- to medium-run expectations (50 basis points at in 2005, 60 basis points in 2006 but only 10 basis points in 2010).

Since the last FOMC meeting, nominal yields at all maturities have increased markedly (see Exhibit B-2). This reflects the strength of the incoming data and a market reassessment of likely Fed actions following the Chairman's testimony and in the last 10 days (since March 8th). The path of forward rates supporting this pattern is in the second panel of the Exhibit. **If all of the increase in breakeven inflation rates from TIPS is attributed to an increase in inflation expectations then the one-year and two-year forward real rates have not increased since the last meeting.**

Yields on corporate debt have been stable. Spreads to Treasuries have declined slightly and remain at relatively low levels compared to recent experience. The stock market is not producing any strong negative signals. There has been a mild increase in implied volatility for stock market indices.

The recent increase in market interest rates is consistent with our view of improving economic developments. This assumes that a large part of the increase in TIPS breakevens has not been produced by an increase in underlying inflation. Exhibit A-7 shows the movement in TIPS 5-year breakevens relative to forecasts of inflation from the dynamic factor model based on 335 time series. It is consistent with this interpretation.

Financial markets views of future policy actions have been broadly consistent with our interpretation of economic developments. There is an expectation of 25 basis point rate increases at the next four FOMC meetings, followed by a slowdown in the frequency of rate increases (see Exhibit B-3). Measures of uncertainty around the expected path have fluctuated since at the last FOMC but show no material changes (see Exhibit B-4). The FRBNY implied skewness measure suggests that market participants are not pricing in large movements in the FFR above the expected path (see Exhibit B-5).

Global Markets

News from global financial markets was generally favorable during the inter-meeting period. All main stock indices recorded robust increases, reflecting favorable inflation data and more optimistic views about future earnings. The rise of global long-term interest rates in the inter-meeting period likely also reflects favorable data on global real economic growth more than fears of resurgent inflation. A more optimistic assessment of Japanese growth prospects, in particular, supported the recent upward trend in JGB yields since early February.

Monetary Policy. Monetary policy abroad is set to remain broadly unchanged in industrial countries through the first half of 2005. The ECB is not expected to tighten until the recovery gets back on track. Continued deflation in Japan will keep the Bank of Japan on hold for at least a year. The Bank of Canada, concerned about the stronger Canadian dollar, is pausing after raising rates in late 2004. Improving inflation in China is reducing the prospect of policy tightening this year. Brazil and Mexico have both been tightening monetary policy to reverse last year's up-tick in headline inflation. Expectations are that the tightening cycles will end in Q2, though stubborn inflation expectations and recent currency weaknesses have raised doubts.

Exchange Rates and Capital Flows. While data on capital flows lag the FOMC cycle (end-2004 data show continued large gross inflows into the United States, mostly private flows from Europe, and official flows from non-Japan Asia), foreign investors are reported to be intensifying their interest in European and Asian assets. Given that net capital flows must match these regions' saving surpluses, this interest is manifested – so far – mostly through a weakening of the dollar. Indeed, the dollar depreciated against most other currencies during the inter-meeting period, especially relative to the euro, which also strengthened with respect to the yen and other Asian currencies with little change in implied volatility (see Exhibit B-6 and B-7). Reserve accumulation picked back up in February in Emerging Asia outside China, as central banks in the region resisted renewed upward pressures on their currencies. Some currencies in the region, including the Korean won, Taiwan dollar and Thai baht, are already trading near post-1997 highs. In Latin America, Brazil continues to intervene heavily, with the public sector's foreign exchange position (including swaps) up over $30 billion since end-November, with more than half of the increase coming in the last 6 weeks.

Emerging Economies. Following the increase in Treasury yields in the second week of March, the spread of the EMBI+ index widened by almost 40 basis points from its record low of 327 basis points on March 8. At this stage, this development should be viewed more as a marginal unwinding of previous speculative positions rather than as a signal of incipient wholesale liquidation of emerging market assets. Yet, historically, persistent increases in U.S. interest rates have led to strains in emerging markets, warranting close ongoing monitoring of financial conditions in this region.

Oil Markets

Oil prices hit record highs on March 16th, after reports showed sharper-than-expected declines in refined product inventories. The global recovery continues to drive oil prices higher as OPEC producers have limited short-term capacity to increase production to meet global demand. Rigid supply conditions suggest oil prices will remain volatile going forward.

Futures prices have increased in step with spot prices. On March 15th, the futures price for Brent was $52.14 for December 2005 and $48.69 for December 2006. At the time of the last FOMC meeting, futures prices for December 2005 and 2006 were $42.66 and $39.99 respectively.

Second District

Our Indexes of Coincident Economic Indicators for January signal continued modest growth in New York State and New Jersey, but robust growth in New York City [Exhibit E-1]. Looking ahead to the next 9 months, our leading indexes predict growth of about 3% in New Jersey, nearly 5% in New York and more than 6% in New York City [Exhibit E-2]. Consumer price inflation in the New York metropolitan region re-accelerated in January, led by rising apparel prices; local-area inflation has averaged 4.1% in the past 12 months versus 3.0% nationally.

Labor Markets. Benchmark revisions show 2004 job growth was markedly weaker than originally estimated in New Jersey but a bit stronger in New York. In January, private-sector jobs rose in New York City but fell at a 1.0% annual rate in both New York State and New Jersey. Still, private-sector employment rose 1.3% from a year ago in both New York City and the New York-New Jersey region, compared with 1.8% nationwide [Exhibit E-3]. Based on unemployment trends, the region has outperformed the nation. In January, jobless rates fell to 3½ year lows in New Jersey (3.9%), New York State (5.0%), and New York City (5.9%) [Exhibit E-4]; although New Jersey's rate did rise to 4.4% in February, it was still down a full point over the past year (New York has yet to release February data). In contrast, the U.S. rate has declined only slightly over that period.

Real Estate. Real estate markets showed further signs of strengthening in early 2005. Housing permits were steady at a high level in January, and the market for both new and existing homes displayed persistent strength, with price appreciation reported to be running well over 10% (annual rate). Manhattan's office market showed signs of tightening in February, with the Class A vacancy rate falling to its lowest level in nearly 3 years.

Surveys and Other Business Activity. Recent business surveys also point to ongoing improvement. Our March Empire State Manufacturing Survey showed continued steady growth in business activity. February surveys of purchasing managers showed mixed but generally favorable results, with activity decelerating in the metropolitan Buffalo area but accelerating slightly in the New York City area and noticeably in metropolitan Rochester. Consumer confidence surveys were mixed to somewhat weaker in February: Siena College's index for New York State, which had risen in December and January, gave back all of that gain, but the Conference Board's index for the Middle Atlantic states (NY, NJ, PA) held steady at a high level.

3. Outlook

Forecast

The fundamentals of the outlook have not changed since the last FOMC meeting, though, as capital spending looks stronger and household spending retains a bit more impetus, the near-term forward momentum of the economy is somewhat greater than we had thought. There is no sign as yet that the increases in short-term rates since last summer are inhibiting spending. We do anticipate that, ultimately, higher short-term rates will show through to the long end of the market and start to restrain spending, most notably in housing, bringing growth down to around our estimate of potential of about 3½% in late 2005 and 2006. However, it now looks as if any remaining slack in the economy will soon dissipate. Thus, unlike the situation last spring, we think that the recent uptick in core inflation will get locked into the system, and core PCE price inflation is expected to stay above 1½% through the end of 2006. However, it is possible that labor cost pressures may be a smaller factor in the inflation outlook; the sharp upward revision to the 2004Q4 data and the expected strong growth in 2005Q1, along with the capital spending surge, suggest that the near-term productivity trend is better than we had thought. Therefore, firms may find it easier to accommodate increases in compensation growth stemming from a tightening labor market and maintain margins with moderate price growth.

Comparison of Greenbook and other Forecasts

As with our forecast, the Greenbook projections are now conditioned on a path for the federal funds rate of 50 basis points higher than in January: the federal fund rate is assumed to rise to 3½ % by the end of this year, and 4% by the end of 2006.

The Greenbook outlook is somewhat stronger than the one projected in January, and is supported by strong spending on equipment and software, favorable news on labor market conditions, upward revisions to income in the second half of 2004, and higher equity prices. The January projection of real GDP growth for this year and the next is nudged up by 0.1% to 4% in 2005, and 3.6% in 2006, matching our projections. For the shorter run, GDP is expected to grow at a pace of 4.25% in the first quarter, sustained by a strong growth of consumer and business spending, and residential investment, and only partly offset by the slightly higher net export drag.

The path of inflation projected by the Greenbook is somewhat different from ours, though. The Board revised upward its January projections for both core and total PCE inflation, but still projects inflation higher in 2005 and then slowing down in 2006. The motivation appears to be that higher prices of energy and of other industrial commodities are expected to feed into raising firms' costs this year. Core PCE inflation for 2005 (Q4/Q4) is forecast to be 1.8% (versus 1.6% in the last forecast) and 1.6% in 2006 (up from 1.4%); that compares with our forecast of 1.6% in 2005, and 1.8% in 2006. The Board's more optimistic view of the path of energy prices is reflected in their forecast of total PCE inflation, which, at 1.9% in 2005 and 1.4% in 2006, remains few tenths below ours of 2.2% and 2% respectively.

The labor market appears to gain more strength in the Board's forecast than in our forecast; private payrolls are projected to increase at a pace of a little above 200,000 per month in 2005, and 175,000 per month in 2006, somewhat above our projections, respectively, of an average of 192,000 for 2005 and 146,000 for 2006.

Productivity growth, boosted, compared to the January forecast, by ½ percentage point to 2.3%, is below our stronger forecast of 2.7%, but settles as ours at 2.5% in 2006. The combination of unchanged growth of compensation per hour with a mild productivity growth leads to an increase in the Greenbook projections of unit labor cost of 1.9% for 2005, and 2% for 2006. These projections are notably higher than our projected growth of unit labor costs of 1.2% in 2005 and 1.3% in 2006, the difference due primarily to our projection of a more contained compensation growth.

The Greenbook interprets most of the increase in productivity as due to structural factors; its effect on potential output, however, is somewhat offset by a reduced estimate of the trend in potential labor input, both in terms of a reduced trend workweek and a lower than expected increase in participation rate. The level of potential output is therefore estimated to remain around 3¼ % per year, as at the end of 2004; as a consequence, with output growing faster than potential, output gap, estimated at 1¼ percent at the end of 2004, is expected to be almost closed by the end of 2006.

The prospect for unemployment is unchanged. The unemployment rate remains at 5.3% over 2005 and then falls to 5.1% by the end of 2006.

Alternative scenarios

The Greenbook consider six alternative scenarios to the baseline forecast, two where a spending boom occurs, with or without an adjustment of inflation expectations, one with faster structural growth, two scenarios with varying degrees of slack in the economy, and a scenario with higher bond premia.

In the 'spending boom' scenario the strength of aggregate demand is increased by putting the saving rate at a low ¾ %, rather than 2 ¼ %, and by assuming that the pace of equipment and software spending remains as strong as in 2004 for the whole 2005. In this scenario, if inflation expectation remain flat at the baseline level, output growth is higher than 4 ½ percent in both 2005 and 2006, and unemployment falls to about 4.3 percent in 2006. A significant effect on inflation, however, comes only in so far as inflation expectations are allowed to rise. In this case core PCE inflation goes up to 1.9% in 2005, and to 2.4% in 2006, and output growth also edges up to 4.9%.

The 'faster productivity growth' scenario boosts output to the same extent as the spending boom, but contains inflation to a lower path of 1.3% and 1.1%, respectively in 2005 and 2006. There is no apparent effect on unemployment.

The other scenario with potential negative effect on inflation is the case of an overestimate of the slack in the economy. Assuming a NAIRU of 5½ percent (instead of 5% as in the baseline case) and a lower labor force participation brings down unemployment, and create labor market pressures that push core inflation just below 2%, without any significant change in output growth as predicted by the baseline.

If, on the other hand, the slack is underestimated – the NAIRU is assumed in this case ½ percent lower than in the baseline case, and trend labor force participation is assumed to be declining - the effects are opposite: higher unemployment, lower core inflation, and mildly faster output growth.

Finally, the Greenbook considers the risks associated with higher bond premia. If long-term rates were to rise and weaken economic activity, risk premia for corporate bonds over Treasuries might increase and move up the path of interest rates, which would restrain then consumption and investment. The effect is a reduction of about 1 percentage point in GDP over the two years, an increase in unemployment, and a more moderate core inflation.

Comparing the FRBNY real GDP forecast to private sector forecasts, we are in rough agreement about the path of GDP growth during 2005: stronger growth in the first two quarters is followed by more moderate growth in the second half of the year. The level of the path of the FRBNY prediction is somewhat higher than that of the other forecasters, although they appear to converge in the last quarter. The Macro Advisors' forecast appears to be higher than the other private forecasts, and smoother, going from a first quarter forecast of 4.2% to 3.8% in the last quarter. The PSI model, which incorporates survey data on business sentiment and activity, gives the most sanguine prediction of a 4.6% growth in the first quarter.

Both our forecasts and the Greenbook are a little below recent private sector forecasts of inflation.

Foreign Outlook. The only major difference with the Board's foreign outlook concerns Japan. Both forecasts have a modest rebound in output in 2005Q1 based on January output data, followed by some moderation in growth from the Q1 pace in subsequent quarters. However, our forecast is for somewhat less growth each quarter. For the year, the Board anticipates growth of 1.5 percent (Q4/Q4), while we forecast growth of 1.0 percent. The difference is due, in part, to assumptions of Japan's potential growth rate. The Board assumes potential growth of 1.75 percent, while we assume a growth rate of 1.50 percent. Note that we have lowered our potential growth estimate for Japan from 2.0 percent because of Japan's conversion to a chain-weighted methodology for calculating GDP growth.

U.S. Trade. The Board expects no drag on GDP growth from net exports in H1 2005 while we have a drag of 0.3 percentage point. The difference is largely due to the Board's forecast of a positive growth contribution from net exports of 0.6 percentage point in Q2. The positive contribution comes from a big slowdown in import growth, something that appears unlikely to us in the context of expected strong domestic demand growth in Q1 and Q2. The export outlooks are similar.

Alternative Scenarios and Risks

Alternative 1: Extinguishing a Low Burning Candle. This scenario now requires large revisions in the investment and consumption data of the last few months to remain viable.

Alternative 2: Productivity. In the post-war era, the United States has experienced three productivity epochs (pre-1973, High I; 1973 to mid-1990s, Low I; and mid-1990s on, High II). Our current central projection for productivity in the medium term assumes a growth rate similar to that of the pre-1973 epoch. There are two alternatives to this projection.

2a. Continued Surge

The recent developments in the labor market and continued strength of labor productivity suggest that firms have become more efficient in using labor. As such, the very strong productivity growth of the past three years could persist. This would imply that the potential growth rate is higher than our current estimates. In addition, strong productivity growth would limit labor cost pressures, and inflation thus would remain subdued. Incoming data that would support this scenario would be continued upside surprises in labor productivity growth that bring the four-quarter average back above 3%, continued strength in consumption, and continued declines in investment goods prices (one indicator would be the difference between the nominal and real FRBNY tech pulse indices).

2b. Slower Productivity Growth

Our central projection no longer has a cyclical moderation in productivity growth. This change is based on limited recent data and thus produces some downside forecast risk. Arguably, a slowdown in productivity could lead to somewhat greater hiring, but in a rising interest rate environment the increase in labor costs could prompt a renewed wave of business caution, leading to weaker investment and GDP growth. Weaker demand and continued foreign competitive pressure would be necessary to limit the inflationary pressure resulting from such a higher labor cost profile. Incoming data supporting this scenario would be a drop in the four quarter productivity average below 2%, a slowdown in consumption growth, and a firming in investment goods prices.

Alternative 3: Overheating. A continuation of the extremely accommodative policy of the past two years going forward has a quicker, stronger effect on prices as well as a more subdued effect on real output. There are two potential connected channels at work here. The first is an underestimate of the equilibrium real rate (i.e., an overestimate of slack in the economy) and the second is higher energy prices. As we have argued before, sustaining the real policy rate below the equilibrium rate for a long time will tend to switch the impact of monetary policy from increasing real output to raising inflation as inflation expectations increase. There is evidence from commodity prices, breakeven inflation rates from TIPS, and core goods prices that this excess demand has begun to produce higher inflation. Also, to this point, with the trade deficit and Asian dollar support absorbing excess demand, strong household spending has been maintained and the housing market has remained robust. In an environment where the excess demand continues, core inflation and inflation expectation measures move steadily upward, while the current account deficit continues to deteriorate. Eventually, the conditions would come into place for a bust in both the housing and foreign exchange markets.

Additional Uncertainties

Foreign Outlook. Uncertainty about the impact of higher energy prices and the weak dollar are the major risks to the foreign growth outlook. For industrial countries that are coping with the weaker dollar, the issue is whether domestic demand can make up for the projected decline in the growth contributions from net exports. An upside risk is that strong U.S. growth will give a greater-than-expected boost to output in the rest of the world. In Asia, China's investment spending, which remains at an extraordinarily high share of GDP, might slow more than currently expected, with significant spillover effects for the rest of Emerging Asia. Another risk is the uncertain impact of currency reform in China or elsewhere in Emerging Asia. If China revalues, speculative capital inflows might pick up in anticipation of a follow-up move, and other currencies in Emerging Asia might see redoubled appreciation pressures. In Latin America, progress in containing inflation will determine the degree that monetary policy restrains growth in Mexico and Brazil. Developments in U.S. fixed income markets are particularly important for Brazil, which remains one of the countries most sensitive to global financial conditions. Argentina's relative success with its debt swap reduces financial volatility risks there and improves the outlook for domestic demand.

U.S. Trade Forecast. The forecast relies on the dollar's depreciation sustaining relatively strong export growth in 2005. The extent of the boost to exports from the weak dollar thus is a key uncertainty in the forecast. The notable slowdown in foreign sales at the end of last year, particularly those to Asia, remains a concern.

Quantifying the Risks

The data over the inter-meeting period have been less consistent with our central scenario than they were before the previous FOMC meeting. Consequently, we are lowering the probability assessment of the central scenario to 61% (it was 65% for the January FOMC). Further, we are introducing more upside risk to the central projection of both inflation and output. The financial market developments reviewed above support our view that the risks to deviating from the central projection--economic growth at the potential rate with moderate core inflation--have moved to the upside with a slightly lower confidence in the central projection. We assume that the most likely alternative scenarios are a continued productivity surge at 10% (9% in January) and a productivity slowdown at 9% (10% in January). Among the other alternatives, the probability of the overheating scenario is at 8% (5% in January) and the extinguishing a slow burning candle scenario is at 1% (3% in January). The remaining 11% covering additional uncertainties around the central projection is split 10% to the upside and 1% to the downside. The first time the volatility of the forecast distribution was calibrated to produce an implied volatility of interest rates using a Taylor rule (see Exhibit D text), the calculated implied volatility was **above** the option market implied volatility. Because market implied volatility incorporates additional uncertainties that are not included in our exercise, this was not deemed appropriate. Therefore, we switched to considering the forecast distribution of core PCE rather than total PCE, as we found the larger variance of total PCE made it very difficult to calibrate implied interest rate volatility below the market implied volatility curve.

The forecast distributions for core PCE inflation and GDP growth produced by these risk assessments are shown in Exhibits C-1 and C-2. The 27% probability attached to upside inflation risks produce a 45% chance that core PCE inflation will exceed 2.5% in the next 12 quarters (this probability is produced by considering the share of inflation paths that exceed 2.5% and cannot be obtained directly from the forecast distribution presented in Exhibit C-1). The probability that the expansion continues through the end of 2007 is 92%. Compared to the "confidence intervals" presented on page 1-18 of the Greenbook, the volatility of the FRBNY inflation distribution is very similar but we are more confident about output growth in 2005 (70 percent interval of 1.3% versus 1.6% in Greenbook). The overheating scenario produces a point forecast of inflation that peaks at 2.4% in 2006 and thus is very similar to the Greenbook alternative of more spending with higher inflation expectations. Overall the forecast distribution only places 10% probability on 4 Quarter average core PCE inflation being between 1.5% and 1.75% at the end of 2006.

4. Policy Alternatives

Our baseline forecast and upside risk assessment are consistent with a 25 basis point increase in the target rate at present and a maintained signal of further future increases. Until we receive more data it is hard to be sure whether these further increases should continue at a measured pace (where measured has the meaning of 25 basis points per meeting with little probability of a pause or 50 basis point move). As shown in Exhibit D-1 measured induces a faster rate of tightening than reverting to the prescriptions of a standard policy rule. To ease comparison of alternatives we now assume that measured ends in June.

In our central scenario we see more inflationary pressures than the Greenbook hence the implied forward path for the FFR from Eurodollar Futures should stay positive into 2007. This can be seen in Exhibit D-2 where our central projection implies a FFR above 4% in

2007. This is slightly below the average projection over all scenarios because of the upside inflation risk to the central projection.

The projected path of the FFR is similar under our two alternative productivity scenarios through 2006, but there is a larger divergence in 2007. Both paths are similar to the market implied path through 2006. The implication from this is that the end of measured should produce a signal of an expected path below 25 basis points per meeting. The real rate implications are shown in Exhibit D-3 and show a larger divergence between the two scenarios as the neutral rate is influenced by the productivity growth rate.

The alternative scenario of overheating produces very different implications. It suggests that if more evidence accrues to support it by the end of the measured period in June, then the subsequent expected path should be centered at 25 basis points per meeting with a high probability placed on moves of 50 basis points.

Finally Exhibit D-4 compares expected volatility from our forecast distribution implied FFR with the market implied volatilities (using a 90% confidence interval). This suggests the possibility that measured is pushing volatility into the future. However, it also suggests that given our assessment of the risks the market is not under-pricing them.

A. FRBNY Forecast Tables

Exhibit A-1. Percentage Changes in Actual and Projected GDP, Prices, and the Unemployment Rate

Summary of the FRBNY forecast for the current FOMC cycle as well as the previous two cycles. Provides the forecasts of real GDP growth, change in the GDP deflator, change in the PCE deflator, the change in core PCE deflator, and the level of the unemployment rate. Data frequencies are both quarterly and yearly over the forecast horizon.
Source: FRBNY Business Conditions Function

Exhibit A-2. Detailed Comparison of FRBNY and Greenbook Forecasts

Summary of the baseline FRBNY and Board forecasts for the current FOMC cycle as well as the previous cycle. Besides variables included in Exhibit A-1, there are forecasts for some broad components of GDP, some measures of productivity and wages, labor force participation, payroll employment growth, and some financial market variables.
Source: FRBNY Business Conditions Function; Board staff

Exhibit A-3. Judgement Table

History and forecasts of the primary variables in the FRBNY forecast. This includes the detailed judgements, such as those for interest rates, profit growth, productivity, and real activity, that are behind our forecasts for aggregates such as real GDP and inflation.
Source: FRBNY Business Conditions Function

Exhibit A-4. Real GDP and components (growth contributions)

History and forecasts of the contributions to real GDP growth of the broad components of expenditures. Growth contributions are in percentage points.
Source: FRBNY Business Conditions Function

Exhibit A-5. Alternative GDP Forecasts

Real GDP growth forecasts from a variety of sources. Besides the FRBNY forecast, this includes the medians from two surveys of forecasters (Blue Chip and Survey of Professional Forecasters [SPF]), the forecasts from Macroeconomic Advisors, and the

forecast from a small model (PSI model) that uses business activity and sentiment as the primary independent variables.
Source: FRBNY Business Conditions and Domestic Research Functions; Blue Chip Economic Indicators; FRB Philadelphia Survey of Professional Forecasters; Macroeconomic Advisors

Exhibit A-6 (1, 2, & 3). Recent Behavior of Inflation

The three tables in this exhibit show the 3-, 6-, 12-, and 24-month changes in a variety of models of inflation.
Source: Bureau of Economic Analysis, Bureau of Labor Statistics

Exhibit A-7. Implied Inflation from TIPS and underlying measure of inflation

The chart shows the 5-year TIPS breakeven inflation rate in comparison to predicted inflation over various periods from a dynamic factor model using 335 time series.
Source: Business Conditions and Swiss National Bank

A. FRBNY Forecast Tables

Exhibit A-1: Percentage Changes in Actual and Projected GDP, Prices, and the Unemployment Rate

	Real GDP			Chain Type GDP Price Index			PCE Deflator			Core PCE			Unemployment Rate *			
	Dec	Jan	Mar	Dec	Jan	Mar	Dec	Jan	Mar	Dec	Jan	Mar	Dec	Jan	Mar	
2004 Q1	*4.5*	*4.5*	*4.5*	*2.8*	*2.8*	*2.8*	*3.3*	*3.3*	*3.3*	*2.1*	*2.1*	*2.1*	*5.6*	*5.7*	*5.7*	
2004 Q2	*3.3*	*3.3*	*3.3*	*3.2*	*3.2*	*3.2*	*3.1*	*3.1*	*3.1*	*1.7*	*1.7*	*1.7*	*5.6*	*5.6*	*5.6*	
2004 Q3	3.9	4.0	*4.0*	1.3	1.4	*1.4*	1.1	1.3	*1.3*	*0.7*	*0.9*	*0.9*	5.4	5.4	*5.4*	
2004 Q4	3.9	3.1	*3.8*	1.4	2.0	*2.1*	2.7	2.5	*2.5*	1.1	1.6	*1.6*	5.4	5.4	*5.4*	
2005 Q1	3.0	3.3	4.5	1.7	2.0	2.5	1.5	1.6	1.8	1.2	1.5	1.7	5.3	5.3	5.3	
2005 Q2	4.0	3.9	4.4	1.7	2.0	3.2	1.6	1.8	3.0	1.3	1.4	1.5	5.2	5.2	5.2	
2005 Q3	3.8	3.8	3.9	1.9	2.0	2.3	1.7	1.9	2.0	1.4	1.5	1.5	5.2	5.2	5.1	
2005 Q4	3.7	3.7	3.4	1.8	2.0	2.2	1.8	1.9	2.0	1.4	1.5	1.6	5.2	5.2	5.0	
2006 Q1	3.4	3.7	3.4	2.3	2.5	2.6	1.9	1.9	2.0	1.4	1.5	1.7	5.2	5.2	5.0	
2006 Q2	3.6	3.5	3.5	1.8	2.0	2.1	1.9	1.9	2.0	1.4	1.5	1.7	5.2	5.2	5.0	
2006 Q3	3.6	3.6	3.6	1.9	2.1	2.2	2.0	2.0	2.1	1.5	1.5	1.8	5.2	5.2	5.0	
2006 Q4	3.6	3.7	3.7	2.0	2.2	2.3	2.0	2.0	2.1	1.5	1.5	1.8	5.2	5.2	5.0	
2002 Q4 to 2003 Q4	*4.4*	*4.4*	*4.4*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.7*	*1.2*	*1.2*	*1.2*	*0.0*	*0.0*	*0.0*	*
2003 Q4 to 2004 Q4	3.9	3.7	*3.9*	2.2	2.4	*2.4*	2.6	2.5	*2.5*	1.4	1.6	*1.6*	-0.5	-0.4	*-0.4*	*
2004 Q4 to 2005 Q4	3.6	3.7	4.0	1.8	2.0	2.5	1.7	1.8	2.2	1.4	1.5	1.6	-0.2	-0.2	-0.4	*
2005 Q4 to 2006 Q4	3.6	3.6	3.5	2.0	2.2	2.3	1.9	1.9	2.0	1.4	1.5	1.7	0.0	0.0	0.0	*

* Q4 to Q4 absolute change   Note: Italics indicates a reported value

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A. FRBNY Forecast Tables

Exhibit A-2: Detailed Comparison of FRBNY and Greenbook Forecasts

	FRBNY				Board			
	2005		2006		2005		2006	
	JAN	MAR	JAN	MAR	JAN	MAR	JAN	MAR
REAL GDP (Q4/Q4)	3.7	4.0	3.6	3.5	3.9	4.0	3.6	3.6
GROWTH CONTRIBUTIONS (Q4/Q4)								
FINAL SALES TO DOMESTIC PURCHASERS	3.9	4.3	3.9	3.9	4.1	4.2	3.5	3.6
CONSUMPTION	2.4	2.4	2.3	2.3	2.7	2.7	2.6	2.5
BFI	0.8	1.2	1.2	1.2	0.6	1.0	0.9	1.0
STRUCTURES	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1
EQUIPMENT & SOFTWARE	0.7	1.1	1.0	1.0	0.5	0.8	0.8	0.9
RESIDENTIAL INVESTMENT	(0.0)	0.2	(0.1)	(0.1)	0.2	0.2	0.1	0.0
GOVERNMENT	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4
FEDERAL	0.3	0.3	0.2	0.2	0.3	0.2	0.1	0.1
STATE & LOCAL	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
INVENTORY INVESTMENT	(0.0)	0.0	(0.0)	(0.1)	(0.2)	(0.2)	0.1	0.0
NET EXPORTS	(0.2)	(0.3)	(0.3)	(0.3)	0.0	(0.1)	(0.4)	(0.3)
INFLATION/PRODUCTIVITY/WAGES (Q4/Q4)								
GDP DEFLATOR	2.0	2.5	2.2	2.3	1.5	1.8	1.6	1.7
PCE	1.8	2.2	1.9	2.0	1.3	1.9	1.3	1.4
CORE PCE	1.5	1.6	1.5	1.7	1.6	1.8	1.4	1.6
COMPENSATION PER HOUR	3.7	3.9	3.7	3.8	4.2	4.3	4.2	4.6
OUTPUT PER HOUR	1.9	2.7	2.5	2.5	1.7	2.3	2.2	2.5
UNIT LABOR COSTS	1.8	1.2	1.2	1.3	2.4	1.9	2.0	2.0
UNEMPLOYMENT RATE (Q4 LEVEL)	5.2	5.0	5.2	5.0	5.3	5.3	5.1	5.1
PARTICIPATION RATE (Q4 LEVEL)	66.4	66.0	66.5	66.1	66.0	66.0	66.4	66.1
NONFARM PAYROLL EMPLOYMENT (Q4/Q4 CHANGE)								
TOTAL, IN THOUSANDS	2674	2299	1775	1753	2800	2600	2400	2100
AVERAGE PER MONTH, IN THOUSANDS	223	192	148	146	233	217	200	175
FINANCIAL MARKET VARIABLES								
FED FUNDS RATE (PERCENT)	3.00	3.50	3.50	4.00	3.00	3.50	3.50	4.00
Baa BOND YIELD (PERCENT)	6.35	6.20	6.35	6.30	6.19	6.00	6.19	6.00
EFFECTIVE EXCHANGE RATE (Q4/Q4)	(1.20)	(1.20)	N/A	0.20	(1.30)	(1.40)	N/A	(1.40)

A. FRBNY Forecast Tables

Exhibit A-3: Judgement Table

	2004:01	2004:02	2004:03	2004:04	2005:01	2005:02	2005:03	2005:04	2006:01	2006:02	2006:03	2006:04	Q4/Q4 % CHANGE/Q4 LEVEL 2004	2005	2006
REAL GDP AND COMPONENTS (% Change, AR)															
GDP	*4.5*	*3.3*	*4.0*	*3.8*	4.5	4.4	3.9	3.4	3.4	3.5	3.6	3.7	*3.9*	4.0	3.5
CHANGE IN INVENTORIES (Growth Contribution) 1\	*1.2*	*0.8*	*-1.0*	*0.6*	0.2	-0.2	0.0	0.0	-0.3	0.0	-0.1	0.0	*0.4*	0.0	-0.1
DOMESTIC PURCHASES	*5.0*	*4.2*	*3.9*	*5.0*	4.6	4.3	4.0	3.6	3.5	3.7	3.7	3.7	*4.5*	4.1	3.6
CONSUMPTION EXPENDITURES	*4.1*	*1.6*	*5.1*	*4.2*	3.5	3.4	3.4	3.4	3.1	3.3	3.4	3.3	*3.7*	3.4	3.3
BUSINESS FIXED INVESTMENT	*4.2*	*12.4*	*13.0*	*14.0*	11.7	12.2	10.6	10.6	10.6	10.6	10.6	10.6	*10.8*	11.3	10.6
RESIDENTIAL INVESTMENT	*5.0*	*16.5*	*1.6*	*2.1*	6.8	9.0	2.5	-5.2	-2.0	-2.0	-2.0	-2.0	*6.2*	3.1	-2.0
NET EXPORTS (Growth Contribution) 1\	*-0.8*	*-1.1*	*-0.1*	*-1.4*	-0.4	-0.2	-0.3	-0.3	-0.2	-0.4	-0.3	-0.3	*-0.9*	-0.3	-0.3
EXPORTS	*7.3*	*7.3*	*6.0*	*2.4*	10.5	9.8	8.1	6.5	7.1	5.7	6.3	6.5	*5.7*	8.7	6.4
IMPORTS	*10.6*	*12.6*	*4.6*	*11.4*	9.0	7.5	7.1	6.4	6.1	6.2	6.1	5.9	*9.8*	7.5	6.1
FEDERAL GOVERNMENT	*7.1*	*2.7*	*4.8*	*1.7*	5.6	4.0	3.6	3.6	5.3	3.0	2.8	2.7	*4.1*	4.2	3.5
STATE & LOCAL GOVERNMENTS	*0.0*	*1.9*	*-1.7*	*0.8*	1.8	2.5	2.5	2.5	3.0	3.0	3.0	3.0	*0.3*	2.3	3.0
INTEREST RATE ASSUMPTIONS (%) 1															
FEDERAL FUNDS RATE	*1.00*	*1.00*	*1.42*	*1.94*	2.46	2.90	3.25	3.50	3.63	3.75	3.88	4.00	*1.34*	3.03	3.81
YIELD ON 10-YR GOVERNMENT	*4.0*	*4.6*	*4.3*	*4.2*	4.3	4.5	4.6	4.7	4.8	4.9	5.0	5.0	*4.3*	4.5	4.9
BAA BOND YIELD	*6.3*	*6.7*	*6.5*	*6.2*	6.0	6.1	6.1	6.2	6.2	6.3	6.3	6.3	*6.4*	6.1	6.3
INCOME (% Change, AR)															
PERSONAL INCOME	*5.0*	*6.4*	*4.6*	*10.6*	3.1	7.2	6.2	5.8	6.2	6.0	6.2	6.4	*6.6*	5.5	6.2
REAL PERSONAL DISPOSABLE INCOME	*2.4*	*2.8*	*2.9*	*8.1*	1.1	4.1	4.1	3.7	4.2	4.0	4.0	4.2	*4.0*	3.2	4.1
PERSONAL SAVING RATE (%) 3\	*1.0*	*1.3*	*0.7*	*1.6*	1.1	1.2	1.3	1.2	1.5	1.6	1.6	1.6	*1.2*	1.2	1.6
CORPORATE PROFITS BEFORE TAXES	*13.6*	*2.9*	*-21.0*	60.9	0.8	1.7	2.1	1.3	-1.3	0.6	0.5	0.6	10.4	1.5	0.1
PRICES & PRODUCTIVITY (% Change, AR)															
GDP IMPLICIT DEFLATOR	*2.8*	*3.2*	*1.4*	*2.1*	2.5	3.2	2.3	2.2	2.6	2.1	2.2	2.3	*2.4*	2.5	2.3
PERSONAL CONSUMPTION EXPENDITURES	*3.3*	*3.1*	*1.3*	*2.5*	1.8	3.0	2.0	2.0	2.0	2.0	2.1	2.1	*2.5*	2.2	2.0
CORE PERSONAL CONSUMPTION EXPENDITURES	*2.1*	*1.7*	*0.9*	*1.6*	1.7	1.5	1.5	1.6	1.7	1.7	1.8	1.8	*1.6*	1.6	1.7
CONSUMER PRICE INDEX	*3.7*	*4.4*	*1.6*	*3.4*	2.0	2.4	2.2	2.4	2.4	2.4	2.5	2.5	*3.4*	2.2	2.4
CORE CONSUMER PRICE INDEX	*1.9*	*2.6*	*1.7*	*2.3*	2.1	2.1	2.1	2.2	2.3	2.3	2.4	2.4	*2.1*	2.1	2.3
COMPENSATION PER HOUR (Nonfarm Business)	*3.8*	*3.7*	*3.5*	*4.1*	4.1	3.8	3.9	4.0	4.1	3.9	3.7	3.6	*4.2*	3.7	3.7
OUTPUT PER HOUR (Nonfarm Business)	*3.7*	*4.0*	*1.2*	*2.1*	3.6	2.8	2.3	2.3	2.5	2.5	2.5	2.5	*2.7*	2.7	2.5
UNIT LABOR COST (Nonfarm Business)	*0.1*	*-0.3*	*2.3*	*2.0*	0.5	1.1	1.7	1.8	1.6	1.4	1.2	1.1	*1.5*	0.9	1.2
REAL ACTIVITY															
CAPACITY UTILIZATION (Manufacturing, %)	*75.6*	*76.5*	*77.0*	*77.6*	78.3	78.7	79.5	80.1	80.6	80.9	81.2	81.5	*76.7*	79.2	81.1
CIVILIAN UNEMP RATE (%)	*5.7*	*5.6*	*5.4*	*5.4*	5.3	5.2	5.1	5.0	5.0	5.0	5.0	5.0	*5.4*	5.0	5.0
PRIVATE HOUSING STARTS (Thous, AR)	*1943*	*1920*	*1969*	*1975*	2135	2065	1995	1930	1910	1880	1870	1870	*1952*	2031	1883
LIGHT VEHICLE SALES (Mil$, AR) 4 \	*16.5*	*16.5*	*17.1*	*17.2*	16.3	16.9	17.1	17.1	17.2	17.2	17.2	17.2	*16.8*	16.9	17.2
FEDERAL SURPLUS/DEFICIT (Unified Basis, Bil$, NSA) 5	*-171.2*	*-25.7*	*-85.7*	*-118.1*	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	-412.3	-377.1	-301.5

NOTE: All series other than interest rates and the federal deficit are seasonally adjusted. Italics indicates a reported value. 1\ Growth contribution to real GDP 2\ Overall outlook is based on an assumption (not a forecast) that interest rates will remain near current levels 3\ Level, Percent 4\ Includes domestic and foreign auto and light truck sales 5\ Yearly numbers are based on the fiscal year

A. FRBNY Forecast Tables

Exhibit A-4: Real GDP and Components (Growth Contributions)

	2004				2005				2006				Q4/Q4 % CHANGE/Q4 LEVEL			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2003	2004	2005	2006
REAL GDP (Growth, Annual Rate)........................	***4.5***	***3.3***	***4.0***	***3.8***	**4.5**	**4.4**	**3.9**	**3.4**	**3.4**	**3.5**	**3.6**	**3.7**	***4.4***	***3.9***	**4.0**	**3.5**
Contributions to GDP growth:																
FINAL SALES TO DOMESTIC PURCHASERS...	***4.1***	***3.6***	***5.1***	***4.6***	**4.6**	**4.7**	**4.2**	**3.7**	**3.9**	**3.9**	**4.0**	**3.9**	***4.6***	***4.4***	**4.3**	**3.9**
CONSUMPTION EXPENDITURES...............	*2.9*	*1.1*	*3.6*	*2.9*	2.4	2.3	2.3	2.3	2.2	2 2	2 3	2.2	*2.7*	*2 6*	2.4	2.3
BUSINESS FIXED INVESTMENT.................	*0.4*	*1.2*	*1.3*	*1.4*	1.2	1.3	1.1	1.2	1.2	1 2	1 2	1.2	*0.9*	*1.1*	1 2	1.2
RESIDENTIAL INVESTMENT.........................	*0.3*	*0.9*	*0.1*	*0.1*	0.4	0.5	0.1	-0.3	-0.1	-0.1	-0.1	-0.1	*0.6*	*0 3*	0 2	-0.1
FEDERAL GOVERNMENT.............................	*0.5*	*0.2*	*0.3*	*0.1*	0.4	0.3	0.2	0.3	0.4	0 2	0 2	0.2	*0.4*	*0 3*	0 3	0.2
STATE & LOCAL GOVERNMENTS..................	*0.0*	*0.2*	*-0 2*	*0.1*	0.2	0.3	0.3	0.3	0.3	0 3	0 3	0.3	*0.1*	*0 0*	0 3	0.3
NET EXPORTS..	***-0.8***	***-1.1***	***-0.1***	***-1.4***	**-0.4**	**-0.2**	**-0.3**	**-0.3**	**-0.2**	**-0.4**	**-0.3**	**-0.3**	***-0.1***	***-0.9***	**-0.3**	**-0.3**
EXPORTS...	*0.7*	*0.7*	*0.6*	*0.2*	1.0	1.0	0.8	0.7	0.7	0.6	0.6	0.7	*0.6*	*0 6*	0 9	0.7
IMPORTS..	*-1.5*	*-1.8*	*-0.7*	*-1.7*	-1.4	-1.2	-1.1	-1.0	-1.0	-1.0	-1 0	-0.9	*-0.7*	*-1.4*	-1.2	-1 0
CHANGE IN INVENTORIES...................................	***1.2***	***0.8***	***-1.0***	***0.6***	**0.2**	**-0.2**	**0.0**	**0.0**	**-0.3**	**0.0**	**-0.1**	**0.0**	***-0.1***	***0.4***	**0.0**	**-0.1**

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Exhibit A-5: Alternative GDP Forecasts

		2005-Q1		2005-Q2		2005-Q3		2005-Q4	
	Release Date	Prev	Mar	Prev	Mar	Prev	Mar	Prev	Mar
PSI Model	3/10/2005	4.3	4.6	--	4.0	--	--	--	--
Blue Chip	3/10/2005	3.5	3.7	3.6	3.6	3.5	3.6	3.5	3.4
Median SPF	2/14/2005	3.4	3.7	3.4	3.7	3.4	3.3	3.4	3.4
FRBNY	3/16/2005	3.3	4.5	3.9	4.4	3.8	3.9	3.7	3.4
Macro Advisors	3/1/2005	4.1	4.2	4.1	4.2	3.8	4.0	3.9	3.8

Note: Previous release of all forecasts except for the SPF is February. The previous release of the SPF was in November.

A. FRBNY Forecast Tables

Exhibit A-6(1): CONSUMER PRICE INDEX DATA AS OF January 2005

	Annualized Percent Change Over Indicated Interval					Weights (December 2003)	
	24 MONTH	12 MONTH	6 MONTH	3 MONTH	1 MONTH	TOTAL	CORE
CONSUMER PRICE INDEX ………………	2.4	2.9	2.2	1.3	0.6	100.00	
ENERGY ………………………………	9.1	10.5	3.7	-6.0	-12.9	7.08	
ALL ITEMS EX ENERGY ………………	1.9	2.3	2.2	2.1	2.5		
FOOD …………………………………	3.2	2.8	1.8	1.5	1.3	14.38	
FOOD AWAY FROM HOME (NSA)	3.0	3.2	3.2	3.0	5.8	6.13	
ALL ITEMS EX FOOD & ENERGY………	1.7	2.2	2.1	2.0	2.4	78.54	100.00
CORE CHAIN-WEIGHT CPI (NSA)	1.4	1.9	1.5	0.0	2.2		
CORE GOODS………………..	-0.7	0.9	1.6	1.7	3.5	22.25	28.34
APPAREL………………..	-0.7	0.2	-0.3	0.7	4.1	3.98	5.06
MEDICAL CARE COMMODITIES….	4.1	4.4	4.0	3.9	5.1	1.50	1.91
DURABLE GOODS………………..	-1.6	0.8	2.5	2.5	4.2	11.28	14.36
NEW VEHICLES………………..	0.0	1.3	3.1	6.9	9.1	4.82	6.13
USED VEHICLES (NSA)……….	-3.7	5.1	8.3	2.1	1.8	2.01	2.56
CORE SERVICES………………..	2.7	2.8	2.4	2.4	2.6	56.28	71.66
RENT OF PRIMARY RESIDENCE…	2.7	3.0	2.8	2.7	3.4	6.16	7.84
OWNERS' EQUIVALENT RENT……	2.1	2.3	2.0	2.1	3.2	23.38	29.77
LODGING AWAY FROM HOME……	3.6	4.6	1.4	-2.2	-8.1	2.95	3.76
MEDICAL CARE SERVICES………	4.7	5.0	4.6	5.0	5.2	4.58	5.83
TRANSPORTATION SERVICES…..	2.2	1.4	1.4	0.9	0.5	6.32	8.05

Exhibit A-6(2): PCE DEFLATOR AS OF January 2005

	Annualized Percent Change Over Indicated Interval				
	24 MONTH	12 MONTH	6 MONTH	3 MONTH	1 MONTH
PCE DEFLATOR ……………………………	2.0	2.2	1.9	1.4	2.2
MARKET-BASED (PCE Deflator)………………	2.1	2.4	1.8	1.4	1.8
DURABLE GOODS ……………………………	-1.8	-0.3	0.4	1.9	6.2
MOTOR VEHICLES AND PARTS …………	-0.2	2.4	4.8	8.7	15.1
NONDURABLE GOODS ………………………	2.7	3.3	1.8	-1.4	-0.7
CLOTHING AND SHOES ……………………	-0.7	0.2	-0.5	-0.4	4.5
SERVICES ……………………………………	2.5	2.2	2.2	2.8	2.9
HOUSING ……………………………………	2.3	2.7	2.2	2.1	2.8
TRANSPORTATION …………………………	1.9	1.0	0.0	3.4	4.2
MEDICAL CARE ……………………………	3.0	2.2	2.4	2.6	2.8
PCE DEFLATOR EX FOOD AND ENERGY ……	1.4	1.6	1.7	2.1	3.7
MARKET-BASED (Core PCE Deflator) ………	1.4	1.7	1.7	2.1	3.4
PERSONAL BUSINESS SERVICES-MB	3.3	2.5	2.3	3.7	2.6
PERSONAL BUSINESS SERVICES-NMB	-0.3	-1.1	-1.2	-1.8	-0.5

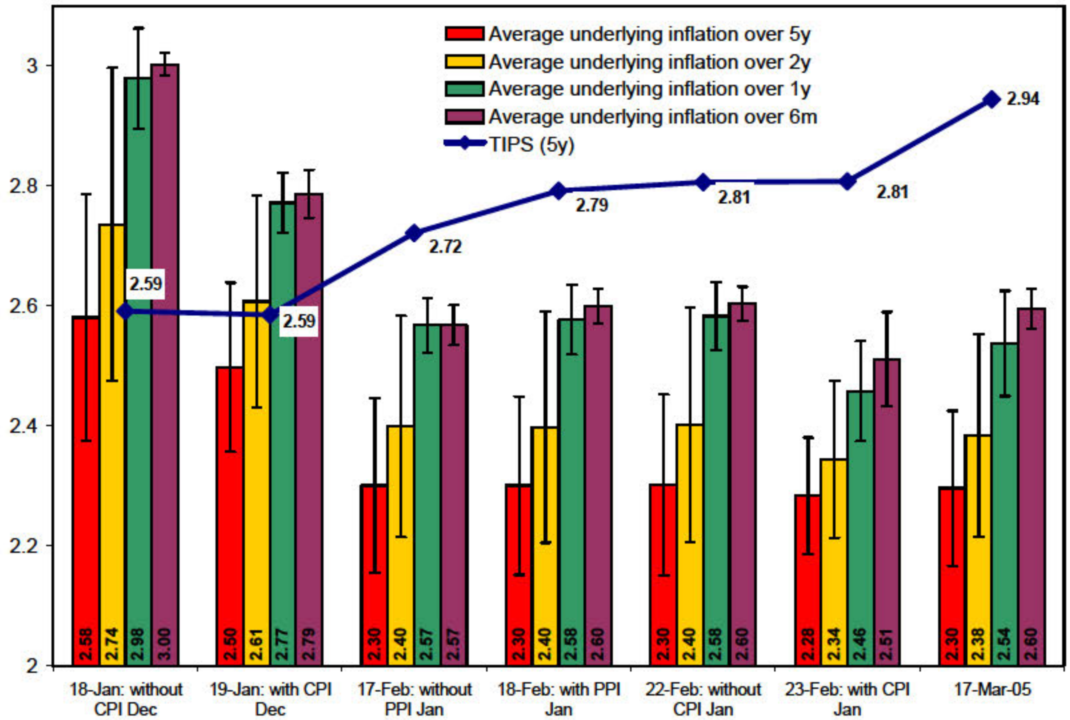
A. FRBNY Forecast Tables

Exhibit A-6(3): PRODUCER PRICE DATA AS OF January 2005

	Annualized Percent Change Over Indicated Interval				
	24 MONTH	**12 MONTH**	**6 MONTH**	**3 MONTH**	**1 MONTH**
FINISHED GOODS.....................................	3.7	4.3	4.9	2.7	3.2
FINISHED CONSUMER GOODS..........................	4.4	4.7	5.4	2.1	2.3
FINISHED CONSUMER GOODS EX FOOD.........	4.5	4.9	5.8	2.4	3.1
NONDURABLES EX FOOD...........	5.6	5.8	6.9	1.5	1.5
DURABLES..................................	1.8	2.8	3.7	4.8	8.2
CAPITAL EQUIPMENT...	1.8	2.8	4.0	4.3	7.8
ELECTRONIC COMPUTERS (NSA)....................	-16.1	-16.8	-24.2	-32.5	-53.0
COMMUNICATION & RELATED EQUIP. (NSA).....	-1.3	-1.6	0.6	-1.5	6.0
FINISHED GOODS EX FOOD & ENERGY.............	1.8	2.7	4.0	4.8	9.7
FINISHED CONS GOODS EX FOOD & ENERGY....	1.9	2.6	3.9	5.1	10.9
INTERMEDIATE MATERIALS................................	6.2	8.7	7.1	5.0	5.0
INTERMEDIATE MATERIALS EX FOOD & ENERGY..	5.4	8.5	7.8	6.8	10.0
CRUDE MATERIALS...	13.4	10.8	3.7	13.1	-21.2
CRUDE MATERIALS EX FOOD & ENERGY............	19.1	13.1	8.8	-6.6	-26.5

A. FRBNY Forecast Tables

Exhibit A-7: Implied Inflation from TIPS and Underlying Measure of Inflation



B. Financial Markets

Exhibit B-1. TIIS Implied Inflation and real rates

The chart in this exhibit gives the time series of implied expected CPI inflation from the TIIS market. The table contains the current (3/16/05) yields on 5 and 10 year nominal and TIIS Treasuries.
Source: Capital Markets Function FRBNY

Exhibit B-2. Smoothed Treasury Yield Curve and Implied Forward Rate Curve

The charts in this exhibit show the change in the smoothed (off the run) Treasury yield curve since the day before the last FOMC meeting and the implied forward rate curve,
Source: Monetary Affairs BofG

Exhibit B-3. Expected Path of Fed Funds Target from Financial Markets

The charts in this exhibit show the changes in expected path of the Fed Funds Target from financial markets since the last FOMC meeting and over the last week.
A constant term premium risk adjustment is made but there is no allowance for time-varying risk.
Source: Monetary Affairs BofG

Exhibit B-4. Implied volatility on Fed Funds Options

The charts in this exhibit show the current and historical behavior of the 90% confidence interval (i.e., financial markets expect 90% of the time the actual FFR at the specified date will be in this interval) for the Fed Funds Target implied from financial markets options. The first two set of charts show how the 90% confidence interval has changed since the last FOMC meeting. The next chart shows the current confidence interval around the expected path. The final two charts show a long history of the behavior of the confidence interval at the 6 and 12 month horizon. No risk adjustment is made.
Source: Monetary Affairs BofG

Exhibit B-5. Implied Skewness

The chart in this exhibit shows the recent behavior of a measure of implied skewness derived from Eurodollar options. No risk adjustment is made.
Source: Capital Markets, FRBNY

Exhibit B-6. Dollar Exchange rates

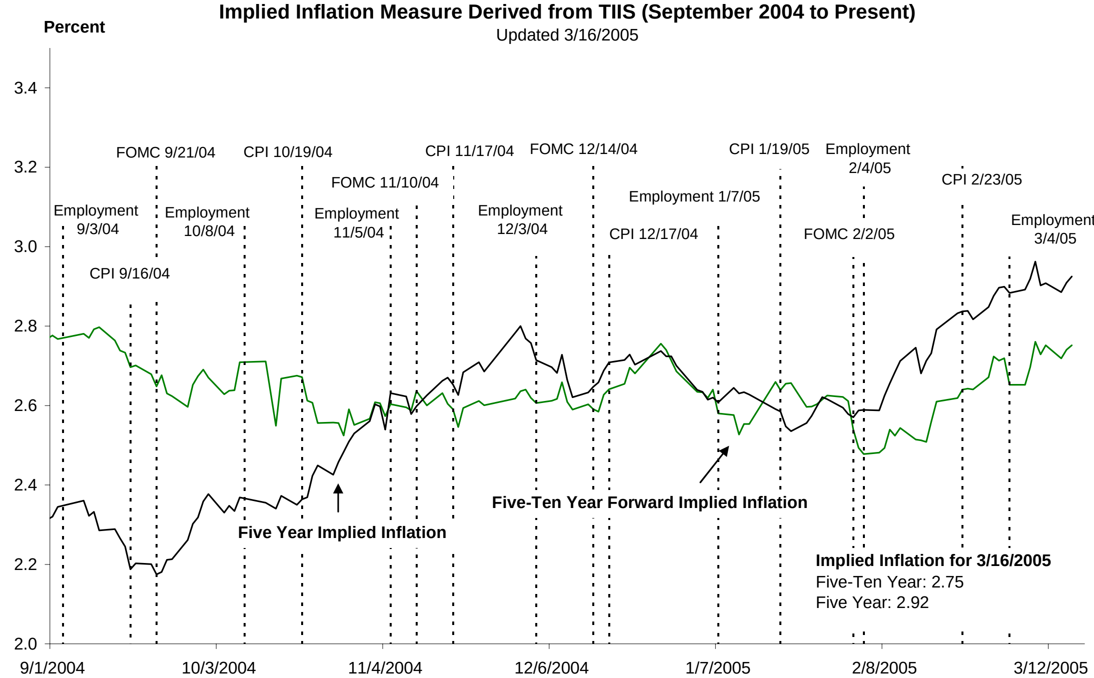
This exhibit contains 4 charts showing the behavior of the dollar in the last 10 years. All series are defined so that a decline in the index represents a weakening of the dollar. Effective rates are computed by the Board of Governors using a "narrow" set of weights, for 16 major exchange rates.
Source: BofG, BIS, International Research Function FRBNY

Exhibit B-7. Implied volatility on Yen/Dollar and Euro/Dollar Exchange Rates

The first set of charts in this exhibit contains the one month ahead implied volatility on Yen/Dollar and Euro/Dollar exchange rates normalized to the width of a 90 percent confidence interval. The second set of charts contains information of the expected path of implied volatility over the next six months.
Source: Markets Group FRBNY, Reuters

B. Financial Markets

Exhibit B-1:



Data based on FRBNY calculations using 3:15pm quotes.
The chart shows the timing of CPI and employment announcements as well as recent FOMC meetings.

Real and Nominal Yield Spreads

	20-Oct-04	23-Nov-04	30-Dec-04	31-Jan-05	18-Feb-05	17-Mar-05
Five-year Spread (%)	2.523	2.593	2.593	2.540	2.710	2.890
Ten-year Spread	2.343	2.589	2.620	2.487	2.579	2.740
Five-year Real Yield (%)	0.727	0.993	1.088	1.172	1.113	1.236
Ten-year Real Yield	1.64	1.607	1.693	1.661	1.659	1.729
Five-year Nominal Yield	3.25	3.586	3.681	3.712	3.823	4.126
Ten-year Nominal Yield	3.983	4.196	4.313	4.148	4.238	4.469

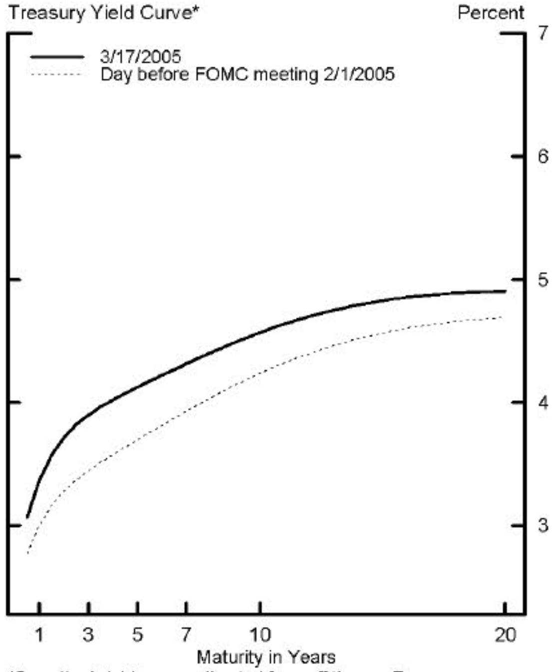
Source: Bloomberg. 8:40am quotes.

B. Financial Markets

Exhibit B-2:

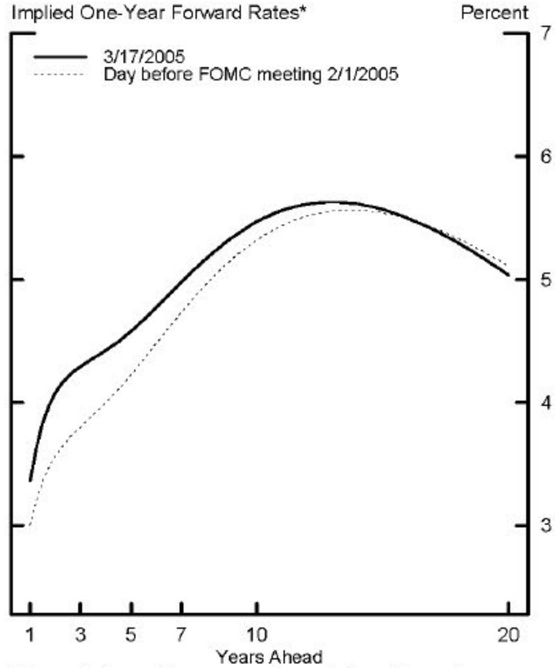
Treasury Yield Curve

Treasury Yield Curve* Percent



*Smoothed yield curve estimated from off-the-run Treasury coupon securities. Yields shown are those on notional par Treasury securities with semi-annual coupons.

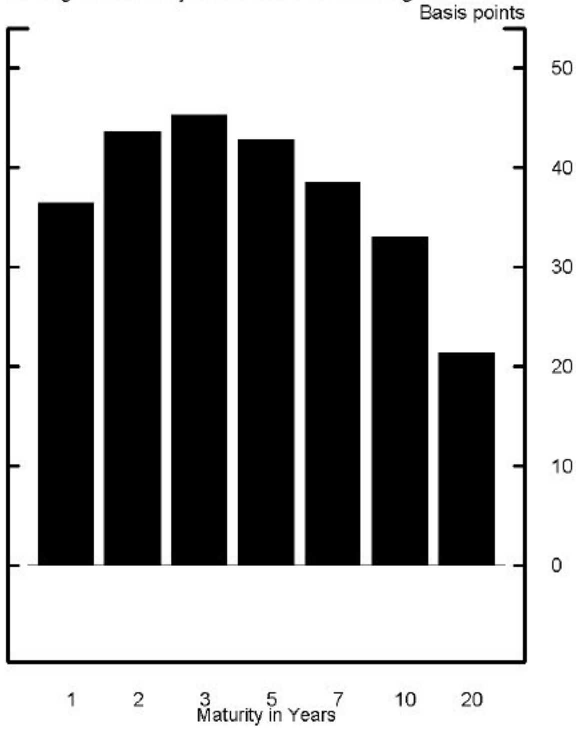
Implied One-Year Forward Rates* Percent



*Forward rates are the one-year rates maturing at the end of the year shown on the horizontal axis that are implied by the smoothed Treasury yield curve.

Change Since Day Before FOMC Meeting

Basis points



Change Since Day Before FOMC Meeting

Basis points

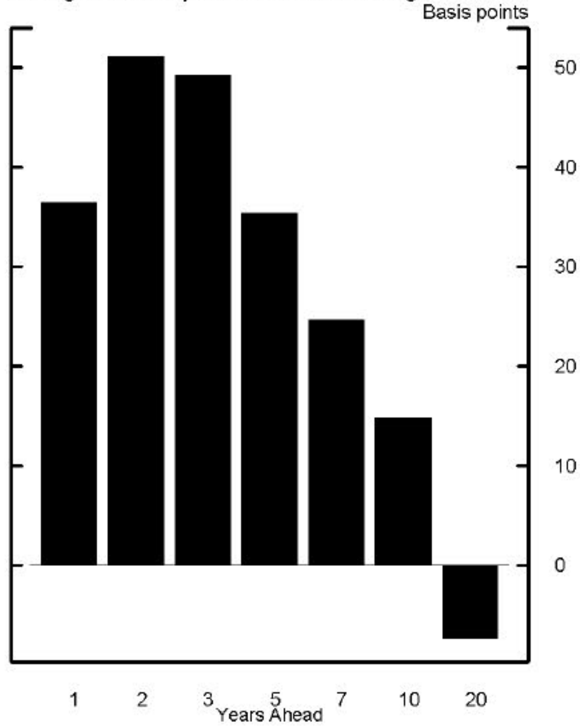
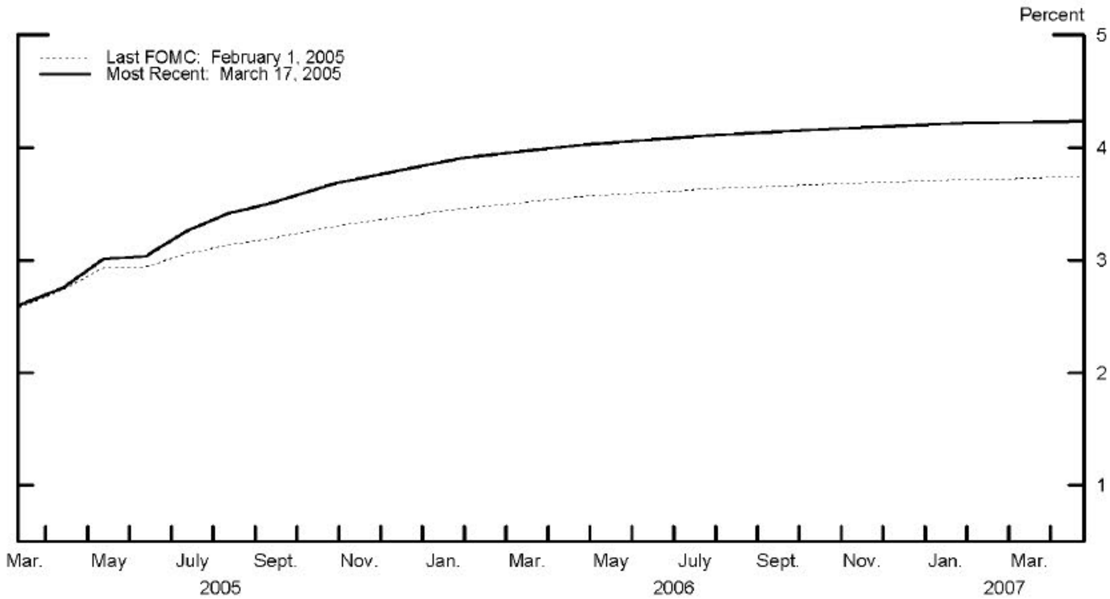
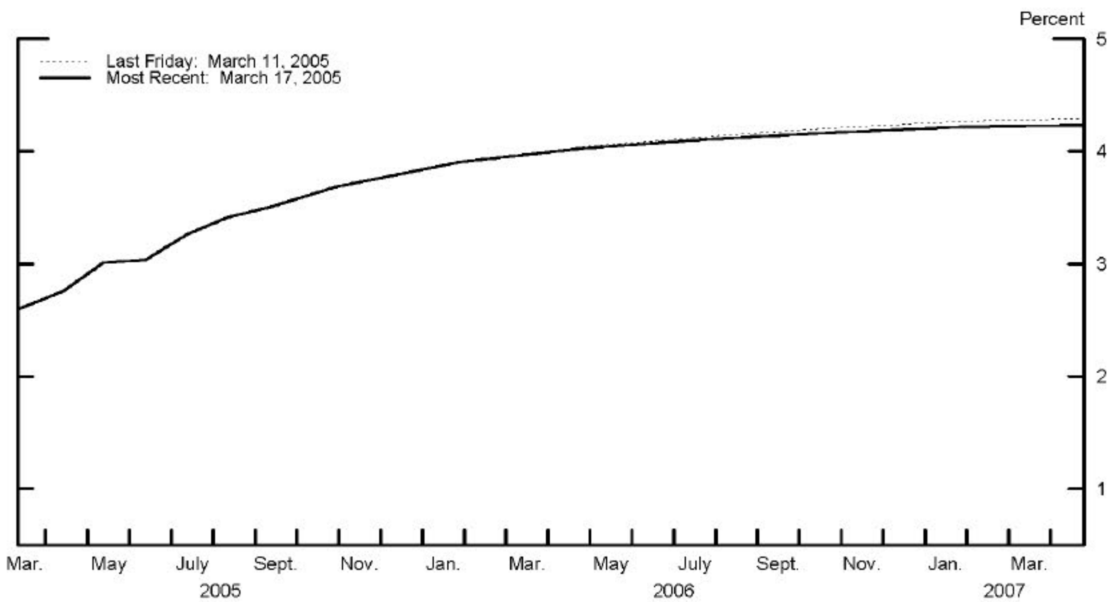


Exhibit B-3:

Implied Federal Funds Rate

03/17/05



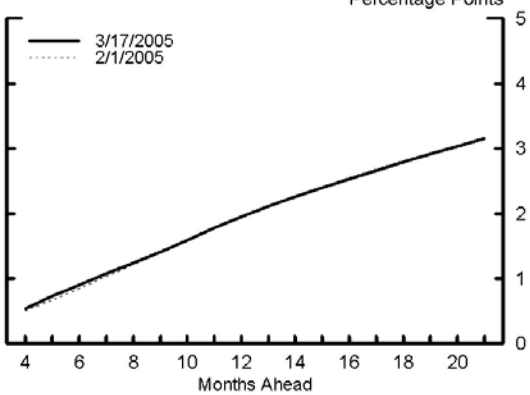


B. Financial Markets

Exhibit B-4:

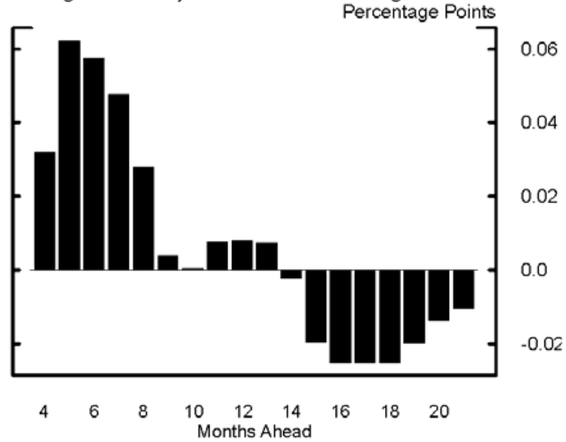
Policy Uncertainty

Eurodollar Implied Volatility Term Structure*

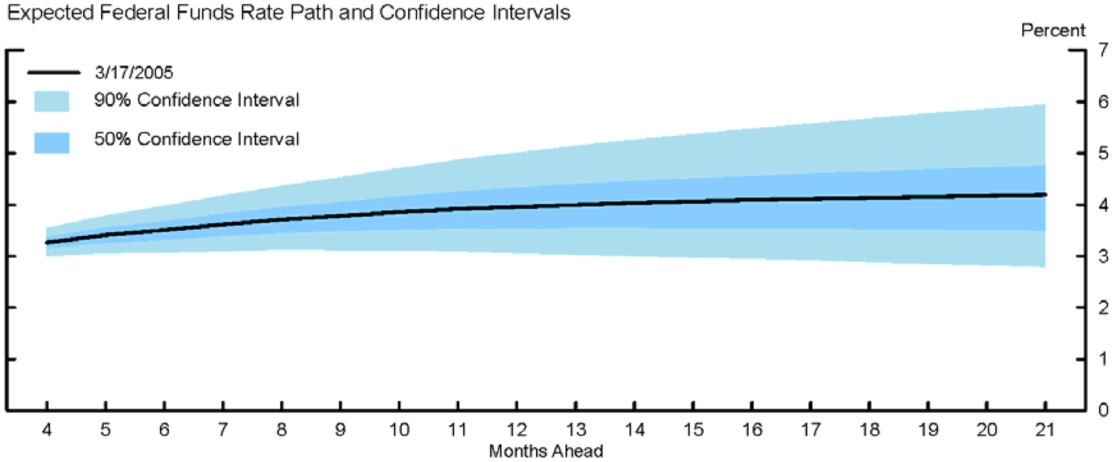


*Width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility.

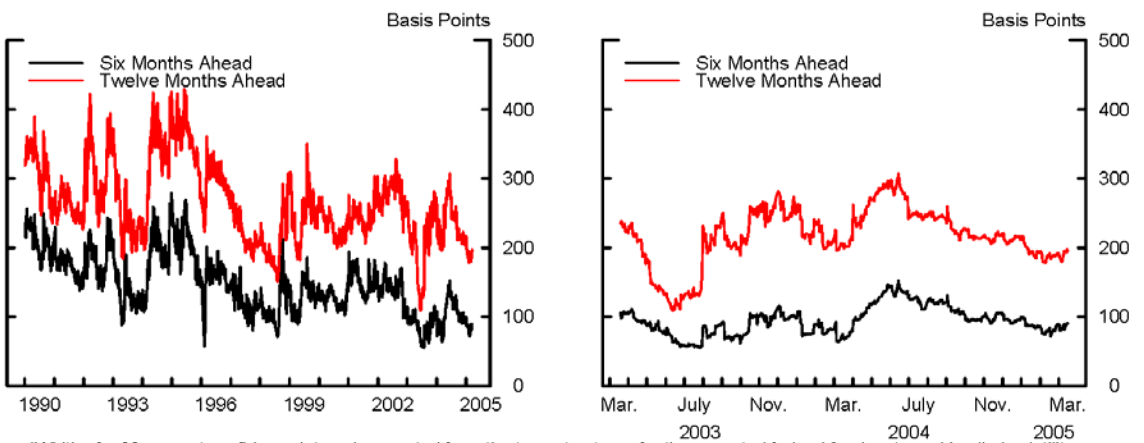
Change Since Day Before FOMC Meeting



Expected Federal Funds Rate Path and Confidence Intervals



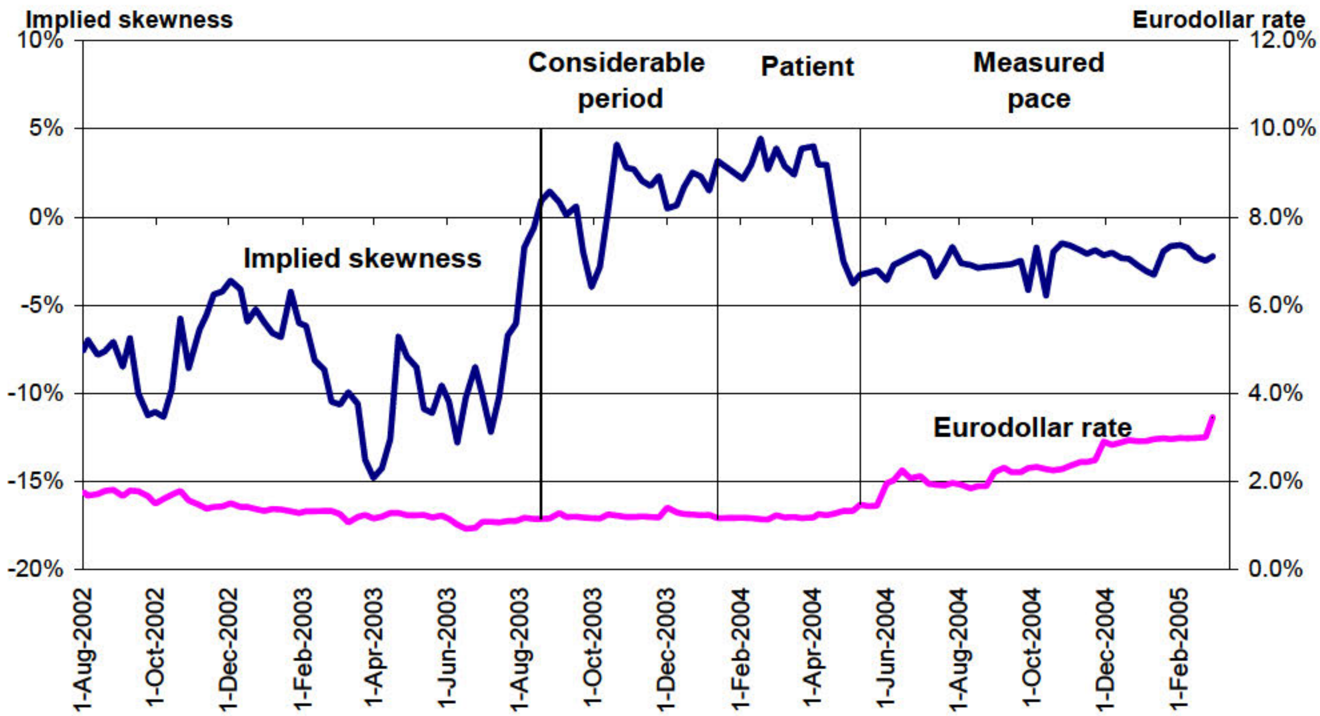
Eurodollar Implied Volatility at Selected Maturities*



*Width of a 90 percent confidence interval computed from the term structures for the expected federal funds rate and implied volatility.

B. Financial Markets

Exhibit B-5: Implied Skewness

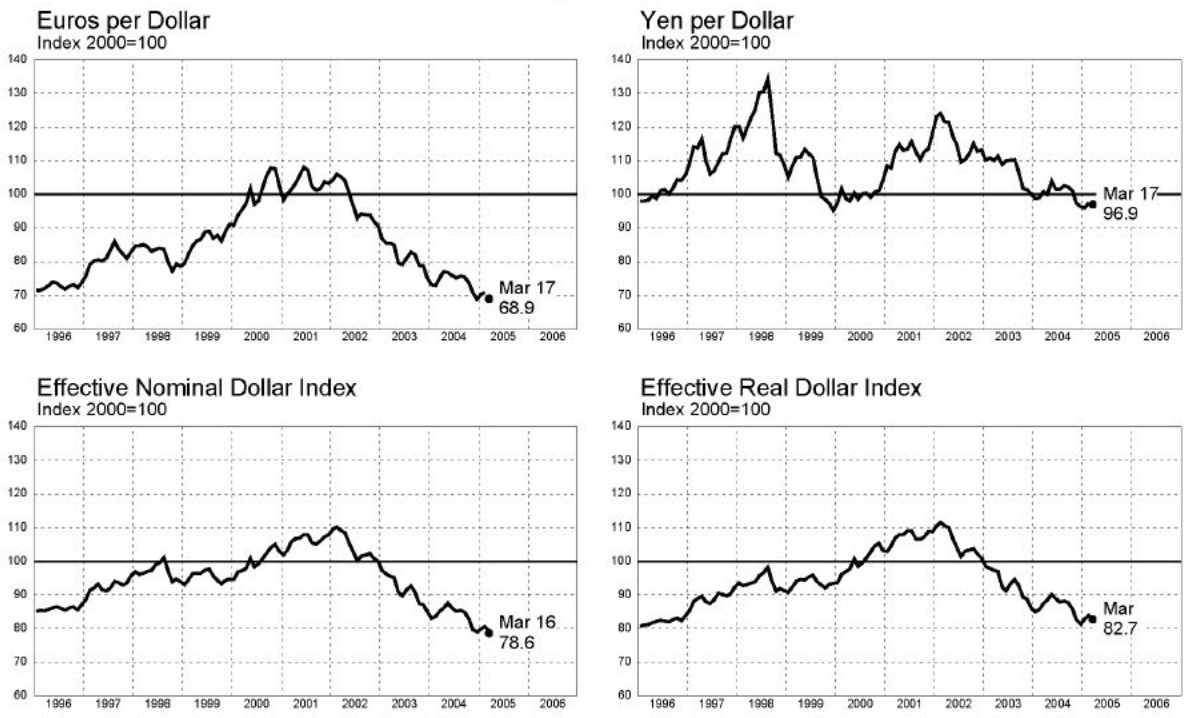


B. Financial Markets

Exhibit B-6:

Dollar Exchange Rates

Monthly Averages



Source: Board of Governors; National Sources

March 17, 2005

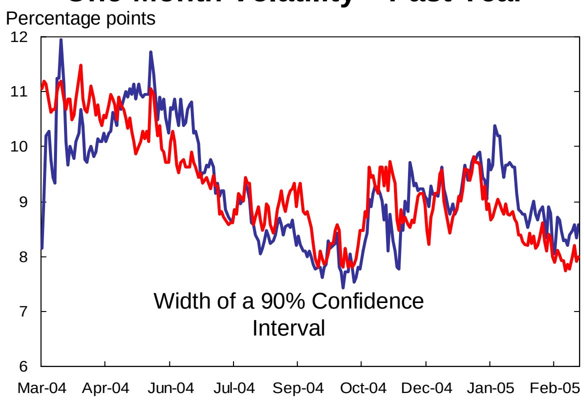
B. Financial Markets

Exhibit B-7:

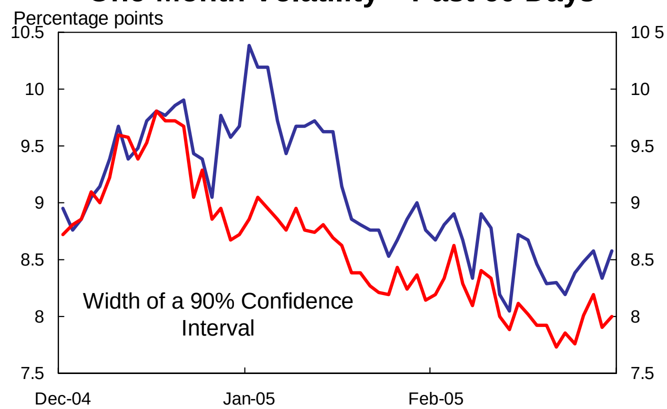
Euro and Yen Implied Option Volatility

Euro options are in red and Yen options are in blue.

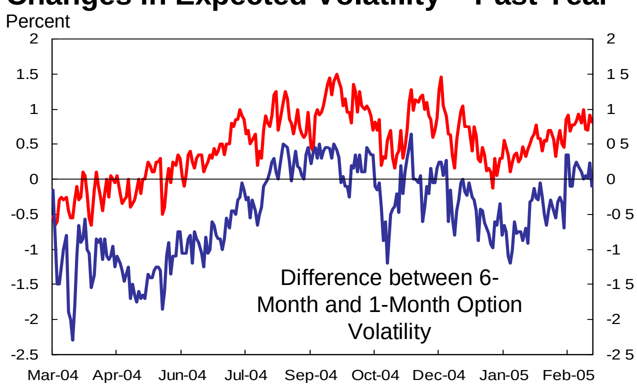
One-Month Volatility – Past Year



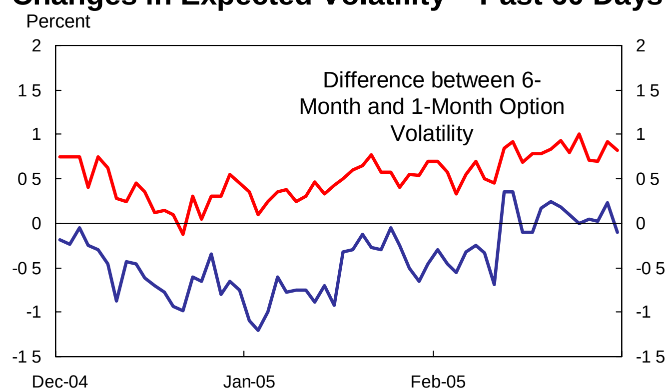
One-Month Volatility – Past 60 Days



Changes in Expected Volatility – Past Year



Changes in Expected Volatility – Past 60 Days



Source: Reuters

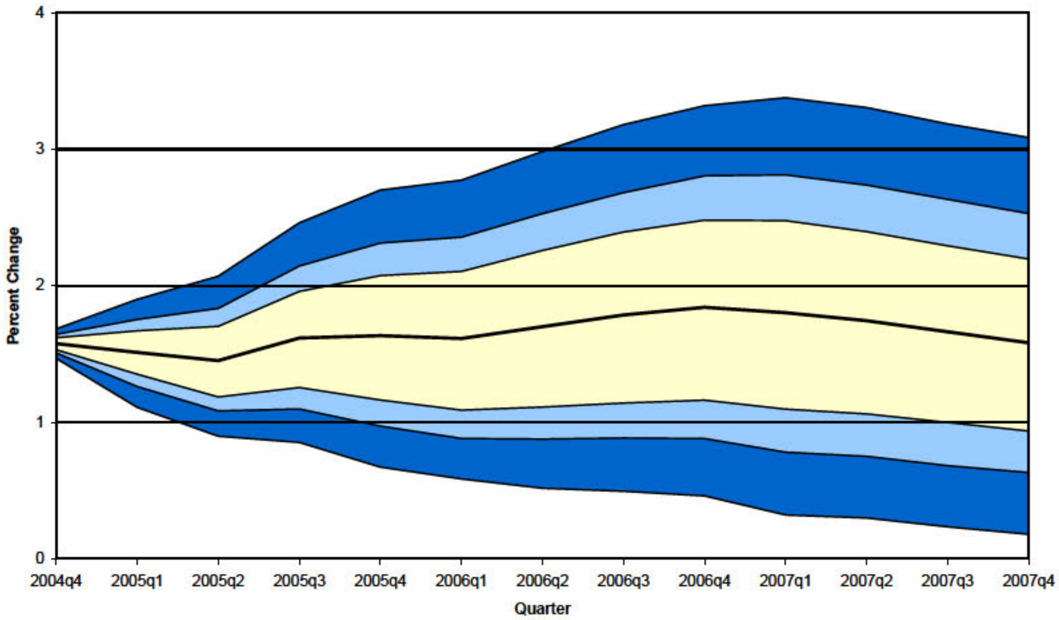
C. FRBNY Forecast Distributions

Two fan charts are shown for the 4-quarter changes in the core PCE deflator (Exhibit C-1) and real GDP (Exhibit C-2). These charts are constructed to represent the uncertainty contained in our main scenario and our alternative scenarios. The amount of uncertainty in the forecast distributions is now calibrated to imply fundamental interest rate volatility lower than given in the implied Eurodollar forward volatility curve. The forecast distributions are now constructed to allow explicit incorporation of the patterns of deviations from the central projection.

C. FRBNY Forecast Distributions

Exhibit C-1:

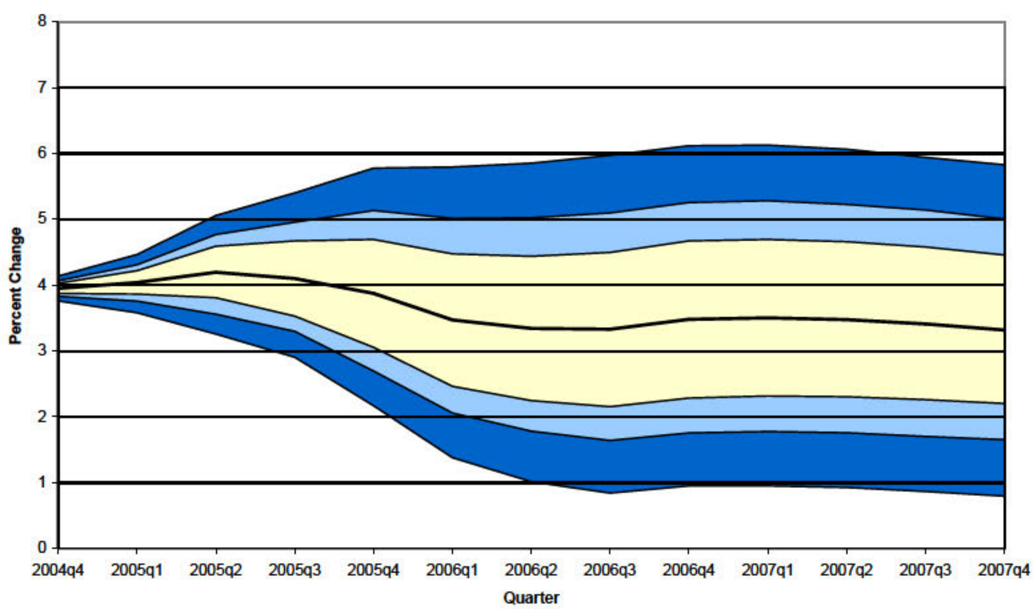
Four Quarter U.S. Core PCE Inflation Change Forecast through 2006



The probability interval shows the 50, 75, and 90 percent chance that the four quarter change in PCE will be within the respective range. The thick black line represents the bank's forecast.

Exhibit C-2:

Four Quarter U.S. GDP Change Forecast through 2006



The probability interval shows the 50, 75, and 90 percent chance that quarterly GDP change will be within the respective range. The blue line represents the bank's forecast.

D. Fed Funds Rate Projections

The exhibits are constructed using the policy rule given below, the Bank forecast distribution and information from Fed Funds futures and Eurodollar futures markets (see Exhibits B-3 and B-4).

Exhibit D-1. Implications of Measured and Policy Rule

This exhibit uses our baseline policy rule in combination with three views of when "measured" will end. Measured is assumed to mean a high probability of a 25 point basis increase at each FOMC meeting. After the end of the measured period, the FFR target is determined by the policy rule. In contrast to the situation in June 2004 the measured restriction implies a steeper path for the FFR target than that from the baseline policy rule. The policy rule is evaluated by averaging over the forecast distribution. The results are compared to the implied market path.

Exhibit D-2. Alternative Scenarios: Nominal Federal Funds Rate

In this exhibit it is assumed that measured ends in June and the policy rule is averaged over the outcomes from our three main alternative scenarios: productivity boom, productivity slump and overheating. Also included is the policy rule averaged over the FRBNY central projection.

Exhibit D-3 Alternative Scenarios: Real Federal Funds Rate

In this exhibit it is assumed that measured ends in June and the real rate (policy rule less 4 quarter lagged average inflation) is averaged over the outcomes from our three main alternative scenarios**.** Also included is the real rate averaged over the FRBNY central projection.

Exhibit D-4 Forecast Distribution Implied Volatilities and Market Implied

In this exhibit the volatility of FFR under the three views of the end period for measured is shown along with the market implied forward volatility curve. Additional simulations with uncertainty about the neutral policy rate and/or over the end of measured produce a forward volatility curve very similar to the market.

Policy Rule: Baseline Specification

$$i_t = p i_{t-1} + (1-p)\left[i^* + \varphi_\pi\left(\pi_t - \pi^*\right) + \varphi_x x_t\right]$$

$$p = 0.8$$

$$i_{2004Q4} = 1.75$$

$$\pi = 1.5 \text{ (Core PCE y/y)}$$

$$\varphi_\pi = 1.5$$

$$\varphi_x = 0.5$$

$$\pi_t : \text{Core PCE y/y}$$

$$x_t : \text{Output Gap}$$

Source: Domestic Research Function, FRBNY

D. Fed Funds Rate Projections

Exhibit D-1: Implications of Measured and Policy Rule

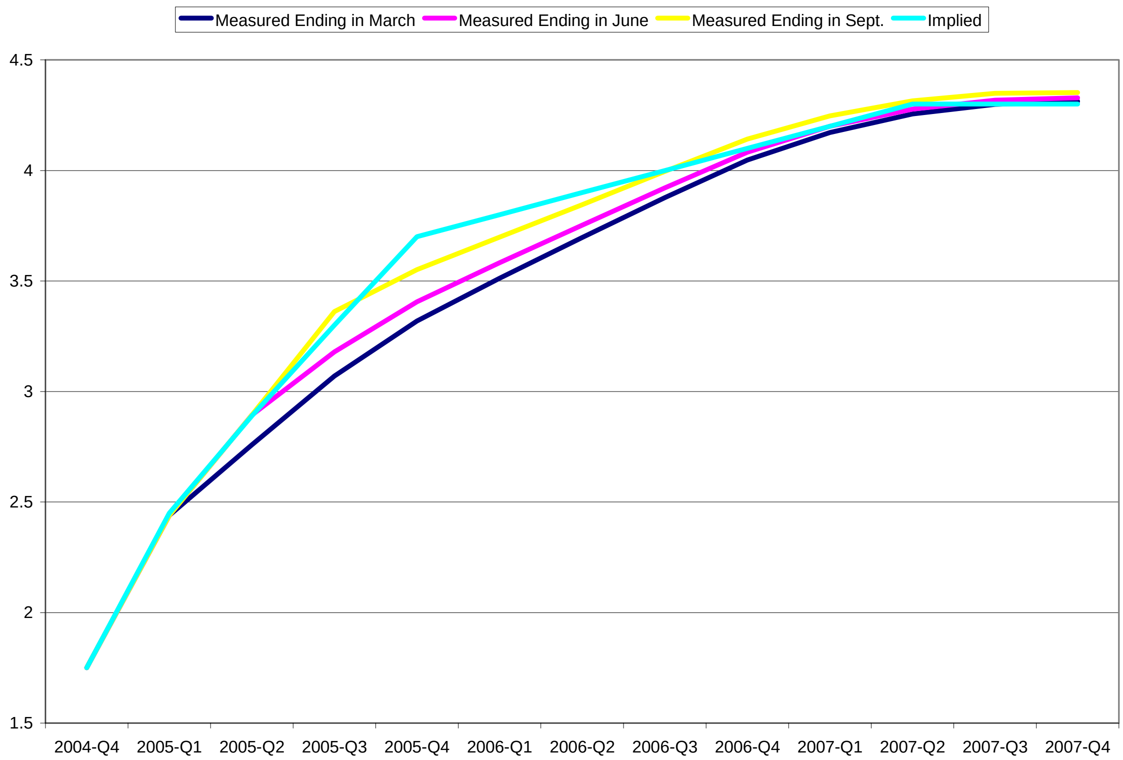
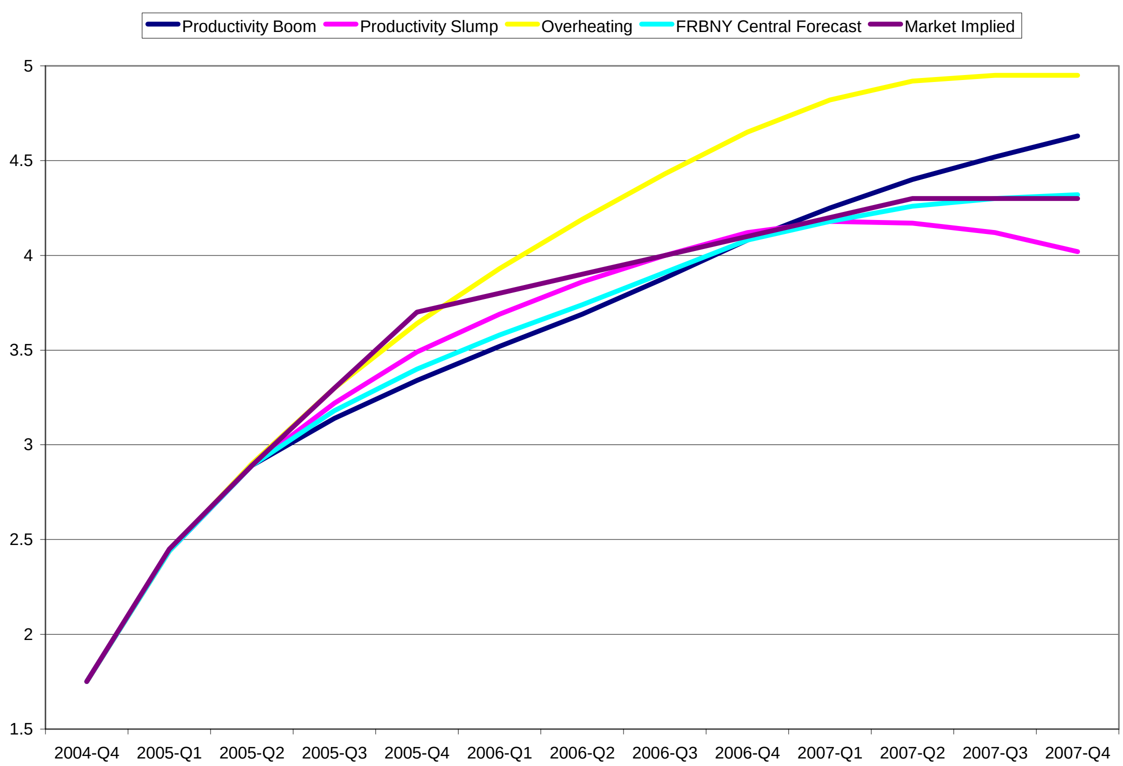


Exhibit D-2: Alternative Scenarios: Nominal FFR



D. Fed Funds Rate Projections

Exhibit D-3: Alternative Scenarios: Real FFR

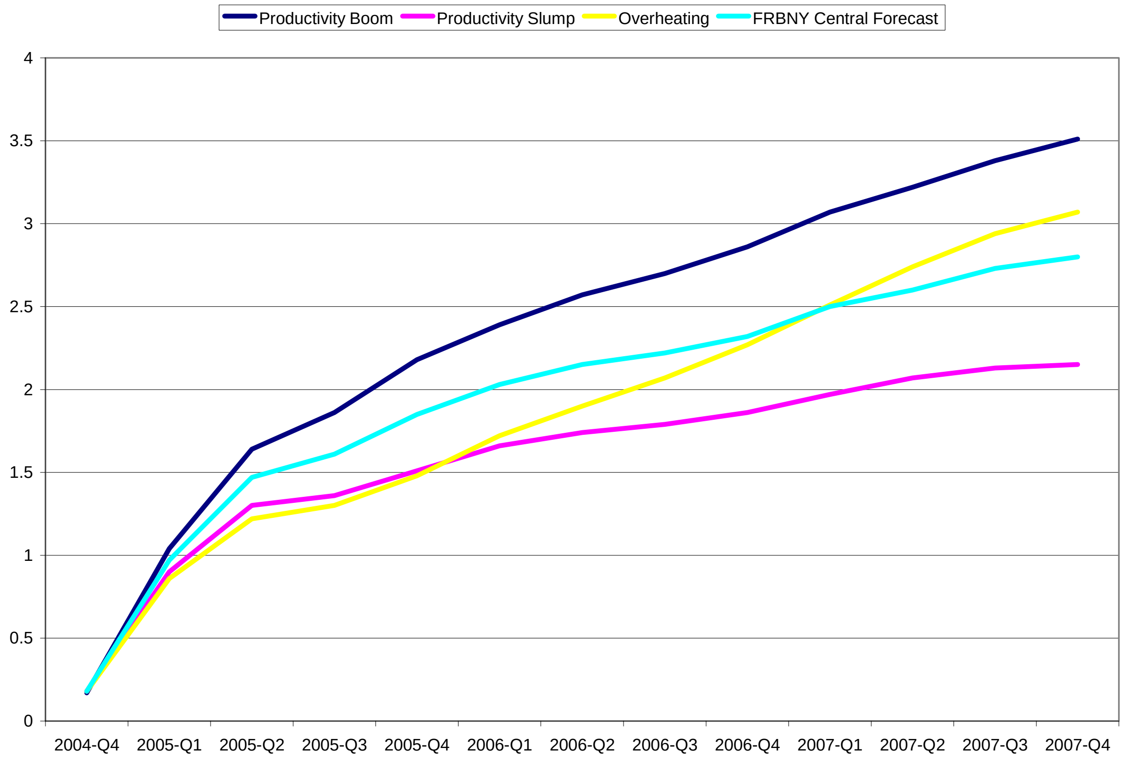
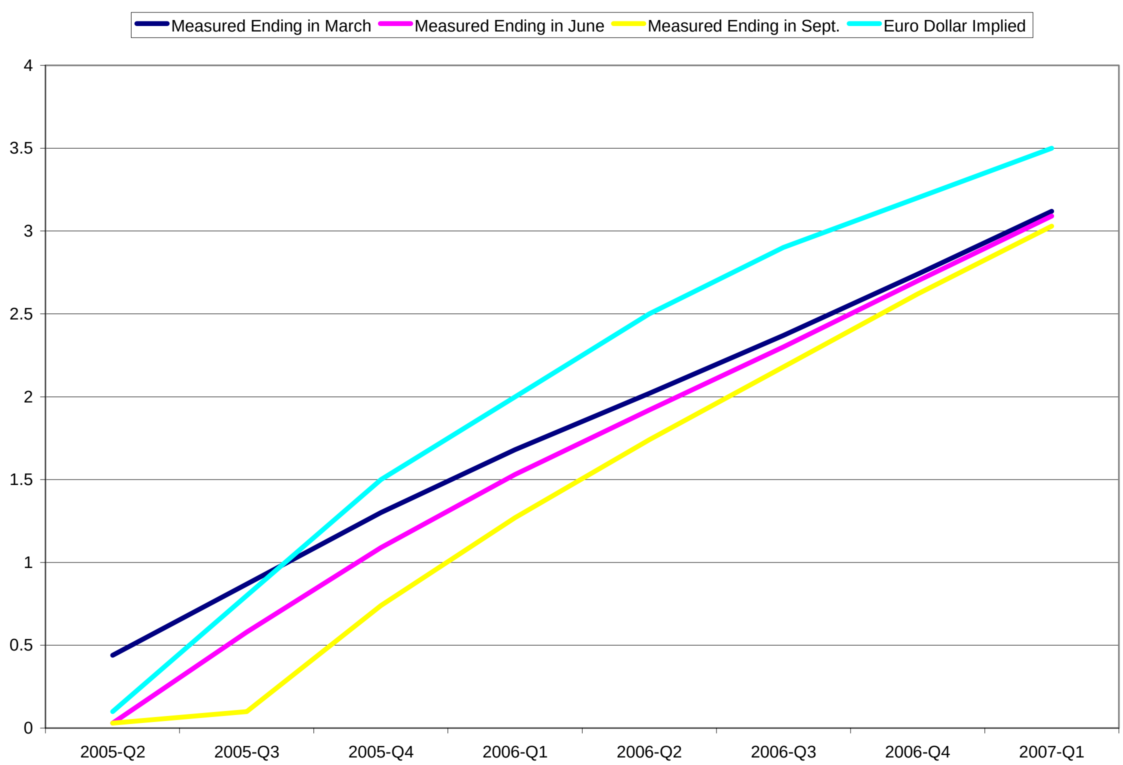


Exhibit D-4: Forecast Distribution Implied Volatilities and Market Implied



E. Regional Charts

Exhibit E-1. Federal Reserve Bank of New York's Indexes of Coincident Economic Indicators

The chart in this exhibit shows our monthly coincident indexes for New York, New Jersey and New York City up through January 2005. The indexes are a composite of 4 economic indicators: payroll employment, unemployment rate, average weekly hours in manufacturing, and real wage & salary earnings.

More details on the methodology and construction of these indexes can be found at
http://www.ny.frb.org/research/regional_economy/coincident_summary.html
Source: FRBNY

Exhibit E-2. Federal Reserve Bank of New York's Indexes of Leading Economic Indicators

This chart shows the growth in our monthly leading indexes for New York, New Jersey and New York City up through January 2005. The growth in the index for a given month represents a forecast of the growth in the coincident index 9 months ahead. The components used in these three indexes differ slightly, but include: housing permits, stock prices, the national leading index, the lagged coincident index.

[NOTE: This index is not released publicly.]

More details on the methodology and construction of these indexes can be found at:
http://www.ny.frb.org/research/regional_economy/coincident_summary.html
Source: FRBNY

Exhibit E-3. Private-Sector Job Growth in the U.S. and the Region

This chart shows the 12-month growth rate of private-sector employment for New York-New Jersey (combined), New York City, and the U.S. (bars). Underlying data can be found at:

http://stats.bls.gov/news.release/laus.t06.htm and
http://stats.bls.gov/news.release/metro.t02.htm
Source: U.S. Bureau of Labor Statistics

Exhibit E-4. Unemployment Rates

This chart shows the monthly unemployment rate for New York State, New Jersey, New York City, and the U.S. from 1992 to present.

Source: U.S. Bureau of Labor Statistics, New York State Dept. of Labor and the New Jersey Department of Labor.

Data can be found at:

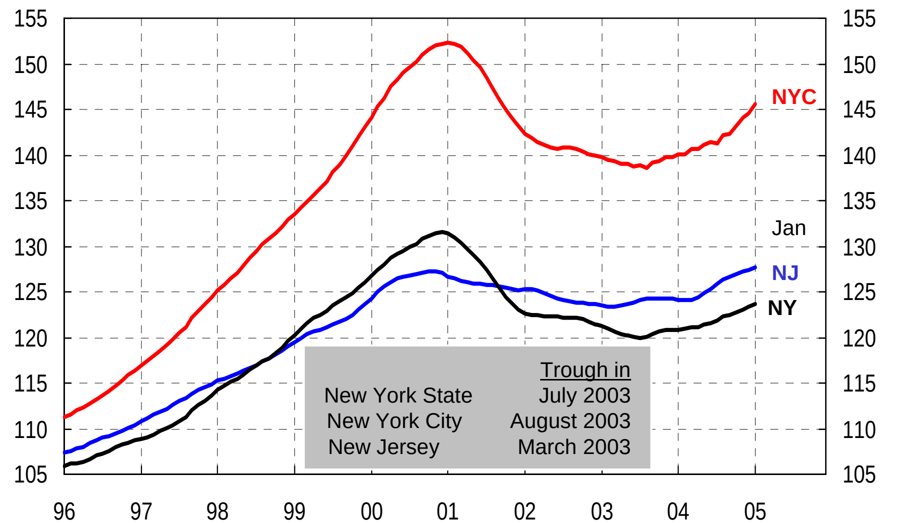
http://www.labor.state.ny.us/agency/pressrel/pruistat.htm

http://www.wnjpin.net/OneStopCareerCenter/LaborMarketInformation/lmi16/release1.htm

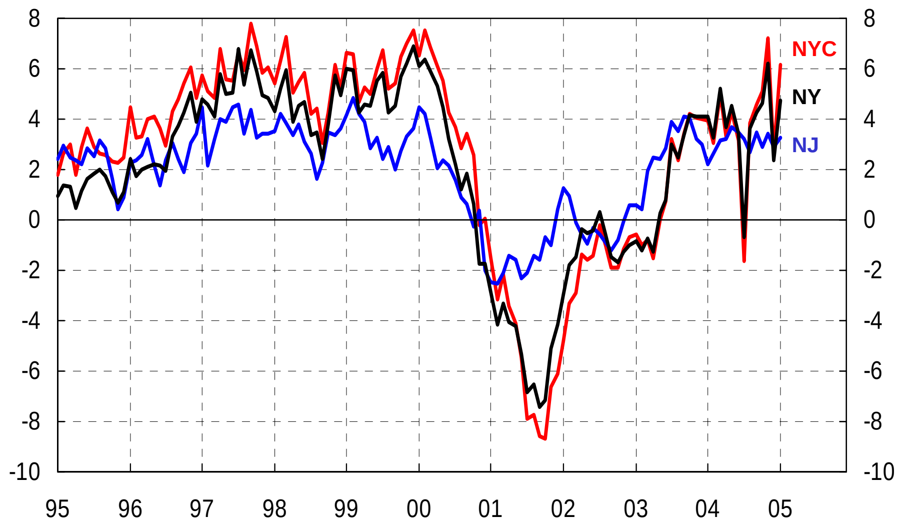
Sources: U.S. Bureau of the Census, NYC Rent Guidelines Board, Federal Reserve Bank of New York calculations.

E. Regional Charts

E1: INDEX OF COINCIDENT ECONOMIC INDICATORS



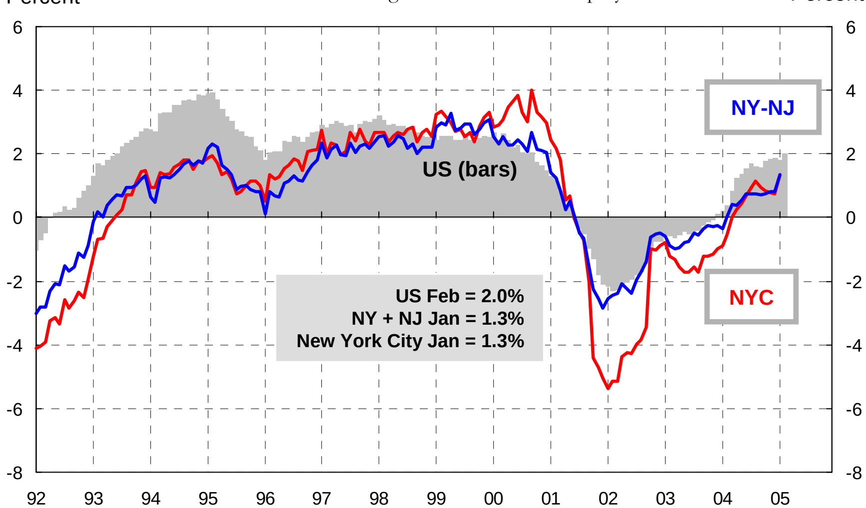
E2: INDEX OF LEADING ECONOMIC INDICATORS



** The percent change in this index represents the forecasted growth in the Coincident Index over the next 9 months.*

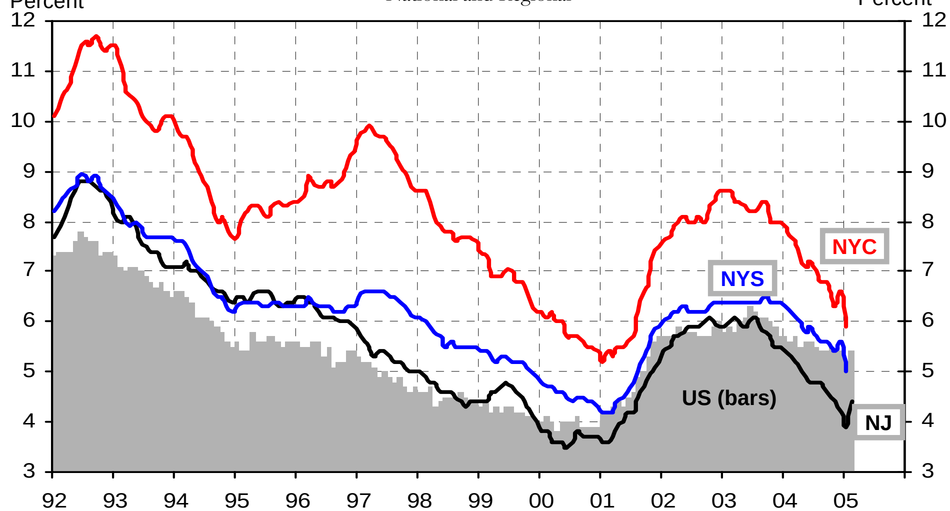
E3: PRIVATE-SECTOR JOB GROWTH: U.S. AND THE REGION

12 Month Percent Change in Private-Sector Employment



E4: UNEMPLOYMENT RATES

National and Regional



FRBNY - cleared for release