Michael J. Prell
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FOMC Chart Show Presentation -- Domestic Economic Developments

Ted and I shall be referring to the set of charts labeled "Staff Presentation...". But, before we turn to the first exhibit, I want to try to dispose of the obvious question of how the world changed when we received the fourth-quarter GDP report.

You may have sensed from the first paragraph of the Greenbook that we were mentally prepared for the possibility that the advance estimate of GDP growth would greatly exceed 3-1/2 percent. It wasn't our best guess as to how BEA analysts would read the available data, but there was enough uncertainty that one couldn't reject the more extreme predictions circulating on Wall Street. As it turned out, the "extremists" were right.

Since Friday, we've been attempting to divine the message in the report. The bottom line is that the nature of the changes in the fourth-quarter picture doesn't lead us to alter our forecasts of growth or inflationary pressures in any significant way. To save time, I'll leave it at that for now. But we'll be happy to respond later to any questions you may have on the matter.

I'll turn then to the first chart, which summarizes our forecast. This is one of the few charts that we have updated to take account of the fourth-quarter GDP report. The changes to history and forecast generally are too small to be visible in the other charts, let alone to alter the analytical content of our exhibits. As you can see in the top panel, we were--and still are--projecting a substantial deceleration of real GDP growth, from more than 3 percent last year to a little over 2 percent per year in 1997 and '98.

This output path had led us to predict that the unemployment rate will edge down to 5 percent by next year. This is a tad below the levels reached in the late 1980s, and we believe it implies enough pressure on resources to cause the trend of inflation to tilt upward.

However, that effect is muted in the projection of the CPI by expected favorable developments in the food and energy sectors--and also by technical changes in the index. So we have the overall CPI decelerating in 1997 and then picking up to only a 3 percent increase next year.

Chart 2 summarizes the policy assumptions underpinning our forecast. The first is that the federal funds rate is held near 5-1/4 percent. If and as people come to perceive that inflation has begun to trend upward, this stability of the nominal funds rate might imply a slight decline in the real short-term rate. Perhaps where that altered perception of a change in price trends may prove more important over the projection period is in intermediate- and long-term rates, which could move upward as a result of some combination of an enlarged inflation premium and an expectation of Fed tightening.

In the near term, however, we think the bond markets may benefit a bit from expectational changes related to events in the fiscal policy sphere. We are assuming the efforts to pass a Balanced Budget Amendment will fail once again, but we are anticipating that agreement will be reached on a program promising balance by 2002. That program will impose ongoing, moderate fiscal restraint on aggregate demand. While such a development is widely discussed, it's our judgment that there's still enough skepticism on Wall Street that actual legislation will have some positive impact on the financial markets.

Why might one anticipate a budget deal this year, after last year's failure? I've listed some of the more conventional reasons. First, the two sides weren't really that far apart, at least on the numbers, when negotiations broke down a year ago. Second, the numerical task is easier now, given the revised budget outlook. The graph shows the sizable downward revision in the CBO baseline forecast of the deficit since last year. The third observation is that there may be a better setting for bipartisan action this year: Republicans in the Congress learned the political advantages of some compromise on policy issues, while the President has identified balancing the budget as a top priority for his final term.

These considerations certainly don't make the balanced budget a sure thing. Partisan tensions haven't disappeared. One of the steps many people see as an attractive way to achieve some of the deficit reduction--an adjustment to the COLAs for benefits and tax brackets--is seen by others as political poison. And, discretionary spending already has been cut substantially in many areas.

That brings me to an assessment of the risks in the fiscal outlook. One is that the strain in reaching the goal of balance on paper, while providing tax cuts as well, will lead to heavy use of gimmicks, such as unspecified spending reductions or asset sales. With it also not being possible to rule out another political stalemate, I would characterize the risks as clearly biased toward less fiscal restraint than we have assumed.

As I suggested, financial market participants are likely to tolerate some shortfall from guaranteed budget balance. Indeed, as the title of my next chart indicates, they seem to be in the grips of a pretty powerful euphoria. Share prices have risen about two-thirds

in the past 25 months, producing a substantial increase in the price-earnings ratios of the S&P 500 and NASDAQ indexes graphed at the top of chart 3. It's natural to ask whether such a run-up represents a speculative bubble, rather than a sound assessment of economic fundamentals. I haven't either the time, or the wisdom, to do justice to this subject. But I'll offer a few observations.

My going-in point is that the mere dimension of the rally is legitimate grounds for suspicion, and that the level of popular interest in the stock market today begins to smack of mania. But let's try to look more objectively at the evidence on current market valuation. As you can see, the p-e for the S&P 500, based here on twelve-month trailing earnings, is relatively high. On the other hand, as the red line in the chart indicates, the current p-e would not be <u>quite</u> so high were reported profits not still being damped by special charges for restructuring. Although this time series, constructed by Goldman-Sachs, goes back only to 1985, it is generally believed that such charges weren't so large a factor proportionately in earlier years. On the third hand, however, there are those who might argue that there are earnings quality questions on the other side, such as the lack of recognition of stock option costs.

A second bullish argument is that high p-e's can be explained by the current low level of inflation. The table at the middle left shows the negative correlation historically between p-e's and inflation.

Inflation cannot be the only factor determining p-e's. Earnings growth prospects obviously should play a role. The vertical lines in the upper panel denote troughs in the earnings cycle for S&P 500 stocks. As you can see, peak p-e's typically have occurred close

to troughs in earnings--presumably because people expected better days ahead. Well, we're nowhere near a trough in earnings: profits have been soaring in recent years. Yet, as can be seen in the middle right panel, analysts' expectations of profit growth for the next three to five years are high and have been rising. There may be something to the notion that the S&P 500 includes many relatively strong companies, at least some well-positioned to make extra money from foreign activity. But one may reasonably ask whether the S&P companies as a group can continue to achieve profit improvements so far above the growth rate of nominal GDP.

Where we came out in our projection of stock prices is that valuations are probably on the high side, but that the market is unlikely to drop substantially just because of the shortfall in profits, relative to prevailing expectations, that we're forecasting. The experience of recent decades suggests that--absent some unforeseen political or economic shock--a major reversal is likely to require a significant tightening of monetary conditions--or at least the anticipation of one.

Meanwhile, we hold a similar view about credit market conditions. It appears to us that lenders are demanding less and less compensation for risk. This is visible in the narrowing of spreads on bonds and bank loans depicted in the lower panels. Experience suggests that such trends typically come to a bad end that leads to lender retrenchment and a contractionary force in the economy, but we can't at this point see the circumstance that will lead to a significant reversal of these lending patterns. As you well know, there have been losses on consumer loans, but banks have been moving to contain them, with only minor effects on overall credit

availability. The Mercury Finance affair may take the bloom off the sub-prime lending business, but it remains to be seen how that will play out and only a narrow slice of the credit pie is involved.

Setting aside the possibility that, sometime down the road, more folks will regret their earlier aggressive lending or investing decisions, what's so bad about their feeling so good right now? One highly relevant possibility, in our view, is that the developments in the financial markets will directly or indirectly spur extra demand in the markets for goods and services at a time when resources are already being stretched.

Charts 4 and 5 summarize our projections of demand. The top panel of chart 4 highlights the outlook for consumer spending. We expect consumption (the black line) to remain quite robust in the near term, buoyed not only by the strong recent trend of disposable income (the red line) but also by the sharp gains in wealth and the positive sentiment of households. These factors should outweigh the negative effects of high debt burdens and tighter credit card lending practices. But we're projecting that the stock market will flatten out and that the ratio of wealth to income will fall in 1998. This presumably will tend to weaken demand growth as time passes.

Business fixed investment is also projected to decelerate somewhat. Financial market conditions certainly are favorable, but growth of internal cash flow will be slackening. We expect that declining prices and advancing technology will continue to drive sizable gains in outlays for computers and communications equipment, but expenditure on other equipment is projected to be flat. In manufacturing, in particular, the level of spending already has reached such a high level that even some drop-off would still permit

the stock of equipment to grow at a good clip. On the structures side, conditions have improved considerably in the commercial real estate market; notably, office vacancy rates have declined substantially. We therefore believe that overall NRS spending will rise moderately further over the next two years.

In the housing market, residential investment is projected to decline this year and to stabilize in 1998. Single-family starts are down from their peak, but demand appears to have leveled out in recent months. Total starts were at a 1.41 million unit annual rate in the fourth quarter, and we expect only a modest slippage from that rate in 1997--as you can see in the little table. Mortgage rates over the next two years are expected to be about the same on average as in 1995 and '96. But smaller gains in income should trim demand gradually--pushing starts down still further next year. The projected level of starts is still fairly high relative to estimates of what might be called for by demographic trends. But affordability is also high in the single-family market, and we believe this can continue to buoy activity for a while longer. I might note that the January Michigan survey showed perceived homebuying conditions to be the best in 2-1/2 years.

Turning to the next page, total government purchases (the black line) are expected to record only modest growth. In the federal sector (the red line), shutdowns and erratic procurement have caused gyrations in the past couple of years. But the trend is still negative. Meanwhile, state and local sector finances look good overall; however, spending is expected to remain cautious.

Net exports have trended down in the 1990s. We are anticipating that the negative contribution to GDP growth from this

sector will increase this year before moderating in 1998. Ted will be discussing this pattern in a few minutes.

The final component of GDP--inventory investment--is a neutral factor in the outlook. Inventory-sales ratios are low in the aggregate--indeed, if the advance GDP numbers for the fourth quarter are correct, the ratios are a touch lower than anticipated in the Greenbook. We expect stocks to grow fairly steadily, at about the same pace as sales, making no net contribution to GDP growth.

Even though output growth is expected to slacken, it remains above potential and the pressures in labor markets are projected to mount. In my first chart, I noted that the unemployment rate was projected to run a shade lower than in the late 1980s, when inflation flared up. The top two panels of chart 6 provide a check on the relative degree of tightness. As you can see, both the help wanted ad index and survey evidence on households' perceptions of job availability tend to confirm the recent readings from the unemployment rate.

But, is it clear that, even if our GDP path is correct, the labor market will tighten further as we've predicted? This appears to be an important difference between our forecast and those of many outside analysts, who don't anticipate the decline in unemployment that we have--even though their output growth predictions are similar. The two middle panels highlight a couple of key factors in our thinking. First, on the left, we have extrapolated the recent upturn in labor force participation, on the assumption that the perceived better job availability and rising real wages will attract more potential workers. In addition, welfare reform is likely to provide some boost to participation, though how fast that will show up is far

from clear. Obviously, in past years, the participation rate rose much faster than we are projecting, but that was before the rate for women had gotten so close to that of men. We could see a greater surge, which would tend to hold up the unemployment rate, but we think the risks are reasonably balanced.

At the right is our forecast of productivity. We still don't have the official estimate of fourth-quarter output per hour, but it is apparent that the increase was much greater than we predicted. However, we think that merely makes more plausible our judgment that one shouldn't take at face value the very weak trend in the data of the prior few years. We are, if anything, more comfortable now with our forecast that productivity will grow about 0.8 percent per year in 1997 and '98. Although that would be down from what was evidently a gain of about 1.2 percent last year, it is just below our revised assumption for the underlying, cyclically adjusted trend rate.

In sum, we don't believe greater participation or productivity growth is likely to prevent labor demand from pressing harder on labor supply. As you can see in the bottom panel, this pressure evidently has begun to leave its mark on wages. I've shaded the periods when unemployment is below our estimates for the NAIRU--6 percent in the late 1980s, and 5.6 percent recently. The wage and salary component of the ECI (the black line) accelerated considerably last year, boosted in part by the minimum wage hike, and the benefit component stopped decelerating. Indeed, on a quarterly basis, there was some sign of acceleration in benefits.

The pickup in compensation gains this year will be exacerbated by another increase in the minimum wage, and perhaps by a lagged effect of last year's acceleration in the total CPI. In 1998,

we project only a small further increase in compensation gains, in the absence of further minimum wage shocks and in light of this year's lower CPI inflation. One identifiable upside risk, especially in 1998, is that various pressures in the health care sector will manifest themselves in a considerable hike in the premiums charged employers, who may not be able to offset those cost increases quickly.

Labor cost increases are the key element in our price outlook. As you can see at the top of chart 7, pressures on physical capacity in manufacturing are not extraordinary. The capacity utilization rate is just a little above the historical average and vendor delivery performance, which typically mirrors the utilization rate, is also in the neutral range.

One factor keeping price pressures down is the availability of imports at attractive prices. As you can see, non-oil import prices have been falling and are expected to continue doing so gradually for a while longer; that is projected to turn around by next year, however, and import prices become a factor pushing up core inflation. Meanwhile, as I noted earlier, the supply-demand balance in the food and energy markets is expected to help hold down overall inflation.

The bottom panels show the resultant relative movements in the total and core CPIs. Because of the favorable movements in food and energy prices, the overall CPI is projected to decelerate substantially this year. Moreover, although it picks up in 1998, the rate of overall CPI inflation continues to be held down by subdued food and energy price increases. In contrast, the core CPI accelerates from year to year as rising labor costs are passed through in an environment of high resource utilization and lessened

competition from import prices. I might note that the relative movement of import prices would appear to be one of the reasons why inflation picked up more quickly when labor markets tightened in the 1980s; as you can see in the middle left panel, import prices were moving up fairly rapidly in that period. The data panel at the lower right shows the annual inflation figures, including, in parentheses, the numbers adjusted for the estimated effects of technical changes in the indexes.

Ted will now discuss some external influences in the outlook for the economy.

E.M.Truman
February 4, 1997

FOMC Chart Show Presentation - International Developments

The first international chart summarizes in the top panel the staff projection for the external sector. As shown at the top left, real net exports of goods and services, the current account balance, and the goods balance are all projected to resume their declines following sharp, but temporary, reversals in the fourth quarter of last year. Those reversals were occasioned by the confluence of special factors, such as larger shipments of power generating equipment to Brazil and China, with residual seasonality in the data. Last Friday, of course, BEA estimated that the reversal in real net exports in Q4 was even larger than what the staff estimated in the Greenbook.

As shown in the panel at the right, the current account deficit as a percent of GDP widens to 2-1/2 percent by the end of the forecast period -- a level last recorded on an annual basis in 1988.

Three major factors in this outlook are outlined in the box in the middle of the chart. First, although growth abroad is expected to pick up a bit further this year, and should exceed U.S. growth by a substantial margin, the differential will be insufficient to narrow the deficits. The reason is that the income elasticity of our demand for imports exceeds the elasticity of demand for our exports by a factor of more than two and the initial level of imports is greater than the level of exports.

Second, the recent strength of the dollar is projected to be sustained for at least a while longer. We expect that the dollar ultimately will turn down as the market reacts to rising U.S. external deficits and, perhaps, inflation. As a consequence, U.S. inflation and aggregate demand will be damped in the near term, but later on inflation will be boosted and the negative effects on aggregate demand will be diminished.

Third, the price of oil is projected to decline about five dollars a barrel from its recent peak, but the influence of this decline on the current account balance will be offset in part by a continuation of the rising trend in the quantity of imported petroleum and products.

The bottom panel lists five issues in the forecast of the external sector that I will address:

How realistic is our projection for growth abroad and what would be the quantitative consequences of error?

What are the risks to the dollar and in international financial markets?

How is our outlook for inflation influenced by the dollar and import prices?

What would be the consequences if oil prices remain elevated?

Why are we projecting weak net exports?

Chart 9 examines the first of these questions -- risks to the foreign outlook. As shown in the top left panel, our projection assumes that fiscal policy will be a restraining influence on growth in each of the foreign G-7 countries over this year and next. The restraint, as measured by staff estimates of the cumulative change of the structural budget balances in these countries, ranges from three-quarters of a percentage point of GDP in the United Kingdom and France to five percentage points in Italy. In Italy, Japan, and Germany, fiscal restraint will be greater than over the past two years; indeed, in Japan fiscal policy shifts from ease to restraint, while it was neutral in Germany over the past two years. As is shown in the right panel, we are assuming that this fiscal restraint will continue to be counteracted by the effects of monetary ease, as reflected in current and projected relatively low ten-year real interest rates and very low three-month real interest rates.

As is shown in the middle left, we are projecting that this combination will contribute to a slight rise in real growth in Western Europe and a more substantial increase in Canada this year that will extend into 1998. By contrast, in Japan fiscal restraint and financial headwinds will slow the economy this year despite a positive contribution from real net exports of roughly a percentage point. Meanwhile, in Mexico the expansion is expected to continue in 1997 under the influence of relatively low real interest rates and a modest fiscal stimulus, but to slow somewhat in 1998; growth is projected to continue at its recent pace on average in the rest of Latin America. In the rest of Asia, we expect a

small rise in growth this year after the effects wear off of last year's modest policy tightenings, currency appreciation against the yen, and weak export demand. In the aggregate, as depicted by the red bars in the right panel, foreign growth is projected to be slightly less than four percent in 1997 and 1998. However, with U.S. growth slowing, the gap increases to about 1-1/2 percentage points.

The panel at the bottom left compares the staff forecast with those published in *Consensus Forecasts*, augmented by other sources for Latin America in 1998. As you can see, we are projecting faster growth in Japan and Mexico this year and slower growth in other Asia, but the totals, at the bottom, are essentially identical for both years.

As shown at the right, over the past 16 years the average, annual absolute error in the staff forecast for global growth, based on the forecast for the January or February Committee meeting, has been about one half percentage point. Everything else being equal, we estimate that such an error this year would add to or subtract from U.S. real GDP about a half a tenth over the four quarters of 1997.

Turning to risks to the dollar and in international financial markets, the top left panel of the next chart shows the real trade-weighted value of the dollar against other G-10 currencies and the real long-term interest rate differential, including our forecasts. As you can see, these two variables have tended to move together over the past several years. Our assumption of a slight upward drift in the interest differential suggests one source of upside risk to our projection for the dollar. However, we think it is more likely that the dollar will come under downward pressure over the forecast period under the weight of the widening of our current account deficit and a projected turnaround in the Japanese surplus. We are far from confident about this forecast, especially in terms of timing and magnitude, but we think that the risks lie in this direction.

What happens to the dollar is only one possible uncertainty in international financial markets over the next couple of years. Some of the dollar's recent strength might have been caused by the sense of over-exuberance, extrapolative expectations, and greater foolery that may be affecting many

financial markets -- exchange markets generally, European equity and bond markets in the run-up to EMU, and emerging markets in the wake of the more-rapid-than-expected Mexican recovery and the continuation of low interest rates in industrial countries. The remaining panels on this chart illustrate some of these trends.

The top right panel shows price trends in equity markets over the past five years. The U.S. market (black line) has risen by almost 90 percent mostly in the past two years; European markets (red line) have risen more than 80 percent on average; an average of selected emerging markets (blue line) rose sharply through early 1994, collapsed in the wake of the global rise in bond rates in 1994, fell further in the wake of the Mexican crisis, but has since almost recovered to about its previous peak. Meanwhile, the Japanese market (green line) has been in the doldrums.

In terms of valuation measures, the middle panels, P/E ratios (based on trailing earnings) shown at the left appear to be high in both the United States and Europe. Mike has noted some of the arguments justifying the high U.S. P/Es. In Europe, investors may be anticipating a rise in earnings associated with EMU, an acceleration in economic activity, and corporate restructuring, and some markets have been receiving increased inflows of pension funds. Nevertheless, except for the early 1990s when rebounds in earnings were expected, these ratios are as high as we have seen over the past 20 years, surpassing the 1987 peak for Europe and equalling that peak for the United States. It is notable that P/E ratios for Hong Kong and Singapore are not high in historical terms; they are about at their average levels for the past 20 years. Price-to-book value ratios, depicted on the right, show the same general picture only more so: historic highs for the United States and Europe, and historical averages for Hong Kong and Singapore.

Turning to bond markets, the bottom panels, the decline in ten-year government bond yields among industrial countries from their peaks in 1995 has been phenomenal, ranging from 5 percentage points or more in the three formerly high-yielding countries in Europe to a more-moderate percentage

point or so in the United Kingdom and United States. There has been a remarkable convergence of long-term nominal interest rates, predicated at least in Europe on the establishment of a European Central Bank with a broad membership from the start.

Not shown are the dramatic declines in spreads of stripped yields of Brady bonds relative to U.S. Treasuries from their peaks following the Mexican crisis. Shown at the right is one result of the general decline in bond yields in industrial countries and optimism about emerging markets: a jump in international bond issuance by developing countries to a level last year that was about two-thirds higher than the previous peak in 1993 when U.S. interest rates also were so very low.

It is easy to point to risks in these markets. It is more difficult to identify the most likely shock: economic (a large actual or anticipated increase in U.S. interest rates), political (a bungled takeover of Hong Kong by China), or a combination (a collapse of plans to move forward with the third stage of EMU on January 1, 1999). One can only speculate about the implications of a severe shock for financial markets and real economic activity. In terms of effects on the dollar, history offers little guide. Following the stock-market break in 1987, the dollar continued to fall. The dollar rose following the ERM bust-up in 1992, fell when bond rates rose in 1994, and fell further in the wake of the Mexican peso crisis.

Chart 11 focuses on an issue about which we can get a bit more of a fix -- the relationship between exchange rates, import prices, and U.S. inflation. Prices of U.S. imports are influenced by a number of factors, microeconomic as well as macroeconomic. At the macro level, it is useful to think of our import prices as being determined by foreign inflation rates (which have been low and declining) and dollar exchange rates. The top four panels in this chart illustrate those relationships over the past five years for U.S. imports from two groups of countries and two individual countries -- the European Union, Japan, Canada, and the four Asian so-called newly industrializing economies. The black lines in the panels show four-quarter changes in prices of U.S. imports of manufactured

goods. On balance, the dominant influence on them has been dollar exchange rates (the red lines), although there has been considerably more movement in exchange rates with respect to the EU and Japan than for Canada and the NIEs. CPI inflation abroad (the blue lines) has been relatively quiescent.

Against this background, the bottom panels present estimates of the influence of movements in the dollar, working through import prices, on the rate of inflation in CPI goods excluding food and energy. The panel at the left shows in the solid lines the paths of actual and projected inflation in prices of core goods and of non-oil imports and in the dotted lines a simulation of their paths on the assumption that the dollar had stayed at its low reached in Q2 1995. The dollar's appreciation is estimated to have held down core goods inflation by about four tenths in the fourth quarter of last year. The panel at the right shows in the dotted lines similar simulations based on the hypothesis that the dollar stays at its recent high through the forecast period. The projected depreciation of the dollar in 1998 is estimated to add about two tenths to core goods inflation at the end of that year.

The next chart examines another influence on U.S. inflation: oil prices. As shown in the top left panel, nominal oil prices have been creeping up since early 1994 and have recently reached a peak that was exceeded over the past decade only briefly in the context of the Gulf War. The panel at the right provides more perspective on oil-price developments over the past two years. It shows both the spot price of West Texas Intermediate and the implied volatility as a percent of the price. The implied volatility over the past year exceeded that in 1995 by a large margin, but was not significantly different from the average of the previous five years.

In our forecast, we continue to assume that oil prices will decline further from recent peaks as the market finally adjusts to the partial resumption of Iraqi shipments and additional production comes on stream from the North Sea and non-OPEC developing countries. However, in light of recent trends, we have again postponed a full return to a lower level of oil prices, and that level is about

$1.25 per barrel higher than we projected that it would be a year ago. The futures price of WTI for May of this year is roughly one dollar below the current spot price which, in turn, is down about two and a half dollars from the recent peak in early January.

While our assumption about oil prices helps to impart some downward pressure on the overall price level, one would be justified in being skeptical about when the decline will be complete, how enduring it will be, and whether oil prices instead might continue to trend higher. To illustrate some of the implications of an alternative oil price scenario, we ran the staff's combined model in its adaptive expectations mode. The results are shown in the bottom portion of the chart. The baseline is the Greenbook forecast extended to 1999 as presented in the Bluebook. In the alternative, we hypothesized that the price of imported oil would remain at its level in Q4 1996 rather than decline by $5 per barrel. With respect to monetary policy, we assumed no change in the funds rate path in the United States; foreign G-7 countries follow Taylor-rule policies.

In this alternative, U.S. CPI inflation is about 4 tenths higher than in the Greenbook baseline this year, declining to a tenth higher in 1999. Growth of U.S. real GDP is essentially unchanged because the stimulus from a lower real funds rate and an even weaker dollar offsets the tax-like effect of increased spending on imported oil. Meanwhile, inflation on average in the foreign G-7 countries is also four tenths higher this year, largely due to the effect in Japan. Real growth is depressed on average this year in the foreign G-7 countries (especially in Canada and Japan), but bounces back relative to baseline in 1998, reflecting the influence of monetary policies acting under Taylor rules.

The last international chart summarizes our projection for real net exports of goods and services. As is shown in the top panel of the chart, we are projecting that imports of goods and services (the red line) will expand faster than exports (the black line) this year, and that growth rates will converge by the end of 1998.

As Mike has indicated, we are projecting a substantial negative contribution to real GDP in

1997, on the order of three-quarters of a percentage point [four tenths on a year-over-year basis], in contrast to a much smaller deterioration reported in the *Blue Chip* consensus, to say nothing of the improvement shown in some forecasts.

A reasonable question is how do we account for this apparent discrepancy. The simple answer can be summed up in two words: history and arithmetic. The staff's growth forecasts do not differ significantly from the general consensus, and our outlook for the dollar eventually to decline has no influence on real net exports in 1997. If we assume that historical relationships will continue to prevail, the arithmetic embodied in such relationships, combined with our starting deficit, guarantees a substantial negative external contribution to real GDP in 1997.

To help illustrate my point, the bottom panels use model equations to decompose changes in actual and projected exports and imports into three parts. The black bars present the four-quarter changes, in terms of chained 1992 dollars, in exports (the middle panel) and non-oil imports (the bottom panel) of goods and services. The red bars show estimated contributions of increases in income. The blue bars show estimated contributions of relative prices. The green bars show equation errors for the historical period and differences from our judgmental forecast for the projection period.

Through most of the period shown income effects dominate price effects. Moreover, because of differences in elasticities and the base levels of exports and imports of goods and services, a comparison of the income effects (the red bars in the two panels) for the forecast period shows that faster growth abroad boosts exports by less than the more moderate growth in the United States boosts imports. It is possible that these historical relationships have changed. There is some evidence that they do change over time, but they change only slowly, and I would hesitate to predicate a forecast for 1997 on such a proposition.

Mike Prell will complete our presentation.

I'll be very brief. Your final chart summarizes the forecasts that you submitted for use in the Humphrey-Hawkins report. Your forecasts of real GDP growth are somewhat below ours. Consequently, your unemployment rates are higher. But your CPI predictions also are higher than ours, putting you closer to the consensus than we are.