Meeting of the Federal Open Market Committee
July 1-2, 1997

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, July 1, 1997, starting at 2:30 p.m. and continuing on Wednesday, July 2, 1997, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Broaddus
Mr. Guynn
Mr. Kelley
Mr. Moskow
Mr. Meyer
Mr. Parry
Ms. Phillips
Ms. Rivlin

Messrs. Hoenig, Jordan, Melzer, and Ms. Minehan, Alternate Members of the Federal Open Market Committee

Messrs. Boehne, McTeer, and Stern, Presidents of the Federal Reserve Banks of Philadelphia, Dallas, and Minneapolis respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Deputy Secretary
Mr. Coyne, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Prell, Economist
Mr. Truman, Economist

Messrs. Beebe, Goodfriend, Hunter, Lindsey, Mishkin, Promisel, Siegman, Slifman, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors

Messrs. Madigan and Simpson, Associate Directors, Divisions of Monetary Affairs and Research and Statistics respectively, Board of Governors

Ms. Johnson, Assistant Director, Division of International Finance, Board of Governors

Messrs. Reifschneider 1/ and Small, 1/ Section Chiefs, Divisions of Research and Statistics and Monetary Affairs respectively, Board of Governors

Mr. Sichel, 1/ Senior Economist, Division of Research and Statistics, Board of Governors

Mr. Elmendorf 1/ and Ms. Garrett, Economists, Division of Monetary Affairs, Board of Governors

Mr. Lebow 2/ and Ms. Lindner, 2/ Economists, Division of Research and Statistics, Board of Governors

Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors

Ms. Holcomb, First Vice President, Federal Reserve Bank of Dallas

Ms. Browne, Messrs. Dewald, Hakkio, Kos, Lang, Rolnick, Rosenblum, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of Boston, St. Louis, Kansas City, New York, Philadelphia, Minneapolis, Dallas, and Cleveland respectively

Ms. Rosenbaum, Vice President, Federal Reserve Bank of Atlanta

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1/ Attended portion of the meeting relating to the Committee's discussion of the economic outlook and the longer-run growth ranges for the monetary and debt aggregates.
2/ Attended portion of the meeting relating to price measurement issues for monetary policy.

Transcript of Federal Open Market Committee Meeting of
July 1-2, 1997

July 1, 1997--Afternoon Session

CHAIRMAN GREENSPAN. I have the gavel that was used for Federal Reserve Board meetings in 1914. I was going to bring it in for this meeting, but it appears to be fragile even though it looks more like a weapon than anything else. [Laughter]

MS. PHILLIPS. Mr. Chairman, have wood mites attacked it? [Laughter]

CHAIRMAN GREENSPAN. It looks more like attacks by the Congress than wood mites.

Regrettably, this is the last meeting for Rick Mishkin who, much to the dismay of the Vice Chairman, is going back to Columbia University. I thought he had just arrived. Whether or not that is the case, we will miss you and we wish you well. I suspect that you have learned something about chaos theory from these meetings. [Laughter]

I will start off as usual by requesting approval of the minutes.

VICE CHAIRMAN MCDONOUGH. Move approval.

CHAIRMAN GREENSPAN. Without objection. Mr. Fisher, you are on.

MR. FISHER. Thank you, Mr. Chairman. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Peter?

MR. BOEHNE. In the memo that presents some of the options for dealing with declining required operating balances at the Reserve Banks, you and Don Kohn addressed the topic of returning to lagged reserve requirements from the current contemporaneous reserve requirements regime. There was a reference in that document to the preparation of another memorandum.

Could you elaborate on that in terms of whether that paper will be a discussion memorandum or a decision-oriented memorandum. Where are you on that issue?

MR. FISHER. I would be happy to refer to Don and his staff on that.

MR. KOHN. Board staff is working on a memorandum for Board consideration that proposes a return to lagged reserve accounting. The Board has not seen any of this or heard this discussed previously because we are still working on this issue at the staff level. I think there are two factors that make this a potentially opportune time to consider this issue. One is that as reserve balances have dropped, we have had increasing difficulties predicting required reserve balances from week to week. The reason is that vault cash has been high enough to enable some banks to shift back and forth between being bound by reserve requirements and not. The previous formulas that were used to predict which banks were going to be bound and which were not no longer work. We have tried to improve these predictions, and I think we have. The errors have dropped substantially, but it is still more difficult to make predictions about demands for reserve balances in an environment in which we cannot even be certain that one or another major large bank will be bound by reserve requirements. Secondly, the Federal Reserve System is in the process of changing the programming and accounting regime for reserve requirements, and it would be relatively easy to allow for a shift back to lagged reserve accounting once that programming is completed. Previously, we were told that it would be a major undertaking to go into the reserve accounting system and change it from contemporaneous to lagged accounting. The implementation of the new accounting system, which I think will occur about a year from now, would be an opportune moment to shift back to lagged reserves. As I mentioned, we are going to come to the Board with a proposal on that.

MR. BOEHNE. As you know, this is an issue that has been debated at length at various times. We have had both regimes. We had contemporaneous reserves before the late 1960s, when we went to lagged reserve requirements. As we got into the monetary aggregates approach to policy, we shifted back to contemporaneous reserves. I think this is more than a technical issue. It has implications for how monetary policy is implemented or the perception of how it is implemented. I hope that this will not be treated as just a technical issue. It ought to be talked about in the broader context of monetary policy rather than in terms of accounting changes. It is a worthwhile debate to have, and we ought to have it in that broader context.

CHAIRMAN GREENSPAN. When we get there, why don't we bring it to the Committee as a subject for general discussion, presuming that something materializes out of what the staff is working on at the moment?

MR. BROADDUS. I agree very much with what Ed Boehne just said. It would seem to be especially appropriate to discuss that in a situation where it is possible that M2 may be coming back on track. Lagged reserve accounting precludes the use of any sort of reserve operating instrument in my opinion, and such an instrument might be a more desirable option in this kind of situation.

MR. FISHER. I would underscore that the paper, particularly the decision tree that shows the different options, is not intended to be technical or to bury this issue in the details. Don and I were trying to lay this out so you would see all the steps we think need to be gone through before you reach any of what we deem to be the important policy choices at the bottom of the decision tree, as it were, and perhaps along the way. I hope no one looks at this paper as taking any of these issues and burying them. Rather, we are trying to let you see, with as much advance notice as we can give, the full scope of the possible changes that might be envisaged as a potential answer to the low operating balances problem.

CHAIRMAN GREENSPAN. I think President Broaddus is raising an interesting issue. If the M2 data eventually suggest that there may be some particular policy use for M2, the whole concept of reserves in the structure of monetary operations, especially in the context of the significant decline in required reserves, will become more than a technical question. I think we will have to be very careful about how that plays out. We do not want to start moving in one direction and find that we have to backtrack because of factors we did not foresee. My guess is that it would be very premature to consider the issue at this stage, but I would not rule out the possibility that it may become a significant question in 6 months, 18 months; I do not know precisely when.

MR. KOHN. As you and President Broaddus remember, the reserve requirements are geared to M1, and there are no reserve requirements on non-M1 deposit balances.

CHAIRMAN GREENSPAN. I think that is precisely the issue in the sense that if we go back to M2 and stay with reserves on transaction balances, something is incoherent. At the moment, it doesn't matter all that much. But it would if we began to take the M2 cone seriously. Any other questions?

MR. MELZER. I have one. I agree with the general thrust of the views that have just been expressed. One of the options on the decision tree would be to lower reserve requirements and increase the deposit base to which they apply. It would be exactly in that circumstance that I think the point the Chairman is making would be relevant. I just want to make the general comment that I am glad the staff has undertaken this analysis of the implications and possible responses to the decline in operating balances. I am sure that everyone shares this view. We have to be concerned about excessive volatility in the federal funds rate, but I think some volatility is actually quite desirable from a market discipline point of view, particularly as required reserves become a less important driver of the demand for federal funds. We really want institutions to have the incentive to hold appropriate balances to settle transactions, and the price they would pay in a very stable funds market might not be sufficient to create the kind of incentives that we would like to see in that process. I know that, as market people, this is something you are well aware of, and we should keep it in mind as we think about these issues.

CHAIRMAN GREENSPAN. Further questions for Peter? If not, would someone like to move ratification of the domestic operations?

VICE CHAIRMAN MCDONOUGH. So moved.

CHAIRMAN GREENSPAN. Thank you. Without objection they are approved. Let us move on now to the Chart Show.

MR. SLIFMAN. Thank you, Mr. Chairman. We will be referring to the packet of material titled "Staff Presentation to the Federal Open Market Committee." Dave Stockton, Ted Truman, and I will jointly share the honors this afternoon. [Statements--see Appendix.]

CHAIRMAN GREENSPAN. Thank you, gentlemen. That was a very thorough evaluation. Questions for anybody? [Pause] I cannot believe it was that thorough!

MR. PARRY. With regard to the table in the middle of chart 5 showing output gaps, could you give me the memo item for the United States, Mike? I assume it would be about 1.0

percent above potential for the fourth quarter of 1996. What was the fourth quarter of 1998 in the Greenbook?

MR. STOCKTON. The Greenbook estimate for the fourth quarter of 1998 is 2.1 percent above potential.

MR. PARRY. 2.1 percent and 1.0 percent roughly for the fourth quarter 1996?

MR. STOCKTON. We have .8 percent above potential for the fourth quarter of 1996.

MR. PARRY. Okay. With regard to my other question, it is obvious that what is happening at Boeing has a big impact on BFI and also on the export number. Are there any limits on their ability to produce?

MR. SLIFMAN. I think they purposely have chosen to stretch out deliveries, as they have done in the past, because they know a bust will inevitably follow the boom.

MR. TRUMAN. To piggyback on the aircraft question, we really do not have a precise view of what is going on. I mentioned that the aircraft shipments have picked up over the last two quarters. The information that we have, where we have some slippage going forward, is that their foreign component is leveling off rather than continuing to rise. A larger fraction of what is shown on that chart, at least for the next 5 or 6 months, is going into the domestic side of BFI.

MR. PARRY. Of BFI?

MR. TRUMAN. Yes, as best we can piece these things together.

MR. PARRY. Thank you.

CHAIRMAN GREENSPAN. Further questions?

MS. MINEHAN. Just a quick question about the projected stock market correction. What is the real impact of that? How much does that negatively affect your GDP figures for next year?

MR. SLIFMAN. We have not quantified it, as I suggested in my remarks, but we think it will have a relatively modest negative effect with a lag on consumer spending in 1998.

MS. MINEHAN. Are declining equity prices basically the major drag that you have embedded in your figures for next year?

MR. SLIFMAN. No. We anticipate that the slowing of activity will result primarily from some stock adjustments following the large increases in investment spending in recent years.

MS. MINEHAN. On both the consumer and business sides?

MR. SLIFMAN. Right, in both consumer spending and business investment.

MR. PRELL. Let me emphasize that this is partly a matter of the peculiarity of the timing. We really don't like to attempt to pin down the dimension, let alone the timing, of this adjustment.

MS. MINEHAN. Right.

MR. PRELL. But we had to do this. We have it starting essentially at the end of this year and continuing relatively steadily through 1998. Given the normal lags estimated for the wealth effects, we will not see a lot of the impact until the very end of the period and in 1999. That is why it does not loom so large.

CHAIRMAN GREENSPAN. Anybody else? Incidentally, Mike Prell has indicated that you can have through Monday, July 7, for any revisions to your individual forecasts for the Humphrey-Hawkins report. President Broaddus.

MR. BROADDUS. I have one quick question: Dave, on chart 15--I may be the only one in the room who had a little trouble following all of this--why does the nominal funds rate in that alternative unemployment targeting simulation have to go up more rapidly? I presume you are keeping employment constant while productivity is increasing.

MR. STOCKTON. Yes, but the reason is that you need to raise rates earlier in that episode because you are trying to keep the unemployment rate constant. If you did not do that, the strength in demand actually would outweigh in some sense the increase in supply. There is a bigger effect in our models in terms of investment demand and consumer spending that actually causes the net effect of this improvement in productivity to be expansionary for the economy. The improvement would tend to drive down the unemployment rate in the absence of a rise in rates.

CHAIRMAN GREENSPAN. If there are no further questions, would somebody like to start the meeting discussion? President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. Economic activity remains strong in the Kansas City District, with only a few signs of slowing. Our directors and other business contacts report solid economic growth throughout the District. Retail sales have been robust and manufacturing remains quite healthy. Two strikes that I mentioned at our last meeting have ended satisfactorily, with some 4,200 or so workers back to work. Conditions have continued to improve in the District's farm and energy sectors. The District's wheat harvest is under way and expectations are that we will have the largest crop since 1994. Also, cattle prices have improved and ranchers are now making modest profits. In the energy sector, drilling activity registered another small gain in May despite some decline in oil and gas prices. Tempering some of the positive economic news for our District, construction activity has tended to level off and total employment fell slightly in April even after adjustment for strikes.

Retail prices are holding steady in the Kansas City District, but labor markets are tight and we continue to hear reports of wage pressures. Many firms continue to have difficulty filling entry-level positions and hiring skilled workers. Our quote of the month is from one of our directors in Southern Oklahoma who reported that labor markets were so tight in his town that everyone was working who wanted to and some were working who did not want to. [Laughter] Several branch directors and other respondents that we survey informally reported above normal wage increases in their markets, especially at the entry level. For example, the owner of one of our large retail chains reported that entry-level wages have increased somewhere in the neighborhood of 10 percent plus over the last year. However, this rate of increase is spotty; we do not see wages pressing up at those rates uniformly across the District.

On the national front, despite the more moderate pace of growth in the second quarter, the economy appears to be fundamentally strong. We would agree with much of what was said in the Greenbook. We expect real GDP growth to pick up somewhat in the second half of the year and then likely move toward trend in 1998. Consumer spending should grow at a relatively strong pace. Contributing factors are solid employment, high levels of consumer confidence, and substantial gains in the stock market. Spending on business equipment should also remain strong, rising in response to corporate profits and elevated stock prices. While there is a great deal of uncertainty about the inflation outlook, and we share that uncertainty, our projections for economic activity and those in the Greenbook certainly suggest that the inflation risks remain on the upside. We continue to be sensitive to those risks in our analysis of the economy. With that I will stop, Mr. Chairman.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, Twelfth District economic growth has been vigorous thus far in 1997. Payroll employment expanded by 3 percent at an annual rate during the first four months of the year and probably in May as well. That rate is only slightly below last year's pace. The durable goods manufacturing sector has performed particularly well, as strong demand has continued for high-tech products and for materials related to aircraft production.

California's economy is fully on track, with the state currently ranking seventh nationally in its pace of payroll job creation. Los Angeles is now sharing fully in the state's economic success. Employment growth in LA County has accelerated substantially this year, and the county's unemployment rate has declined about 1-1/2 percentage points over the past 12 months to 6.8 percent.

Five other District states are ranked among the top seven nationally in their yearly rates of payroll job creation. After accelerating substantially last year, the Washington State economy has settled into a solid growth path. Although economic expansions in the fast growth intermountain states and Oregon have slowed only slightly in 1997, those states remain on strong growth paths with stable or declining unemployment rates. Even Hawaii has shown signs this year of reversing its several-year pattern of employment declines.

Sustained and rapid expansion has caused rising inflation in many areas of the District. In the San Francisco Bay area, sharp acceleration in prices of services led to rising consumer price inflation in 1996 and early 1997. Inflation in other strong growth areas of the District also increased in 1996 and is likely to rise further this year.

Turning to the national economy, recent data have confirmed that growth in economic activity has slowed markedly, probably to a rate around 2 percent in the second quarter, which is a little lower than the Greenbook projection. Although our forecast shows growth picking up in the second half of this year, it drops back to a more sustainable pace in 1998. I think there are a number of factors restraining prospective growth, but the economy's rapid expansion over the past year or so has left it operating at a noticeably higher level according to our traditional measures of capacity such as the rate of unemployment, rates of capacity utilization, and the GDP gap.

These indicators provide good reasons to be concerned about the future trend of inflation, and the lags in policy mean that we must be forward-looking. In this regard, I am concerned about the indications of excess demand for resources. This situation raises two key questions that are very difficult to resolve. First, are our estimates of capacity accurate, and second, given those capacity estimates, is the economy's growth likely to slow enough and for a long enough period of time to eliminate any inflationary pressure that may exist? In balancing these uncertainties, my best judgment is that underlying inflation will show an upward trend. For the GDP price index, our forecast indicates an increase of around 2-1/4 percent this year and 2-3/4 percent in 1998. Thank you.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, economic conditions in the Midwest remain quite similar to those I reported at the May meeting. Our regional economy is still expanding at a modest rate, and District manufacturers and retailers continue to report that competitive pressures inhibit their ability to raise prices. Our manufacturing sector is still operating at very high levels. The Chicago Purchasing Managers' Survey results, released on Monday, showed a sharp increase in the composite index to 61.5 in June from 56.8 in May, indicative of a pickup in the rate of expansion in the manufacturing sector. Contacts report strong activity in a number of industries including steel, heavy trucks, cement, gypsum board, and agricultural and other heavy equipment. However, a large national paper manufacturer headquartered in the District reported slow growth in shipments of containerboard and noted that they are reducing capacity by temporarily closing two plants.

In terms of consumer spending trends, retailers indicated that the sales slowdown evident in April and May continued through much of June. However, sales improved significantly in the latter part of June when warm weather finally arrived. To illustrate the adverse impact of the cold weather, one very large national retailer headquartered in our District noted that on a year-to-date basis, unit sales of air conditioners were down 38 percent compared to last year. This retailer also reported that sales of white goods were flat year-to-date; they are now taking a more conservative approach to the second half of the year. Contacts in the trucking industry reported that shipments of new merchandise to retailers nationwide had slowed from the first quarter. This probably indicates attempts by retailers to keep inventories in line with the slower sales pace. Information from the auto industry suggests that reports on light vehicle sales to be released this week probably will show June sales at an annual rate of around 14.8 or 14.9 million units, which would be consistent with what is implied in the Greenbook forecast.

Our labor markets are still very tight. The unemployment rate for District states was 4.1 percent in April for the third straight month and then fell to 3.8 percent in May. Despite tight labor markets, we still have not seen much upward pressure on wages, although reports are mixed. Contacts at one large national retailer said they still are not having difficulty attracting workers, and a recent labor settlement with the UAW calls for a 50 percent reduction in wages and benefits for new hires at a foundry, resulting in a two-tier wage structure. In contrast, another retail chain increased wages 10 percent and is still having trouble getting workers. A large phone company is seeing upward pressure on wages, particularly for marketing and managerial people. In the trucking industry, one firm's 33 percent increase in truck driver wages that went into effect in February of this year was not enough to attract as many drivers as they needed, so they have started advertising for drivers. Other trucking firms have raised wages considerably, with the increase in the industry being about 10 to 15 percent.

Turning to the national outlook, since we met in May new data have confirmed our view that growth slowed considerably in the second quarter from its first-quarter pace. Further, we have had more good news on the price front, as the CPI rose only .1 percent in May. However, if anything, labor markets now appear tighter than we previously anticipated, and we currently have a positive output gap. Our forecast of growth near trend over the next few quarters will only maintain the gap and not shrink it. Consequently, we see a significant risk that the economy is operating beyond its long-term potential and that underlying inflationary pressures will worsen gradually over the next few quarters, though these pressures may be masked somewhat by the favorable developments in food and energy prices and by continued BLS implementation of methodological improvements in the CPI. Furthermore, though we and the public may have been pleased with keeping inflation at or under 3 percent in the last few years, we must ratchet down this threshold to about 2-1/2 percent now just to keep up with the BLS changes that remove, little by little, some of the measurement bias in the CPI.

With the new benchmark in mind, I find the Chicago Bank forecast for inflation and the Greenbook forecast as well quite troubling both in terms of the projected levels of inflation and the upward tilt to its future path. We all know that a gradual acceleration of inflation is difficult to detect in real time and that any actions we take today will not affect inflation in the short run. But we also know that an inflation rate that is gradually, even gently, moving up is not moving us any closer to anyone's definition of price stability. The risks in our forecast and in the Greenbook as well clearly are tilted toward the upside.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Mr. Chairman, the New England economy continues to expand. The annual rate of job growth now rather closely matches that of the nation as a whole, but within the region considerable state-by-state variation is evident. Massachusetts is now the fastest growing New England state, at least as measured by job growth, outstripping New Hampshire by nearly a full percentage point. After New Hampshire, Connecticut is a close third, while Maine, Vermont, and Rhode Island have had relatively slower rates of job growth. New England employment is dominated by at least four large sectors: high-tech, defense, education, and financial services. The financial services sector is booming as is high-tech. Education remains relatively stable, but defense has endured major reductions in the last several years.

Work conducted recently at the Federal Reserve Bank of Boston suggests that, while Pentagon contracts have declined, some formerly defense-oriented companies are starting to expand their employment as a result of opportunities in commercial markets. This is especially true in Massachusetts and New Hampshire where the most flexible defense businesses appear to be located. By contrast, Connecticut and Maine suffer as a result of the inflexibility of their submarine and other shipbuilding industries.

At a recent panel discussing labor shortages in New England, we were told that the Massachusetts software industry has grown from about 800 companies with revenues of about $3 billion in 1989 to over 2,000 companies employing 130,000 people and having revenues of nearly $10 billion in 1996. More than 73 percent of Massachusetts software companies are planning to add jobs in 1997, and one of the biggest issues the industry faces is the labor shortage, not just locally but nationally. Massachusetts software companies are said to be facing the tightest labor market in a decade, with unfilled positions a problem not just in old mainframe companies but in the hottest Internet companies as well. Over the short term, companies are using higher bonuses to attract and retain personnel, increasing benefits such as portable vacations and family-friendly work environments, courting retired and laid-off workers, and granting financial awards to existing employees who recruit new employees. Over the longer term, there simply will have to be more high-tech graduates from local and national colleges to meet the demand we see in Massachusetts and nationally.

During much of the last two or three years, loan growth at First District institutions has trailed that of the nation due at least in part to the effects of mergers and restructurings but also to concerted attempts to manage balance sheets and organizations to eliminate low earning assets, restrain costs, and improve efficiency ratios. Large First District banks now appear to be embracing loan growth as a means of increasing net income, and they have become intense competitors locally and nationally, especially for commercial and industrial loans. They commented recently about the narrowing of spreads and weakening of loan covenants that they have observed, though they maintained that their own commitment to loan quality remains firm after the lessons of the 1980s. They also report that a tremendous amount of liquidity is being supplied by nontraditional middle market lenders--Merrill Lynch, for example.

Finally, let me say a few words about the tightening of commercial real estate markets. We saw a graph in the Chart Show that looked at that development. We see this especially in Boston. The vacancy rate for Class A office space is now below 5 percent, and per-square-foot rental rates are at levels just below the peaks of the late 1980s. It is not occurring just in Boston. We did a survey that indicates that other New England cities are experiencing declining vacancy rates, as are a number of cities around the country--San Francisco, Seattle, Charlotte, just to name a few. So far, "spec" building has not begun in Boston, but it would seem to be only a matter of time before it starts both locally and nationally, given current interest rates, liquidity, and both business and consumer optimism.

On the national scene, it is interesting to compare the Greenbook forecast with a range of other forecasts: DRI, Georgia State, Michigan, and our own. All these forecasts evidence a lot of similarities in their GDP growth projections for 1997 and 1998. The Greenbook is more optimistic about inflation, as previously noted; more importantly, it paints a picture of declining unemployment rates while most of the other forecasts anticipate increasing rates, with one showing no change as I recall. Thus, while the numbers are not far apart, the feel of the forecasts differs quite a bit. In sum, the other forecasts see an environment of slowing growth and rising unemployment, spurred in part by federal funds rate increases, with some small pickup in inflation. The Greenbook, on the other hand, sees falling unemployment, marginally stronger growth, and a rather similar uptick in inflation.

Why is the Greenbook so optimistic or, to put it another way, why is it willing to be further behind the curve than other forecasters seem to think is wise? Some of this optimism could relate to how wrong we all have been in our projections for the past year or so. In comparison with our Humphrey-Hawkins forecasts in February, our current forecasts now suggest that GDP will grow faster than the highest forecast in the February range and that both the CPI and the unemployment rate will be lower than the lowest forecast. So, collectively, we have been wrong. We have underestimated the potential for the economy to grow and for unemployment to fall without serious inflation damage--in fact, with some progress on the overall inflation front.

Should we be a "learning organization" and assume that this experience can continue through 1997 and into 1998? Or should we remain skeptical that the relationships that drive other forecasts, and ours as well, will reassert themselves sooner rather than later? It should come as no surprise that I am a bit skeptical. I am skeptical because I believe the factors damping inflation--medical cost containment, the value of the dollar, a restructured and downsized business environment--are temporary or about reaching the peak in terms of their economic impact.

As I look ahead, I see few, if any, constraints on growth. All the factors have been mentioned: good jobs, high levels of optimism, no particular fiscal drag, and reasonable levels of growth abroad. About the only negatives mentioned in the Greenbook are the prospects for a stock market correction and for consumer and business buying to moderate because of stock price effects. As I keep saying, people in Boston have been telling me for over a year now that consumers can only buy so many cars and that businesses can only buy so many computers. However, it has been difficult to see the effects of that buildup in stocks kicking in as yet, and I wonder when it will in 1998, given all the positive factors. It may be that increases in capacity and moderating agricultural and energy prices will help, but I also think it is wise to be skeptical about the impact of a stock market correction on the real economy. Thus, I would associate myself most closely with the Greenbook's worry about a boom/bust scenario, where we wait too long and then we need to move too strongly to attain our objectives.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, economic activity in the Fifth District seems for the most part to be following the pattern of the recent national data. As in the nation as a whole, consumer spending was very strong in our region over the latter part of last year and the early part of this year, but it clearly has decelerated in the second quarter, especially spending on automobiles, other durable goods, and apparel. The question, of course, for both our own region and the national economy is whether this deceleration is a temporary phenomenon or something more permanent. Unfortunately, the recent data and anecdotal information from our District do not shed much light on this issue. Consistent with some of the comments in the Greenbook relating to the national economy, there have been some signs of a pickup in retail activity in our area in the last couple of weeks, but it is much too early to know whether that will persist and, if it does, how strong it will be going forward. Certainly, the fundamentals seem to be in place to support a reacceleration of consumer spending in our region in the months ahead.

Labor markets remain exceptionally tight in our District as they apparently are elsewhere in the country. Jobs and income are growing strongly. I am always a little suspicious of local unemployment rates because I don't always know how they are constructed, but they suggest that unemployment is very low throughout our region, and that should help support consumer outlays. While credit card charge-offs have risen fairly significantly at some banks, that is not the case at all banks, and we do not see any significant constraints on consumer credit availability, at least at this point. Elsewhere, residential construction is holding up very well in our region, especially at the high end of the market. There is considerable speculative building throughout the District, especially of upscale new homes.

With respect to prices, the reports we get are mixed. Some of our board members commented at the latest meeting that there are signs of outright price moderation. For example, told us that his company recently signed a contract with an automobile company that calls for a 3 percent cut in the prices of all the items will supply that company in each of the next five years. But there also are signs of potential upward pressures. This is consistent with some of the comments that Mike Moskow was making. Several months ago, I commented here that trucking companies were advertising for drivers on the mud flaps of their trucks along I-95. At the time, they were offering 26 cents a mile. They are now offering 42 cents a mile, and at the speeds those guys drive, that is a heck of an hourly wage! [Laughter]

I don't have a great deal to say this time about the national economy. Our projections, which are based on a VAR model modified by judgment, to the extent that we have it, [laughter] are not very different from the staff baseline forecast. That is obviously a very rosy forecast, especially with the modifications from the last Greenbook. But in contrast to the staff, I guess we are skeptical along the lines of Cathy Minehan's comments and some of the outside forecasts that she mentioned. We think that at least a moderate increase in the funds rate is likely to be required soon to achieve that nice outcome. Incidentally, we would not see this as a tightening of monetary policy in any meaningful sense. The economy seems to be experiencing something that is at least approaching an investment boom. While I think the staff is right to be cautious about concluding in any definite way that the longer-run trend growth in productivity has increased, there is certainly a possibility that we may be looking at a moderate increase. As I said at the last meeting, either of those events would imply a need for higher real interest rates. With inflation expectations basically stable, a moderate increase in the nominal funds rate would give us a moderate increase in real interest rates. Thank you.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. Thanks, Alan. The Eighth District economy continues to grow at a pace consistent with national trends. Firms report moderate gains in sales and employment, but we often hear that concerns over labor availability have put a damper on expansion plans. Tight labor markets are reflected in an average unemployment rate of 4.6 percent for District states in April. Manpower's employment survey for the third quarter shows increased job opportunities compared with three months earlier. A survey of 223 small businesses in the District revealed that about 18 percent plan to increase sales prices in the months ahead, while about 3 percent plan to lower prices. This is consistent with results from the same survey a year ago. Year-to-date sales tax receipts for District states are running nearly 5 percent ahead of the same period one year ago. Retailers in the District remain optimistic about sales growth in the second half of 1997. Although results for April and May were mixed, many say that sales growth generally has been in line with expectations and that current inventories are at desired levels. While loan demand appears to be slowing at District banks, many are still experiencing double-digit growth rates in their loans on a year-over-year basis. Some contacts report more generous lending terms stemming from stiff competition, which is consistent with the most recent Senior Loan Officers Survey for the nation as a whole.

The national economy is indeed turning in an impressive performance. So far in 1997 the economy has created an average of 229,000 nonfarm payroll jobs per month, well above projected longer-term trends in labor force growth. Consumer confidence indices are at high levels, and manufacturing continues to show strength. While retail sales slumped over the last three months, part of that reflects adjustments to exceptionally strong gains early in the year. As the Greenbook notes, weekly chain store sales data indicate some upturn in June. The consumer price index has increased only 1.4 percent at an annual rate over the first five months of this year, down sharply from the 3.3 percent rate for all of 1996. This favorable inflation news has come as a surprise relative to most forecasts made last year, as Cathy Minehan noted.

The Committee might do well to think about ways these inflation gains could be locked in. If markets had more confidence that the Fed was not satisfied with 3 percent inflation, longer-term interest rates might fall in line with the news on the CPI. As it is, 30-year Treasury bonds have been trading to yield about 6.7 to 6.8 percent in recent sessions, actually up a notch from 6.6 percent in the fourth quarter of 1996. It appears that markets expect inflation to rebound later this year, a forecast echoed by the Blue Chip consensus. Their expected 1997 CPI inflation rate is 2.8 percent as of June 10, followed by a rate of 2.9 percent in 1998, the same rate that professional forecasters see over a 10-year horizon. Our St. Louis forecast, after incorporating the good news on real growth and inflation for the first quarter of 1997, assumes the persistence of the underlying forces that have generated sustained real growth at a rate of about 2-1/2 percent and sustained CPI inflation at a rate of about 2-1/2 to 3 percent. With respect to CPI inflation, we recognize that the experience of the first five months will moderate measured inflation in 1997, which we expect will come in below that observed in 1996. Nevertheless, like other forecasts, ours is for a bounceback in 1998 to the 3 percent rate that is entrenched in budgets and long-term interest rates. We have assumed in this regard that the Committee will not adopt a deliberate strategy to achieve price stability over some specified time period. Thank you.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Thank you, Mr. Chairman. The Philadelphia District economy is paralleling the national economy. Our region experienced robust growth in the first quarter, as did the nation, and moderating growth in the second quarter, also like the nation. The regional outlook is positive. There are tight labor markets but few, if any, signs of accelerating inflation. A major focus of management across a broad range of companies is to contain costs to protect profit margins and hold the line on prices. The major emphasis is to avoid increasing worker head counts as production expands. Companies are investing in labor-saving equipment and technologies. For example, in areas like law and real estate, which we do not often think about in terms of labor-saving efforts, professionals are getting more done in less time by taking advantage of advances in information processing and telecommunications equipment. Outsourcing is also increasing. The use of variable pay and signing bonuses is becoming ever more present to meet current needs while helping to hold down permanent increases in employee compensation. There is a huge cultural shift going on throughout the District in the way management approaches cost containment, and its vigor is still intact.

Turning to the nation, we find ourselves in a very favorable situation, just to introduce a little joy into these discussions. [Laughter] Demand has moderated but it is still solid, and developments on the supply side have been surprisingly positive. Producer prices have fallen for five straight months; the last time that happened was in 1952. Consumer prices are rising at a slower pace this year than last. The unemployment rate is as low as it has been in 24 years. Nonetheless, there are legitimate concerns about what might go wrong, particularly in terms of overheating of the economy and upside inflation risks, and I share those concerns. But I also see and hear what is going on in the real economy in terms of productivity increases and price containment. As I weigh the two sides, I feel comfortable with the wait-and-see approach that we have followed in recent months.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. As was the case the last time we met, the economy of our southeastern region also looks very much like the nation's, after having led the nation for five plus years earlier in the expansion. Sixth District economic growth appears to have moderated somewhat during the second quarter, primarily reflecting some softening in manufacturing and to some extent in the single-family real estate sector. Our regional survey of manufacturing indicates that the proportion of firms reporting increases in production and shipments declined significantly, and there was a sharp falloff in new orders. Looking ahead, however, expectations were for increased orders and backlogs. Reported plans for capital spending over the coming six months also declined. Underscoring the comments Ed Boehne just made, I too am struck by the frequency with which corporate CEOs continue to tell me that their investment spending is driven by the pursuit of gains in productivity and efficiency to protect their margins rather than to increase capacity. Regional retail sales, while on average slightly above year-ago levels, seem to have slowed somewhat or at least to have paused. At the same time, we are told that inventories are at desirable levels, with only a few retailers reporting somewhat higher levels. The tourism and hospitality industries, which are particularly important to our region, continue their solid growth. Near-term bookings in our major tourist cities are now reported to be up between 5 and 20 percent. For example, the huge Opryland complex in Nashville, which added 20 percent capacity just recently, stays essentially full with spillover to other hotels in Nashville. Wage pressures across our regions are mixed. The tightest markets are those with the highest percentage of high-tech employment and the hospitality industry, which has been tight for quite a while now. Stories about the role of competition in holding down price increases do not seem to change very much from those we have been talking about for more than a year, although I recently had several CEOs tell me that they are beginning to see pressures on margins, and they are expressing doubts that they can continue to get the productivity gains they have seen recently.

Our view of the national economy is very similar to that of the Greenbook this time. It is now quite clear that the expansion slowed significantly in the second quarter. We, too, look for the pace to pick up again in the last half of the year, pushing year-over-year growth to about 3-1/2 percent. Like others, our best guess is that the slowing is likely to turn out to be a pause or catch-your-breath period rather than a fundamental slowdown. The ingredients for renewed vigor in consumer spending seem to be in place and, absent a significant correction in asset prices, we could get a sizable surprise on the upside.

What concerns me most, consistent with what others already have observed, is that our own forecast and most other forecasts show a gradual upward drift in inflation at the end of 1997 into 1998 and even into 1999. If we are really committed to a forward-looking preemptive approach to policy and if we are satisfied that we have corrected for what has been an overestimation of inflation in most of our forecasts in recent times, then in my view we probably will need to adjust policy further sometime soon. We will need to do so to hold our inflation and credibility gains before we get behind the curve, as we have so often in the past. In my mind, the risks of being wrong in our forecasts and getting somewhat slower-than-expected growth and lower inflation seem quite small. Accordingly, a forward-looking preemptive approach to policy is quite consistent with our longer-run objective for controlling inflation that I hope we will embrace more firmly as we talk about these issues during the remainder of this meeting. Obviously, a preemptive approach to policy to guard against an expected upward drift in inflation, which is present only in our forecasts and cannot yet be seen in our current data, increases the burden on all of us to provide skillful explanations of our policy actions. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. The Ninth District economy remains remarkably healthy overall and rather than go into details about that now familiar story, let me report on a breakfast meeting that we had last week with some 20 or 30 business and community leaders from the Twin Cities. They were representative, I think, of the Twin Cities economy, although certainly not a perfect reflection of it. Several themes came out of this breakfast. One is that the degree of tightness in our labor market cannot be overstated. There were widespread reports of great difficulty in finding workers, and some of these firms, of course, are employing people District-wide and in some cases nationwide. I think it was clear that this tightness is now being reflected in wage and benefit increases, and that incentives like signing bonuses, retention bonuses, early qualification for participation in 401(k) plans and so on are becoming increasingly commonplace. A second theme was the importance of international trade to many of these businesses. There were generally favorable comments about such trade. The protectionist sentiment that rears its head from time to time in the District was not evident. There seemed to be a general appreciation of what trade can do for an economy. Certainly, most of these business leaders feel and believe that globalization is a big issue, and it may be the single biggest factor in their minds as to why it is difficult to raise prices in the current environment. That is a summary of what came out of that meeting.

As far as the national economy is concerned, my view is generally positive in the sense that I think real economic growth will continue at a satisfactory pace. My own numbers are not very different from those of the Greenbook, maybe a bit more optimistic as far as real growth is concerned. Where I become concerned is that if we believe the Greenbook forecast, then it seems to me that an acceleration of inflation is increasingly likely at some point. Our forecasting model, which is a VAR model unencumbered by judgment, [laughter] produces the same result. In listening to the staff presentation on the outlook in conjunction with the prospective inflation situation, I found two things particularly discouraging. As I understood the presentation, were it not for a projected decline in the markup of prices over unit labor costs, we would get a more discernible increase in inflation. So, in part the staff is banking on a factor that to me seems by no means to be a foregone conclusion. The second thing that I found discouraging about the forecast is that after some analysis and thought, the staff concluded that potential growth on the supply side is no more rapid than they thought earlier. This means that despite the business community's view that productivity is rising rapidly, there apparently is not much evidence that that is the case.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you, Mr. Chairman. I am going to characterize reports around the Fourth District as mixed. All of the large metropolitan areas and most of the medium-size metropolitan areas are not mixed at all; their local economies are operating flat out. But a number of smaller communities around the District and some counties still report unemployment rates of about 9 or 10 percent. My impression in driving through those counties is that such unemployment rates might translate into only 1 or 2 people, [laughter] but still--

CHAIRMAN GREENSPAN. If you mean a 9 percent unemployment rate with a labor force of 2, that raises a very interesting mathematical question!

MR. JORDAN. Construction activity is reported to be booming throughout the District in that there are no unemployed construction workers. Resources in that industry are so tight that many people cannot get bids on construction contracts. There was a recent effort to secure bids for the Cleveland Browns' new football stadium, and they came in well over budget. It is now reported that the whole project may cost $100 million more than the first estimate when it was agreed to build the stadium. Three years ago, we negotiated a guaranteed maximum price on our building project. I am now told that we would no longer be able to get a guaranteed maximum price. So, I'm glad that we negotiated it when we did, and in fact the cost came in under budget. Under current circumstances, the project would be much more expensive.

Retail spending is reported to be definitely softer. who is associated with a national retailing company but tries to assess what is happening at the stores in our region, indicates that earnings are coming under very severe pressure. The main problems that he sees are in imported inventories. Such imports account for about 70 percent of the problems with inventories insofar as the latter relate to filling orders and production pipelines.

Labor contract settlements have been coming in with increases of around 3 to 4 percent in most cases. There clearly has been an uptick from previous settlements, so that the period of successive contracts coming in somewhat lower than prior contracts is definitely over. We had one construction union contract that went to arbitration and came in at 4.8 percent. We all hear the same talk about labor shortages in our Districts, and I will not go further on that. We have heard some talk about job fairs about which I am a bit puzzled after listening to some of the reports around the table this afternoon. Columbus city officials went to Boston to hold a job fair to recruit people and Cincinnati officials went to San Francisco. I hope they had a good time [laughter] because it is not likely that they hired many new workers.

CHAIRMAN GREENSPAN. Their recruitment efforts are increasing revenues in the tourist industry.

MR. JORDAN. We are told that there is no backlog in orders of steel, basically because new domestic capacity is coming on at a time when imports continue to be very strong and there are downward pressures on prices. One director feels very strongly that plant and equipment spending is going to slow, mainly because he says the motor vehicle companies are going to be winding down their spending on new capacity. I think he is talking principally about domestic companies. Communications companies in one of our metropolitan areas said that their yellow-page listings are running at an all-time record, especially business listings, which they said are rising very sharply. Phone line installations are proceeding at rates above previous records. Bankers are telling us that earnings are good but they are worried about not being able to maintain these earnings. Their margins are getting squeezed, and the quality of their loan portfolios is deteriorating. Everybody is talking about very aggressive bidding for real estate deals that they would not have considered not that long ago. We hear more reports that speculative residential and commercial projects are getting funded, mainly as banks try to achieve their earnings objectives for the year. Down in Kentucky, horse farmland prices are jumping. [Laughter] Next year I will say they are galloping! We are told that land that was running $3,500 to $3,800 per acre in 1996--these are horse farms--was recently selling for $4,500 to $5,000. So, there has been a significant notch up. Two of our directors have argued that inflation is understated. They claim that many discounts that they had become used to and regularly expected are simply no longer available.

Let me shift to some thoughts about the national economic environment in which we find ourselves. Often in the past when we have talked about recent and prospective near-term developments, we have given attention to such things as inventories, trade statistics, and the like.

Usually we try to look through the statistics for the past couple of years and the forecasts for the next couple of years in an effort to discern the basic trends in productivity, labor force growth, labor force participation, and those kinds of things. I want to focus on a much longer-term perspective for a few minutes. The business cycle dating committee at the National Bureau of Economic Research says that this expansion is now past its seventh year. Without that eight-month contraction associated with the Gulf War, they would be saying that we have just finished 15 years of expansion. This period generally has been characterized by a rising participation rate in the labor force, a declining unemployment rate, a concurrent downward trend of inflation, and even a recent improvement in the saving rate. There have also been increasing returns to capital relative to returns to labor associated not only with increased capital inflows but a domestic investment spending boom. Certainly, at least some of these good results are due to good policies. I think even our most severe critics would give us some credit for helping to make this economic performance come about. It was not all luck, and it was not all technology and innovation.

Looking back, if the past 15 years had been characterized by several 2- to 3-year stop-and-go cycles and/or if the inflation rate had averaged, say, 5 or 6 percent through this period, I think we would all agree that standards of living would be lower today, the capital stock would be smaller, and overall the economy would not look and feel nearly as good as it does. If 5 years from now we are talking about an expansion that is approximately 20 years old, it will be because the basic trends that have characterized the last 15 years have been maintained.

Instead of asking how we can keep inflation from going up, we could pose the question simply by asking how we might improve the chances that the expansion will last another 5 years. Part of our answer probably would be that a necessary but certainly not a sufficient condition is to prevent the escalation of inflation. Some of the Fed watchers--and some of us, too--who look back on what we did in 1994 have characterized those actions as preemptive anti-inflation measures. But it would be just as accurate to say that they reflected a preemptive anti-recessionary policy. That is because had we not done what we did, I believe we could make a very good case that we would have had a 1996-1997 recession. If we had failed to act in 1994 and inflation had accelerated, we would today be facing a higher unemployment rate than we currently have, a lower level of output, less overall capacity, and the economy would not feel as good. So, we were preemptive in the sense of being anti unemployment and preserving growth.

When we turn to our future prospects, if we state our objective as minimizing the risk that the year 2000 will turn out to be a recession year, I think we would argue that it is necessary but not sufficient to prevent more inflation from emerging in 1998 and 1999. If we are successful in doing that, employment is going to be higher and output and standards of living are going to be higher when we get to the year 2000. This is going to be a richer country. The frustration comes when we look at policy options for the near term, for the next year or two. The latter often involve raising the unemployment rate to prevent inflation, but the ultimate objective is preventing the emergence of a recession and unemployment. Sometimes it must sound to people out on Main Street that we had to create unemployment in order to prevent unemployment. I think we need to find ways to cast our policy alternatives and to communicate our objectives in a manner that does not involve retarding growth and raising unemployment, even for an interim period. There are ways of thinking and talking about the interim objective of stabilizing the purchasing power of money that do not involve excess supply of or demand for output, or excess supply of or demand for labor. I think that would be a useful thing for us to be working on as we struggle our way to the year 2000. Thank you.

CHAIRMAN GREENSPAN. Governor Rivlin.

MS. RIVLIN. I had somewhat the same instinct to look back that Cathy Minehan had, but because this is my first anniversary meeting, so to speak, I looked back to my first meeting in July a year ago. In the Greenbook for that meeting, the following points were made: GDP was growing at a rate well above trend, but the rate of expansion was expected to slow to trend and, indeed, second-quarter growth last year turned out to be even stronger than the Greenbook predicted. Consumption, investment, and housing were all described as strong but expected to slow. Last year's Greenbook had a tone of some surprise at the strength especially of consumption and housing. Labor markets were described as very tight, but demand for labor was expected to moderate. The unemployment rate was then 5.4 percent, and it was expected to level out at around 5.5 percent. Concern was expressed about prospective wage increases, employment cost increases, a rise in the minimum wage and its impact on wages more generally --the minimum wage legislation had not passed yet, but it was expected to--and about prospective increases in the CPI. But the actual CPI forecast was shaded down a little on the basis of then-recent experience. In addition, it was boldly stated that the stock market was seriously overvalued.

A year later, what have we seen? We have seen the GDP experience some slow quarters and some fast ones, but on balance it has been stronger than was forecast a year ago. It is still expected to slow to trend but not quite as rapidly as was thought last year. Labor markets are even tighter than anticipated and actually are expected to get a little more so, with the unemployment rate leveling out at about 4.5 percent instead of about 5.5 percent. Concern is still being expressed about the outlook for wage increases, employment cost increases, another round of minimum wage hikes, and prospective increases in the CPI. But the forecast of the CPI is again being shaded down a bit. The stock market is being described even more emphatically and for good reasons as seriously overvalued. We now have a forecast of a decline in stock prices, but not a very imminent one.

What have we learned over the past year? I think we have learned to be cautious. The tone of the current Greenbook is considerably less sure of itself than it was a year ago. We have learned that the economy is less inflation-prone than we thought. After another year of low inflation, we can be more confident that expected inflation will be low. But the risks of inflation are still there, and almost everybody around the table is emphasizing those risks. I think it can be said that the cost of waiting has proved to be less than anticipated. We are all aware of that, but there is also a view that we may be about to run out of time. We have learned that tight labor markets have benefits. They cause people to use labor very effectively, and we have heard examples of that around the table even at this meeting.

We have not made a lot of progress toward solving the fundamental puzzles. The question of why wages and benefits are not rising faster is still there, and the job insecurity hypothesis propounded by the Chairman a year or so ago seems perhaps a little less plausible after a year of more plentiful jobs. The puzzle of why prices are not rising more, given the labor cost increases, is still there. One of the strongest contributions clearly has been the downward pressure of import prices stemming from the strong dollar, but that effect seems to be coming to an end. We do not have a very good analytical explanation for the anecdotes we keep hearing. Those include the perceived inability of firms to make price increases stick, even in thoroughly domestic markets and quite local markets. That puzzle is still mystifyingly there. Productivity remains a puzzle. The circumstantial evidence still points to an acceleration in productivity growth, possibly associated mainly with the large investments in computers and associated changes in production processes, with other types of capacity increases, with the tight labor markets themselves, and with a greater flexibility in the use of labor. But we really do not know, and the usual statistics are not helping us at all. I think we come down to a contest between the optimists and the pessimists. I tend to be one of the optimists. I think we still have to be very vigilant about inflation, but I would be inclined like Ed Boehne to be a little more on the side of wait-and-see. I do not think we have made a lot of progress on the analysis that will tell us more than we get from being optimists or pessimists.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Over the last couple of months, growth of the Texas economy has begun to pick up steam. In the Eleventh District as a whole, employment growth is once again outstripping that of the nation after both had converged for a period of about a year and a half. In addition, it is becoming increasingly difficult to find any pockets of weakness to report about. If anything will put a damper on future growth, it is likely to be the continued tightening of labor market conditions.

I, too, had breakfast last week. [Laughter] I had breakfast with the senior executives of three Dallas-based high-tech firms. It was not long before the discussion turned from overall business conditions to labor market turnover and the methods they were using to deal with the loss of key employees and the shortage of replacements. There was talk of retention bonuses to match or top the signing bonuses offered by competitors, of drastically increased incentive bonuses, indeed, anything to meet the market even to the point of scrapping completely the compensation and reward systems that had been in place for many years. My first reaction was to think that somehow this new attitude that "the sky is the limit" on pay scales would have to be inflationary if it persisted. But within a few minutes the conversation turned to the reengineering efforts that these companies were engaged in. These efforts were driven by a need to continue dropping their final product prices by 10 to 20 percent per year. If competitive forces are bringing about 10 to 20 percent deflation in product prices, I have about decided that I am not as worried as I was that rising wages could be causing inflation.

The energy industry and all the industries that service it are running at full capacity in our District. Oil drilling remains profitable even with the lower prices that have prevailed in recent months. Thanks to improved technologies, drilling is profitable for some companies with prices as low as $15 per barrel; with prices above $19, everybody I meet in the energy business seems to have a smile on his face. The Dallas Fed has just lost one of its head office directors, who runs an energy services machine shop, because he is simply too busy to attend the board meetings.

Construction activity continues to strengthen and a few of my contacts in that industry are starting to talk about the beginnings of a possible boom in commercial construction. Hardly a day goes by without an announcement of a new office or other commercial project. Dallas may have the most empty downtown in the nation, a 33 percent vacancy rate versus 13 percent nationwide, but it now has a suburban vacancy rate below the national average. With the supply of such space fixed over the short run, rents have risen sharply to reflect the growth in demand. It is likely that the rise in new construction activity will put a cap on rent increases, and later the added capacity will likely reverse the inflationary impact of the recent rent increases. About a year ago, I mentioned that our commercial real estate market had turned from a tenant's market into a landlord's market. One of our Beigebook contacts just reported that "it's a scary time to be a tenant right now." In fact, one of our head office directors may be forced to move his office headquarters to suburban Houston unless he is willing to double his rent payments when his lease expires shortly.

The Mexican economy continues to improve, with positive spillovers for Texas. We get reports that more Mexicans are making trips north for shopping. Lately, they have been showing up at higher-end apparel retailers and even at car dealerships. Mexico's improved economy has led to renewed growth of Texas exports to Mexico. The recent boom in Mexican export-focused maquiladora manufacturing has attracted several high-tech electronics and computer manufacturers to the El Paso/Juarez area, thereby generating a new label, "Chilicon Valley," for the region. [Laughter]

This weekend's election in Mexico is generating more than the usual amount of uncertainty because the ruling party could possibly lose control of the legislature. The general feeling seems to be that the outcome of the election will have little economic impact. This view may be too optimistic; we'll just have to wait and see. Given the importance of Mexico to many businesses in Texas, concerns about the election outcome are one of the few worries in our area.

As for the national economy, I don't have any information or new insights that you do not have or have not heard before. I guess the main difference is in my interpretation of that information and, perhaps, Ed Boehne's. When I read over the transcript of our May meeting, I was struck by the dovish tone of my remarks, which makes me uncomfortable, being the hawk that you all know me to be. I realize that only hawks get to go to central banker heaven, and I want to go there to be with all my friends around this table! [Laughter] So, let me assure you that I have not lost my inflation-fighting zeal. It's just that I believe we are already winning that war, and for some reason we are having trouble accepting our success. Maybe we feel that we do not deserve the gain because we have not suffered the pain. Something is different in this economy. It may not last, but it already has lasted much longer than we expected. At the last meeting, we had four straight months of declining PPI; now it is five. At the last meeting, we had two months of .1 increases in the CPI; now it is three. The two price measures have increased significantly less or have declined so far this year, as have other broad measures of inflation. Neither is there a buildup of inflation in the pipeline--commodity prices, oil, gold, steers, wheat, whatever. The yield curve is lower and flatter, the dollar remains strong, and the bond vigilantes have eased long-term rates recently. Sooner or later, the tight labor markets will probably spill over into higher prices, but that prospect seemed imminent a year or more ago.

In summary, the economy looks too good to be true. I know how these stories usually end when people say something is too good to be true, but perhaps they don't always end as expected. Yes, Cathy, we are a learning organization but with a long and variable lag. [Laughter]

CHAIRMAN GREENSPAN. Governor Meyer, top that if you can!

MR. MEYER. That is a tough act to follow. I read the recent data as consistent with a slowing in second-quarter growth to near 2 percent. I view this in large measure as a payback for the surprisingly robust first-quarter growth. More importantly, the fundamentals supporting aggregate demand, in my judgment, remain very positive: there is solid momentum in income and employment; financial conditions are generally favorable, and measures of consumer confidence have soared to new highs. In the absence of a change in policy, the fundamentals appear to support the Greenbook projection of a rebound to well-above-trend growth in the second half and continued growth near trend over 1998. As a result, the unemployment rate is likely to trend lower in coming quarters from an already low level. While this would normally suggest an increased risk of higher inflation, the staff trimmed its inflation forecast in this Greenbook. This highlights what we have come to appreciate as a very unusual period from the perspective of the relationship between inflation and unemployment. The staff forecast represents a careful attempt to balance the inflation risk stemming from prevailing and projected labor utilization rates with a continuing exceptional performance of inflation. My first reading of the Greenbook, however, was that the staff had somehow mistakenly combined an output path from a buoyant economy run and the low inflation path from an alternative soft economy run. True, there remains some upward drift in inflation in the staff forecast, but most of the acceleration over 1998 reflects the small rise in oil prices following the sharp decline this year and a rebound in non-oil import prices after a further fall in the first half of this year. Compensation per hour, on the other hand, edges up only .1 next year despite an unemployment rate that is nearly one percentage point below the staff's assumption of the NAIRU.

Let me focus on two positive elements in the inflation forecast that support the Greenbook story and two concerns that nevertheless make me very worried that prices may rise more than the Greenbook projects. The first positive factor is the influence of an excellent inflation performance this year on wage determination and on inflation next year. Overall, inflation this year is benefiting from falling energy prices, smaller increases in food prices, and to date still declining import prices. Next year, wage change and core inflation will feel the benefits.

That still leaves unanswered the question of what is holding down wages and core inflation this year despite the low unemployment rate. In my never-ending effort to reconcile low inflation and low unemployment, I have been placing increased weight on the contrast between the apparent tightness in the labor market and the seeming absence of comparable tightness in the product market. This is illustrated by the fact that while the prevailing 4.8 percent unemployment rate is below most estimates of NAIRU, the prevailing capacity utilization rate is only a shade above its estimated natural rate. Looking at the historical record of unemployment and capacity utilization rates in previous cycles, one reaches the conclusion that this disparity is a unique feature of the current episode.

One way of appreciating the significance of this disparity is to view the unemployment rate in a price/price specification of the Phillips curve as a proxy for overall excess demand across both labor and product markets. Given that the excess demand in the labor market is traditionally mirrored by a similar degree of excess demand in the product market, the unemployment rate is generally a reasonably good proxy for economy-wide excess demand. In the current case, however, the unemployment rate at best is capturing tightness in the labor market and hence overstating the economy-wide excess demand. Another way of seeing this is to compare inflation forecasts from the Phillips curve using the unemployment rate to specifications using capacity utilization rates. This disparity most likely reflects one of the key and perhaps under-appreciated features of the current expansion--the robust pace of business fixed investment, notably equipment purchases and particularly purchases of high-technology equipment. The result is that industrial capacity is increasing at the fastest rate in 28 years. The net effect is that while labor markets are tight, the increasing productive capacity associated with the investment boom has prevented excess demand from arising in the product markets. The much reported absence of pricing leverage that firms emphasize may be another implication of the absence of excess demand in the product markets. Nothing gives a firm market power like excess demand. I also suspect that firms have responded to the absence of pricing leverage by being less willing to bid aggressively for workers, thereby helping to explain why wage change has increased so modestly despite the prevailing tightness in labor markets. The above considerations do encourage me to expect continued modest inflation over the forecast horizon.

Let me conclude, however, with two reasons why I remain concerned that inflation may nevertheless increase more than projected in the staff forecast. First, the unemployment rate averaged 5.4 percent in 1996, close to most current estimates of NAIRU. It has fallen significantly below this threshold for only a couple of months. The rise in wage change we would normally anticipate from the prevailing unemployment gap may therefore be just ahead. As I emphasized above, the role of the capacity utilization rate is in my view only to damp rather than to block entirely the effect of the lower unemployment rate. Hence, both time and still lower unemployment rates pose a real threat of higher inflation. Second, a coincidence of temporary factors, including declining import prices associated with the appreciation of the dollar, a slowdown in the rise in benefit costs, and most recently a decline in energy prices have been contributing to restraint in the increases in compensation and consumer prices. These factors are likely to be of diminishing importance going forward.

On balance, in the absence of further policy changes I expect above-trend growth over coming quarters, a further decline in the unemployment rate, and still modest inflation. Perhaps the main message here should be that this would be a remarkably benign outcome. But we get paid to worry and we get paid to hold the line on inflation. I am concerned that the increase in inflation may be somewhat sharper than projected in the Greenbook, and I believe that the single most important risk factor in the forecast is the potential for a significantly sharper rise in inflation.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. Thank you, Mr. Chairman. A lot of the suspicions that we discussed last time seem to be a bit more confirmed. We have had some slowdown in consumption, at least for March through May. Inflation appears to have remained well behaved. It seems to me that the questions now before us cluster into two areas. The first is whether we really are experiencing a slowdown in the expansion. If so, how much? Is this soft landing more of a touchdown to be followed by a takeoff in the next few months? The second area of questions clusters around inflation. How is it possible that the inflation record has been so favorable? How much longer can we reap the benefits of this benign inflationary environment? I have structured my comments around these two sets of questions.

First, with respect to the factors contributing to the length and perhaps to the upcoming strengthening of this expansion, there is certainly the behavior of the labor market, as has already been discussed around the table today. People appear to be coming out of the woodwork to join the labor force. The consistent and now widespread reports of labor shortages, hiring bonuses, and retention bonuses are impressive. During the intermeeting period, I made several trips to the Midwest and the West, and I met with several groups here at the Board. I have been particularly impressed by the labor shortage stories. I never thought that I would be hearing in-migration suggested and accepted as the answer to Iowa's economic challenges. [Laughter] Business people are now talking about and recognizing that they not only have to locate and transport new workers, but they also have to train unskilled workers to meet their production needs. Clearly, this indicates that the labor market is going to be strong for a while. I am not sure that I can quite buy into the Greenbook forecast of a 4.6 percent unemployment rate through 1998, but even if the rate drifts up a bit, it is clear that the U.S. job machine is alive and well. Strong labor markets mean that people have the wherewithal to spend, and we certainly are seeing the evidence of that in the aggregate numbers for retail sales and housing.

The second area that has been contributing to the strength of this expansion is business fixed investment. I think the fundamentals remain for growth in that area. The overall cost of capital is low for short-term and long-term debt financing and for both internal and external equity financing. There is no capital shortage and certainly no credit crunch. Profit levels have been holding up, and that puts management in the mood to expand or at least to buy more equipment to improve productivity. The low inflation environment, I believe, is especially conducive to capital investment. In fact, declining prices for computers and information technology make these investments particularly viable in the presence of tight labor markets. The gains in the productivity of capital seem to be encouraging additional investment. The technology story has been well documented, and I think firms are learning to manage inventories more closely. These two factors seem to feed on each other: business investment creates job opportunities, and a strong labor market allows continued growth in consumption and aggregate demand. I guess we have located or we are at least getting close to a zone of sustainability.

The second set of questions that I identified relates to inflation. Why is it that we have had such a favorable inflationary performance recently? That performance probably can be attributed to a number of factors. The strong dollar accompanied by low-inflation imports has helped to control domestic inflation. Increased business fixed investment has added to capacity and improved productivity. The macroeconomic weakness of the economies of some of our foreign trade partners has alleviated commodity price pressures. There have been no recent energy or food shocks, and the farm outlook for 1997 is quite favorable also. Now, lest we get too cocky, we should remember that the BLS has made some improvements to CPI measurement, shaving several tenths from the index. President Moskow drew our attention to this. While this is quite a rosy outlook, I do see considerable risks: The economy could turn out to be stronger than we anticipate. Consumers could reemerge and go on a spending spree. As the international sector strengthens, we should expect it to be less of a drag on GDP growth, but concomitantly that may bring back some inflationary pressures. With respect to inflation, at some point wage pressures will start to bite. Productivity improvements can only absorb so much. I believe a key area for us to watch is profit margins. If we were to see significant profit declines, investment activity would slow and that could trigger a sizable stock market correction. The possibility of such a development was certainly highlighted in the Greenbook.

In sum, while we have seen a bit of a slowdown in the expansion, it may already have come and gone or it may be on the way out. It does seem to me a bit too soon to tell, but the risk is that growth may be more than has been anticipated.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, economic growth in the Second District has slowed slightly over the past six weeks, and the growth that is taking place is mainly in New York City. Economic activity is rather stagnant in the rest of New York State, and growth has slowed slightly in the northern part of New Jersey.

We do not have great differences with the forecasts of the other members so let me talk a little about where I think we are. Because monetary policy works with long and variable lags, as we all know, we must consider what will happen 18 to 36 months from now, not what is happening today. That puts us in the forecasting business. All of us believe in price stability, even though we have not agreed around the table on precisely what that means beyond your working definition of it, Mr. Chairman. I find increasingly that the degree of anxiety of Committee members varies with their belief in traditional forecasting methods. All are forecasting some increase in core inflation later this year and in 1998, but all have been forecasting higher inflation for the last two years and it has not happened.

Those of us who are perhaps least uncomfortable with watching and waiting are those who, in my words, concentrate on knowing what we do not know. We know that for the last two years or so the forecasting models have not been working well, witness how bad our forecasts have been. What we do not know is why they have not been working. My feel, as was discussed at length at the last meeting, is that we have been underestimating and we continue to underestimate productivity, but we aren't sure of that. In fact, in meeting after meeting with the exception of March, the Committee has been fretting but waiting. I think that many of us have felt that the risk of waiting has been quite low because, as measured by the real fed funds rate and in other ways, our policy is in fact rather tight; it certainly is not loose. Therefore, I believe that we can afford and should continue to wait until we have greater certainty about what really is happening in the economy. Some members of the Committee are very concerned about our credibility if we wait, and certainly they should be concerned if we wait too long. But I think credibility is not the result of raising rates whether needed or not; credibility is doing the right thing. In my view, we have been doing the right thing. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Thank you, Mr. Chairman. By my count, I am the cleanup hitter here in this excellent tour de table. Nearly every thing has been said, and I will be very brief. It does seem that we finally are getting a slowdown in the expansion, albeit a quarter later than expected. The inflation news continues to be very good, with none of the indices surging, a few beginning to show signs of drifting upward, and most still either flat or drifting down on a 12-month change basis. I continue to try as best I can to scan carefully for emerging pressures in the inflationary pipeline. I've seen very little pressure for a number of quarters, but recently there have been straws in the wind that some new pressures may be starting to emerge such as the expected increase in the level of import prices and so forth. The glaring exception, of course, is our remarkable labor market; everybody has talked about that. So far, price levels have been very little affected by the low unemployment rate and the rising ECI, as our unit labor costs of production have remained very stable. However, the Greenbook is now projecting a substantial and sustained acceleration in unit labor costs beginning almost immediately, and time will tell about that. While the condition of the economy today remains excellent, tensions and pressures continue to build as one looks forward over our forecast horizon. If the rate of expansion remains moderate, this remarkable era could continue well into the future. However, if growth should reaccelerate strongly in the short run, the Committee may need to reassess conditions quickly and critically. Looking further out in our forecast period, I would like to be more confident than I am of the Greenbook's projection of substantially slower growth through 1998. It seems quite likely to me that growth will exceed the Greenbook projection over the forecast period, especially if there were to be no additional monetary restraint until the middle of next year. For now, however, it is steady as she goes. She is going very well so far. Thank you.

CHAIRMAN GREENSPAN. Thank you. As you pointed out, we have come to the end of this very interesting discussion. We now move to something quite different but also something that is likely to be quite interesting. I call on Dave Stockton to lead us through this set of issues.

MR. STOCKTON. Thank you, Mr. Chairman. [Statement--see Appendix. 3/]

CHAIRMAN GREENSPAN. Questions?

MR. JORDAN. I don't know if I can convert this into a question, but I will make a comment that ends with a question mark.

CHAIRMAN GREENSPAN. I will rephrase: Questions or comments?

MR. JORDAN. Thank you. It was an interesting paper and it led to provocative and

3/ Secretary's note: In Mr. Stockton's statement and the discussion that followed, reference was made to a staff memorandum to the Committee dated June 19, 1997, and titled "Toward a Working Definition of Price Stability." A copy of the memorandum has been placed in Committee files.

useful discussions with my staff. I was glad to see not only the paper but to have the topic included on the agenda. When I approach the subject of various price statistics as potentially useful information for policy, I cannot help but think back to the time when I was a Boy Scout and had to learn the difference between magnetic north and true north. How much adjustment you make depends on where you are on the globe. The adjustment is important because no one wants to go to magnetic north. Likewise, we use these statistical series to guide us toward some place where we want to go, but it is also important that we not lose sight of where that place is.

The paper starts by approaching the issue of how we measure inflation. I start a different way. I start by asking how I should define the condition of noninflation because prices are changing all the time to some degree. Noninflation to me is a condition in which the weighted average of those prices that are rising is just matched by the weighted average of those prices that are falling. This immediately gets to the question, prices of what? How do we want to use the concept of inflation in talking about what we are trying to prevent or minimize? In a gold standard world that was fairly easy because people in such a world were conditioned to the notion that inflation meant it took more gold dust or nuggets to buy the same thing. Unfortunately, we in the modern world have gotten into the habit of talking about inflation in terms of rising prices of things instead of an increase in the number of money units it takes to buy those things, which is really what inflation is and what we want to measure.

Regarding what to measure, we are condemned to live in a world now and forever in which we can only distribute and consume what we produce. Brezhnev thought that such a world was the result of a capitalist plot; he never discovered markets. Our inflation measure has to relate to output over time, which does not mean we should ignore asset prices. Ultimately, it has to be a weighted average of the prices of things that people buy and consume over time. Some of those prices always seem to go up; tickets to Cleveland Indian baseball games certainly do. Some prices go down; computer prices certainly do. We are trying to find some way to normalize all of that information about prices in the minds of people and get them thinking that, yes, some prices are always going up, some are always going down. We want them to see price changes as averaging out. That is what I mean by noninflation.

I think our price index has to be the broadest possible measure of output prices, but we also have to have information about asset prices. That does not mean that we necessarily want to include asset prices in our statistical measure. With regard to the relevant theory, Alchian and Kessel developed a theoretical framework about 30 years ago, and Alchian and Klein did further work in the early 1970s. The St. Louis Fed staff tried to put some empirical bones on that in the mid-1970s, using various statistical measures that introduced asset prices into the Alchian and Klein framework. About two years ago at a Bank of Japan Conference, Charles Goodhart went through all that theory again and he tried to develop an empirical measure for England using certain asset prices. So, there has been some work that one could build on. At this point, however, my judgment is that we would add more noise than we know how to process if we included asset prices in our measure than if we did not. We are better off seeking as broad a measure as we can of those things that are simply current consumables over time. Question mark. [Laughter]

CHAIRMAN GREENSPAN. Mr. Parry.

MR. PARRY. I don't have any questions either, just some comments. I, too, think this is a very good study, and it clearly is based on some first-rate empirical work. I like the use of the model-based simulations to illustrate the tradeoffs facing policy. At least to me, these simulations suggest that a flexible approach to pursuing price stability would not generate excessive variability in output. But more importantly, I believe that this study contains other useful insights as well. For one thing, it gives us a working definition of price stability. Measured in terms of the broad indices at least, a value of around 1 percent seems reasonable. Since inflation as measured by the broad indices is still rising at a rate of 2 to 2-1/2 percent, we clearly are not at price stability, and this, of course, is a fact that is brought out in the Bluebook as well. Moreover, the study shows that it does not seem to matter which index we choose. Focusing on one broad price index rather than another is unlikely to make a significant difference in the longer-term success of our policies, and I think the focus on the longer term is appropriate. Finally and perhaps most importantly, I would like the Committee to focus more clearly on the pursuit of price stability, which will require that we address some of the other issues raised in this study and also the list of issues that were in Dave Stockton's cover memo. Thank you.

CHAIRMAN GREENSPAN. I would like to raise a more fundamental question about this whole issue. It is not something that we need to address in the shorter term, but it does come up when we look beyond a 5-, 8-, or 10-year horizon. If we start to focus on price stability now, we should try to be aware of the problems that we may be confronting over the longer term.

First, let me raise a heretical issue. Is price stability really what we are after or are we after financial stability? Even more generally, going back over time we have tended to argue, I think correctly, that the objective of monetary policy is to create maximum sustainable economic growth, and we have argued, again I think quite correctly, that price stability is a necessary condition to reach that goal. But price stability may indeed be a proxy for something else, which I suspect is financial stability.

If we look at the data with which we are working, part of our problem as we have discussed before around this table relates to the fact that an increasing proportion of nominal GDP involves items whose prices, as we define and estimate them, have been undergoing very significant declines ranging up to 15, 20, or even 30 percent per year. I will argue tomorrow that industries accounting for 3 percent of the nominal GDP created about a third of the increase in the real GDP over the past year. It does not require much analytical insight to see that if these segments of the economy are increasing their nominal share of GDP and if they continue to do so, then at some point we will be looking at an average price level that is falling and could be falling quite significantly. I would argue that that is not deflation in any meaningful sense of the word. Indeed, the question really is whether that is something we wish to fight. The reason is that if we define price stability in terms of whatever price measure we are using and if we run into an increasing proportion of high-tech products with falling prices, we would be led by our price stability objective to inflate the economy because prices are falling. That clearly cannot make any sense.

One of the difficulties created by all of this is that it involves very tough conceptual and measurement problems for us. It is by no means clear exactly how we should measure price stability, given the prospect that it will become increasingly difficult over time to define what constitutes output and prices. I raised the issue at an earlier meeting and suggested that it really didn't matter all that much from a policy standpoint because it may well be that what we are endeavoring to do is to stabilize the inflation premium in long-term interest rates. In short, as

Jerry Jordan said, the question is whether we are looking at the inflation of prices or the decline in the purchasing power of money. In this context, even if we get to the point where we are not able to define very explicitly the unit of production or bundle of goods or services involved in particular nominal dollar sales and hence are unable to define exactly what constitutes price, there is no question that we will still have a nominal interest rate out there. An inflation premium is of necessity implicit in the nominal interest rate. We may not be able to define a particular price, but in the end we know that markets are operating on the basis of some notion of prices. When we move into the 21st century, what we will try to stabilize may in effect be the purchasing power of money, however that is measured.

The reason I raise these questions is not that we have to worry much about them in the current period, as I noted. All I wish to put on the table is the notion that, as we respond to the excellent paper by Dave Stockton and his colleagues, we bear in mind that it is a paper that really refers to the nearer term. The problems that we will be dealing with as we get beyond the turn of the century are going to be increasingly difficult to resolve and in fact to define. There is no conceptual problem involved in defining nominal GDP, and we can in principle calculate it down to the last dollar or even the last cent if we know how to measure it correctly. It is unambiguously defined. The unit of production is not; price is not. So, I think the problems that we will have to deal with in defining what we are stabilizing are going to increase in the years ahead. What I want to suggest is that we confront the question of whether we are trying to stabilize prices or trying to stabilize the financial system. That is where the issue of asset prices comes in; it is in a certain sense positioned on a continuum that begins with spot prices for units of goods and services.

In sum, I am speculating that we are going to have problems that are quite different from those that we have today. While I am not saying that these involve issues that we need to resolve today, I suspect that we will start to confront them in 5 years or certainly within 10 years, and they may very well affect our projections going out to, say, the year 2006. I also suspect that by around the year 2006, this very tricky question may involve what we are endeavoring to stabilize and may be the focus of our policy actions. My own guess is that we are going to be dealing with asset prices, the question of nominal long-term interest rates, and probably the outlook for nominal GDP as well. In any event, our task will surely be tougher than it is today, and the issue will be how we should proceed. For the moment, fortunately, that is not an issue. All this probably is violating President McTeer's view that we should just sit and enjoy it, but I did want to mention that I have a different set of worries. Tomorrow, I will raise the conventional worries.

MR. MEYER. In the theoretical framework, I think we should understand that it is one thing to measure and define price stability; it may be something else again to define an inflation target. I want to put on the table the view that, before we decide that we want the target to be price stability or what I might call price stability plus a small cushion, we still need to do a lot of research dealing with nominal rigidities, the potential flexibility of real interest rates, and whether a little deflation is more dangerous than a little inflation. I just want to throw that out.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. Thank you. I already mentioned to Dave Stockton that I thought this memo was extremely well done. I think it advances our knowledge and understanding of the strengths and weaknesses of the various indices. It helps to focus our attention on some of the questions we should be looking at, including some that you raised, Mr. Chairman. I also thought the memo made a good point in suggesting that perhaps we should be thinking about price stability as opposed to arguing and thinking about various inflation indexes.

One of the things I wanted to mention is my hope that some of the conclusions in the memo and some of our discussion here will find their way into the Humphrey-Hawkins report. I say that because I think we need to give some thought to conditioning people to recognize that we are thinking about a broad range of issues and trends as opposed to concentrating on just one interest rate. It is my impression that we are seen as focusing only on the fed funds rate when in fact we are looking at some longer-term issues and what monetary policy can contribute to sustainable economic growth. In my view, some airing of the issues that we are looking at would be a useful thing to include in the Humphrey-Hawkins report.

CHAIRMAN GREENSPAN. Let me just raise one caveat to that. If we were involved in an objective and wholly academic discussion, I would agree with that wholeheartedly. I am fearful that there are people out there who are looking for any reason to presume that a sound-money, hawkish view à la McTeer is the wrong view. That is regrettable at this stage, but we still have a very large bias among various members of the public toward inflation. I would be uncomfortable about opening up discussions in a way that might not be interpreted as an appropriately balanced view.

MS. PHILLIPS. I understand.

CHAIRMAN GREENSPAN. I would be very concerned that it would be misread as meaning that we have abandoned our objectives of a stable currency and stable inflationary pressures. Nonetheless, it is an issue that is going to emerge, and I do think we have to confront a lot of broadened policy issues in Humphrey- Hawkins testimony. I am a little nervous about the way the political system is operating. I do not want to say that our monetary policy has been exceptionally good, although I think it has in fact been quite good. That certainly has not stopped criticism in any material way, and frankly I find that worrisome. I don't know where that leaves us particularly, but caution is probably wise.

MS. PHILLIPS. I am thinking in terms of some of the conclusions of the paper, including how some of the price indices may move together and what their biases may be. I believe publishing some of that would be very useful.

CHAIRMAN GREENSPAN. It depends on where it gets us. If at the end of the day we raise more questions than we can answer, I'm not sure that would be helpful to us.

MS. PHILLIPS. Maybe not, but if we are never perceived as asking the questions, I think we will not be seen as a very--

CHAIRMAN GREENSPAN. That is a valid point; I agree with that. I think that bolstering the broad range of information that is already in the Humphrey-Hawkins testimony is a good idea. But the presumption that we are just dropping ideas into an academic environment for general discussion is not my notion of what we should be doing. President Melzer.

MR. MELZER. Thanks, Alan. I, too, want to thank the staff for a good job of analyzing these issues, and I also appreciate having this matter on the agenda. These are topics that we need to be talking about. I see this with a shorter-term focus than you were talking about, but I feel that we could benefit at the appropriate time by being more clear among ourselves and eventually with the public about our objectives and by being more transparent regarding what we specifically are trying to accomplish. So, I think we need to be looking at and talking about this sort of thing.

From that perspective, some of the things I took away from this analysis included, first of all, the desirability of focusing on a broad measure of inflation. That certainly raises questions in my mind about the focus that we as an institution have placed on core CPI. Even now, some of the analysis and some of the simulations in the Greenbook focus on core CPI and core PCE, and I wonder whether these measures are what we ought to be looking at in these longer-term simulations. We probably have created an impression with the public and the financial markets that core CPI is what we really care about. I don't think we need to change that impression in the near term, but I believe there's a good bit of feeling out there that core CPI is our focus; at least that is my sense.

I thought the insight with respect to rates versus levels was very interesting. Clearly, if we were going to go in this direction, then rather than debating what the ideal index would be and setting its level, it would simplify things greatly to recognize that the indices move broadly together over time and to focus on rates, realizing that we are a good distance away from price stability. That might be a good first step. I was also interested in the sensitivity analysis with respect to fluctuations of plus or minus 1 percentage point from a fixed target. In general, I feel that if we go in this direction, we have to be looking at the trend in inflation rather than a point estimate. Probably the way to capture that idea is to think in terms of some range around a particular rate. I thought it was interesting that the plus or minus 1 percentage point that most people would think about in terms of a reasonable range does not generate larger variations on the real side in these simulations than those we have experienced. In my view, one of the assumptions that one would have to question is the tradeoff between the inflation rate and the output gap. In fact, I suppose one could argue that if we had lower and more stable rates of inflation, we would also engender more stable output. I'm not sure that is implicit in the curve that the staff has in its chart. Finally, and Bob Parry made this point, even after taking account of the bias, we seem to be a good distance away from where we ultimately need to be to achieve price stability. That is the case no matter which of these measures we look at, even with these 80 percent confidence intervals.

In any event, I believe it is very constructive to be talking about this. I don't know when and if the time would be right to go public with something like this. I accept your judgment that now is not the right time. But, clearly, if we wanted to move in this direction, we would have to cut through some of this. In other words, we can continue to throw issues in the air that arguably need to be analyzed before we presumably have enough confidence to go in this direction. So, I have always viewed this sort of thing as having to be imposed from above when the time is right. It is almost like a corporate strategy where a decision is made and is followed by efforts to figure out how it should be implemented as opposed to wandering around in the weeds and thinking about all the problems that could come up. Clearly, this is not the right time, but we could study this forever and never be comfortable with all the questions that could be raised. Ultimately, if it is the right thing to do and the time is right, then we have to cut through the questions and move ahead.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. I have a couple of comments. First, I agree that this is a good paper and the right time to be talking about this issue. It is an issue that has to be put in the context, as you mentioned, of the more important goal of sustainable growth. When we put it in that context, it becomes a very important discussion item. From that perspective, what has been brought to the table is the realization that, regardless of the price measure we may have in mind, we are not at price stability. That is something we should keep in front of us, continue to talk about, and introduce to the public at some point so as to broaden its education on this issue. With that in mind, I think we should take the paper and this discussion to the next step, namely what it might mean from a policy standpoint and how we might proceed.

With regard to your point about looking further ahead, ten years or whatever, to anticipate what will be happening in the economy, I agree that conditions then will be substantially different. However, I am not convinced that prospective changes over that period will be substantially more pronounced than those we have gone through over the past 10 or 15 years. How we deal with the changes ahead is part of this discussion of how we measure prices and define price stability. We are constantly refining our thinking on that, and I think that is what we will have to continue to do going forward. In that regard, having this analysis and working definition of price stability is very helpful and can assist us in our discussions as we work toward making progress in achieving our price stability objective.

CHAIRMAN GREENSPAN. Let me raise a related question that is not on the table largely because, to my knowledge, nobody around this table supports the alternative in question. I am looking at page 2 of this memorandum. That page follows an executive summary comprised of several pages. The second sentence on page 2 under the heading "Theoretical

Issues Related to the Choice of the Appropriate Price Index" says in part that "the case for price stability rests on the belief that inflation is costly." There is general agreement around this table that inflation is costly and undesirable, but that is not a universal view. That view is not really addressed in this paper. To the extent that we want to go forward in our pursuit of price stability, we need to recognize the absence of a universal belief in the benefits of price stability. In this regard, I find that there has been a very major change in central bank politics. It is really quite remarkable that all central banks have seized upon this issue as crucial. Indeed, if we look at the communiques of the G-7 summits, they all take the desirability of price stability as a given. Yet, we have papers like the Akerlof-Dickens-Perry article and a similar paper in Canada that are raising questions about this basic policy objective. The notion that widespread support of price stability is a given and that all we have to do is to assert it is really not quite there. I looked at the word "belief" in the sentence that I quoted from, and it struck me that if I were writing it, I would have said "because the case for price stability rests on something other than belief." [Laughter] It rests on some greater or higher conviction. I hesitate because it is an interesting question.

VICE CHAIRMAN MCDONOUGH. But if you are a true believer, there is nothing stronger than belief!

CHAIRMAN GREENSPAN. That may well be, but the true believer often has great difficulty communicating the reasons for that belief to a third party.

MR. MEYER. Just to follow that up with some examples: Marty Feldstein has a paper in which he tries to demonstrate the importance of squeezing out the last bit of inflation to achieve low inflation, which he defines as 2 percent. All the countries that have zone inflation targeting have ranges of 1 to 3 percent.

CHAIRMAN GREENSPAN. Part of that is the bias question.

MR. MEYER. It is, but it is what I call bias plus a cushion. I think that is the issue that we really have to confront. We need to do a little more work on whether there are some costs that outweigh the benefits in eliminating that last, say, percentage point of inflation. In that regard, we should keep in mind that when we look at the literature on the costs of inflation, we find an enormous nonlinearity in those costs. They are very high at very high inflation rates. They are discernible for more modest inflation rates, but the fact is that below 8 or 10 percent inflation it is really hard to find that definitive evidence. So, I think we have a long way to go in our research to make that case very definitively, particularly for that last percentage point. I think we want to be a little cautious.

MR. PARRY. I have a feeling that Dave Stockton would not want to do that study again! [Laughter]

MR. PRELL. The emphasis is on "again." [Laughter]

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Just to add a brief observation on the most recent point that was made, I would agree that the importance of zero inflation is an article of faith among central bankers and that we still have a lot of work ahead of us to make that case in society as a whole. But that is not my main point.

I, too, thought that the paper was quite helpful. One of its main conclusions is that all the broad measures of inflation that were examined tend to move together over the long run but not necessarily in the short run. Therein lies a dilemma for policymakers. While we need to keep a focus on the longer term when we make monetary policy, we still make it in the short run and we have to have justifications that carry some short-run weight. Even if we ended up picking the "best" measure of inflation, there would be periods when it would lead us astray and some other measure or measures would be more accurate. Therefore, I think at least one avenue that we should pursue as we go further with this is to study the potential advantage of a basket of price measures that would enable us to monitor multiple price indices rather than hanging everything on one. The Committee faced a similar problem in the period leading up to Humphrey-Hawkins when we were supposed to target money. The question then was what is money? We had M0, M1, M2, M3, and I think at one time we had up to M8. At some point, one goes too far. My main point is that whatever may be the strengths and advantages of individual measures over time, in any given period a single measure can lead us astray. While it is a little untidy to look at a basket of measures, I think it would be helpful as we go forward to consider such a basket as at least one alternative way that we might proceed.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I also thought that the paper was very well done. It is a good step forward in addressing this issue, which is the type of longer-term issue that is important for this Committee to review from time to time. I was intrigued by Ed Boehne's suggestion of considering a basket of measures at least as one option. I was coming at it in a slightly different way. If we are going to choose one measure, I have a slight preference for continuing our focus on the consumer price index. If we are to have a basket of measures, I would say that the CPI has to be in that basket.

MR. BOEHNE. You can have it first among equals.

MR. MOSKOW. My preference for the CPI stems not so much from any technical superiority of that measure but from its familiarity to the public. Of all the inflation measures, it has received the most attention. If we were to switch the focus from the CPI to one other single measure, I think we would risk causing a lot of confusion and divert energy away from more productive efforts to educate the public on the importance of price stability. But as others have noted, it doesn't matter too much, according to the memo, which broad index we choose if we are to choose one. The reason is that if we stabilize one inflation rate, we tend to stabilize them all. And no matter which index is chosen, the simulations suggest that economic performance would be enhanced. So, the important thing is that we choose some index or basket of indices and then stick to the goals of first capping inflation and then moving inflation rates down until we achieve price stability, however we define the latter.

CHAIRMAN GREENSPAN. Governor Rivlin.

MS. RIVLIN. I, too, thought it was an excellent and stimulating paper. I don't think we've had a dissenting vote on that score. We do have to think a lot about where we put our marginal research effort. I guess the paper convinced me that I would not put it on refining measures of inflation. The broad measures are plausible and they all tend to move together in any event. I would concentrate on studying the costs and benefits of inflation because I do not think we have been able to demonstrate convincingly that the benefits outweigh the costs when we try to reduce inflation from a level near the current range.

To go back to Susan Phillips' point, I have the feeling that part of the criticism that we get for being too focused on inflation is that we have not explained it very well in the past, and we have not offered supporting evidence very well. In my view, our credibility would be enhanced, not undermined, by a serious discussion. Humphrey-Hawkins may not be the right venue for it, but the more we inform the public that there are some real issues here and we really are thinking about them, the more credibility I think we will have.

CHAIRMAN GREENSPAN. I suspect that the last couple of years are going to give us data observation points that will be very helpful to our case. What we have to demonstrate effectively is that the lower the rate of inflation, the higher the rate of productivity growth. If we can demonstrate that, we can make the case for low inflation; if we cannot, it is a very tough case to make, especially as inflation falls below Larry Meyer's 8 or 10 percent range.

MS. RIVLIN. There is a causality question here. You also have to look at whether low unemployment gives you high productivity growth and what the tradeoff is.

CHAIRMAN GREENSPAN. If you cannot demonstrate at least the covariation, then the causation issue never comes up. President McTeer.

MR. MCTEER. Rather than comment on the paper directly, I would like to comment on your point a moment ago about the sentence that has the word "belief" in it--the belief that inflation is costly. Your statement was that that belief may be universally held within the community of central bankers, who all want to go to central banker heaven, but not necessarily outside that small group. I will express a view that I believe is a minority view around this table. A lot of people have said that price stability should be regarded not as an end in itself but as a means to an end, and the latter should be maximum sustainable growth. While price stability is a means to that end, I think it is a worthy end in itself, and we lose a lot by not emphasizing that. It is a little easier for me to think about that distinction if I borrow what I believe is Jerry Jordan's view of the distinction between price stability and stability in the value of the monetary unit. The government issues something that we call a dollar, and it is our responsibility to take care of that dollar. People are using those dollars as a store of value, and I think we have something of a moral obligation to protect the value of that dollar regardless of statistical studies about whether 1 percent or 2 percent or 3 percent inflation might maximize real growth.

CHAIRMAN GREENSPAN. I think we try to make that point periodically.

MR. MCTEER. I believe we may overdo the point that price stability is a means rather than an end. I would like to go back to Henry Wallich's famous speech about the distinction between sound money and honest money. He made some good points there about honest money.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. As the person who may well have spent less career time puzzling over these issues, I probably have learned more than anybody around the table from this exercise. I have come to the simple conclusion that the differences among the primary indices that have been studied are quite small compared to our ability to control inflation and hit some price target.

I may be the most cynical of all the members who have spoken on the question of the public's understanding of our inflation goal. In my view, we are well short of any ability to explain why we need to squeeze out the last bit of inflation. I don't think we've gotten to first base in terms of achieving a general public understanding of the benefits of lowering inflation even from 2-1/2 percent to 2 percent. When I make speeches or talk to smart business people about it, their eyes glaze over. As persuasive as you are, Mr. Chairman, I don't know whether I would like to see you try to explain to Congress in your upcoming Humphrey-Hawkins testimony why it is desirable to push inflation down even 1/2 percentage point from its current level, much less to get all the way to price stability. I may have missed the sermon, not having been at the table for as long as most of you, in terms of having gotten this religion, but I know in my heart and everything I ever studied that moving toward price stability is the right thing to do. Unfortunately, the current state of public understanding of this concept, or even of pushing inflation somewhat below its current level, is so minimally advanced that I cannot imagine us being in a position to use that as a justification for our near-term policy actions without engaging in a great deal more educational effort. Again, I know I come to this debate later than many other people, but I do not think we can underestimate the need to talk about this.

CHAIRMAN GREENSPAN. We have to be a little careful about misreading this in one respect. What the polls show is that when the inflation rate is very low no one is worried about inflation. Trying to convince them that inflation is a problem when they do not perceive it to be one, basically because it is already low, is very difficult.

MR. GUYNN. That's what I am trying to say.

CHAIRMAN GREENSPAN. The best time to try to argue a move from 2-1/2 to 2 percent is when the inflation rate is at 10 percent! President Minehan.

MS. MINEHAN. I must say that I, too, enjoyed reading this paper. When I came back from one of our meetings five or six months ago, where yet another index was raised as a possibility to consider, I challenged the people in Boston to tell me which of these indices were bad, which were good, and which we really should be looking at. Staff here did a lot more intensive work on this issue, but I was glad to see that the overall conclusion in the two sets of studies was about the same. Particular measures may have some advantages and disadvantages at the margin, but it really doesn't make a whole lot of difference which measure we look at. So, that was comforting, at least from my point of view.

One of the things that impressed me was how stable things have been for a 4- or 5-year period no matter which one of these indices we look at and compare to this confidence band around some definition of price stability. Depending on which index we look at, the outcome may differ for a particular year but the stability over the last several years is quite striking. With reference in particular to your comment about financial stability, Mr. Chairman, it seems to me that we do not spend a lot of time thinking about fluctuations in inflation at a low level versus pushing it down to a particular number. I am a bit uncomfortable with the idea of focusing on a particular target number for inflation. The reason is in part because I agree with Governor Meyer's thoughts on the desirability of a cushion and in part because I would hate to be forced by some published number into doing something--or even thinking about doing something--at a point in time when that would not be the right thing to do for purposes of financial stability. That does not mean we should not have some settled idea among ourselves of where we are headed, but published numbers make me nervous.

I am wondering whether it is possible to think about a stable band of inflation as opposed to pushing the rate down continually, with fluctuations occurring within that band, however we may want to measure it. What concerns me the most about developments over the past year is that we may get ourselves into a situation where we could have a boom/bust environment in which we might have to overreact and induce negative economic growth. Of course, we would not be reacting strongly except to stabilize conditions when they got out of hand. I wonder if more of our attention could be focused on fostering stability as opposed to ratcheting inflation down to a particular number. I realize I am not being very eloquent in expressing this.

CHAIRMAN GREENSPAN. Not at all. You are in effect raising the question that we were discussing before, namely, can we demonstrate that as the inflation rate falls, the rate of growth in productivity continues to increase?

MS. MINEHAN. Right.

CHAIRMAN GREENSPAN. Because that is the basic determinant that tells us whether in fact the system is functioning.

MS. MINEHAN. Yes.

CHAIRMAN GREENSPAN. We do not have enough data points in recent history to be able to make that judgment. Governor Kelley.

MR. KELLEY. Mr. Chairman, one part of this fascinating discussion leaves me a little nervous. There are many intriguing questions here that we can ponder. We can spend a great deal of time doing so if we allow ourselves to focus on such questions as what is money, and are prices necessarily the most relevant way to measure whatever we will want to measure in tomorrow's world. These are important questions, but we must not lose sight of the fact that we have to manage policy and the related question of how we should manage policy in a low inflation era. We are in such an era. We may not be at price level stability, however someone may want to define it, but we are in a low inflation period. Most of the price indices that we look at show inflation rising between 1 and 2 percent and the trend is flat. A few indices are in the 2 to 3 percent area, but I don't think any are over 3 percent at this point. Much of the discussion on price level stability is focused on inflation rates in the 1 to 3 percent area. We have to manage policy in that framework, and there are some rather imminent questions.

Larry Meyer raises probably the most basic question, and that is, what is socially optimal in this era? If it is a range, what is the range? Should policy respond differently to inflation when it is at a low absolute level than it does when it is high? A one percentage point difference in the inflation level may mean something entirely different when the absolute level is 5 or 6 percent as opposed to when it is 1 or 2 percent. And if policy should respond differently, how should it respond? If we are going to get down to lower levels of inflation, we are going to start having more and more pockets of deflation. How should we think about those, and to what extent is that an acceptable condition? In sum, low inflation has its own problems as we all know. But we have not had to face them, and I think we could very well get ourselves in a situation where we may need to face them. So, there are some very practical problems that we need to work on even while we are thinking about these longer-term, perhaps a little more theoretical, kinds of concerns. I guess my plea is, let's give a large amount of attention to those nearer-term problems while we are dealing with the others.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Let me make several brief observations: In terms of the general question of the overall value of low inflation, it seems to me that we actually have developed some evidence. If we think about the performance of the U.S. economy in the 1960s, much of the 1980s, and much of this decade, those have been periods of very favorable economic performance and periods of relatively low inflation. This does not prove causality, but if we step away from the rigor that economists might want to apply and think of the general public, it seems to me that we are in the process of developing some very practical evidence. That does not get to what I think is the tougher question--and I agree with Larry Meyer and Cathy Minehan on this--of demonstrating that there is a significant payoff to reducing inflation further from, say, 3 or 2-1/2 percent. I think that is a very significant challenge. I don't think we have the evidence that would convince skeptics that that is a sensible and sound thing to do.

Finally, and I raise this only as a question, I wonder whether it is preferable to have a basket of inflation measures as opposed to one measure. This paper suggests that as long as we pick a broad index, we are not in any danger of going significantly off course over an extended period of time. It seems to me that when we were working with the monetary aggregates, we really were doing something a little different. We were trying various combinations and permutations of bank and other liabilities, knowingly changing the concept. Here I think we know the general concept and that it does not make a lot of difference empirically what specific measure we choose.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, it seems to me that what we are talking about, directly or indirectly, is whether there should be a publicly stated, publicly agreed upon goal of monetary policy. By that I mean a goal that is a little more clear to the citizens of our country than what I would describe as the goal of sustained economic growth to be achieved through price stability, which in turn is not defined with a number. In fact, I use your working definition. In my view, there would be a benefit if we had a more clearly stated goal of price stability today because it would give us better signals. We could stop this debate and we would be more accountable to the American people in that they would have a better idea of what we are supposed to be doing and whether we are doing it. But in a democracy, one has to be extremely pragmatic. Given the absence of absolute certainty about what we are supposed to be doing, we have in fact been very successful in bringing down the level of inflation. Despite having done that, however, the political criticism of the central bank has been increasing. We are not being particularly rewarded for our achievement; instead, there has been increasing questioning.

Going back to the Humphrey-Hawkins report and testimony, I think we should be very clear about what we think ought to be the goal of monetary policy before we go out and start selling it. We do not quite know what to sell because we have not agreed on it, and we have to be very certain that what we attempt to sell will make it more likely that we will be able to carry out policy more effectively rather than less.

CHAIRMAN GREENSPAN. President Broaddus, you are going to have to close us down.

MR. BROADDUS. Most of the comments I wanted to make on the paper have already been made, in many cases more than once, so I will make just a quick comment on the broader issue of the desirability of price level stability, which has come up in an interesting discussion. I have only a couple of points. One is, as Gary Stern mentioned, that a lot of work has already been done to support the idea that price stability is a desirable longer-term objective for any central bank. I thought a lot of good evidence in support of that view was summarized at the Kansas City conference at Jackson Hole last year.

My second point is a little more vague. Let me put it this way: I do not think we should underestimate the degree of appreciation that already exists among the public concerning the desirability and benefits of something approaching price level stability. I see in everyday life and hear in conversations a growing realization that at least part of the explanation for the universally recognized good macro economic performance has something to do with the way we are conducting monetary policy and our focus on low inflation and eventual price stability. Like a stew, one has to let that appreciation steep, and it will slowly but surely grow. What we need to do, it seems to me, is to reinforce it in every way we can. One dimension of price stability for me is not just the current inflation numbers, but the very important expectational component. We need to reinforce the view that we are going to maintain the progress we have made, and I think that will pay off over time. I think we need to have a strategy, and it needs to be as clear as it can be. In my view, this paper is a good first step in helping us to build that strategy and address the related tactics as we go forward.

CHAIRMAN GREENSPAN. Unless anyone has any final words, I think Al Broaddus has completed this session on a very good note. Congratulations to the staff who took an impossible subject and made it slightly less so.

[Meeting recessed]

July 2, 1997--Morning Session

CHAIRMAN GREENSPAN. We turn to a discussion of the long-run ranges for the monetary aggregates, and I call on Tom Simpson.

MR. SIMPSON. Thank you, Mr. Chairman. I will be referring to the handout called "Material for Staff Presentation on Money and Debt Ranges." [Statement and related handout--see Appendix.]

CHAIRMAN GREENSPAN. Tom, going back to the bottom panel of Exhibit 3, I would assume that if we were to substitute gross domestic income for gross domestic product, the most recent data would not look as good as they do because we would be getting higher V2.

MR. SIMPSON. Right, the points would be farther apart.

CHAIRMAN GREENSPAN. Have you actually done the calculations to see what that would look like? In other words, is part of the tightness of fit that we see a function of the widening statistical discrepancy in the national accounts or is it de minimis?

MR. PRELL. I think we are only talking about .02 on this scale. I don't think it would greatly alter the recent picture.

MR. KOHN. Especially if the revision went back a couple of years.

MR. PRELL. It's a question of starting points for thinking about this.

CHAIRMAN GREENSPAN. But the gap has been opening up since 1994, so V2 shifts up progressively over time from the observations you have here. The most recent observations are on top of the fitted line, so we would expect a little more of a drift.

MR. SIMPSON. It could alter the slope.

CHAIRMAN GREENSPAN. I don't know how significant it is, but it does raise some questions. Since we have so few observations, it is not clear to me what is happening. President Parry.

MR. PARRY. Also with reference to Exhibit 3, it seems to me that developments in the last couple of years clearly are encouraging. If we focus on the bottom panel of the exhibit, it also seems clear that velocity is continuing to change. In particular, if one had run that regression to include the forecast period, it would have produced a different velocity. So, this exhibit seems encouraging to me, but it also illustrates that it would be a mistake to assume that velocity is now stable.

MR. SIMPSON. Right. As was mentioned in the Bluebook, we thought that M2 velocity was being boosted somewhat this year by continuing very large inflows to mutual funds, presumably involving diversions from M2 accounts.

MR. KOHN. It is also the case that when we fit these things econometrically, we find small time trends both for the period covered by the bottom line and for that covered by the top. Thus, the charts show bigger misses relative to the fitted line than there are in our models because the models have this time trend in them. But I think your basic point is still correct. In some sense, it is amazing how little velocity has shifted up given the huge flows into stock mutual funds.

MR. SIMPSON. If you look at the upper panel, an alternative interpretation would be that the big upward movement in the early part of the 1990s has slowed rather than come to an end.

CHAIRMAN GREENSPAN. Other questions? President Jordan.

MR. JORDAN. A couple of things: With regard to your question, Mr. Chairman, we too have looked at this with gross domestic purchases instead of nominal GDP and also the command basis of GDP. That's because we are trying to relate money held to household income and the command of U.S. citizens over resources. It does change the picture a little. The statistical relationship of MZM is better in terms of the stability of the functional relationship. The series is volatile because of the higher interest elasticity, but we still get a tighter fit with MZM, especially if we use gross domestic purchases or the command basis.

My other question, a real question, is how to complete the picture of the NAIRU alternative. The Bluebook presents almost a "for your information" kind of alternative that assumes the NAIRU is 4.8 percent, and then it really doesn't do anything with it. It would be helpful, to me anyway, to have Exhibit 4 completed to include what would be implied for the velocities of the three aggregates under that assumption and then the appropriate ranges for the aggregates. You might choose not to change the nominal funds rate, so opportunity costs would not change, but the lower NAIRU has to have an implication for your choice of the appropriate ranges.

MR. SIMPSON. As I mentioned, with a supply shock of this sort and particularly if the Committee wanted to see more of that shock show through in terms of real output, we would get more nominal GDP and more money growth.

MR. KOHN. On that low NAIRU alternative, we would have small effects on nominal GDP and lower inflation. It is not clear which way nominal GDP would go since we would have higher output and lower inflation. Actually, I think nominal GDP would be a bit lower in that scenario than in the baseline scenario. Interest rates would not be rising, which would help boost M2, but nominal GDP would be a little lower because inflation would be so much lower. So, I don't know which way it would go, but my guess is that the net effect would not alter our projection of M2 a great deal.

CHAIRMAN GREENSPAN. Any further questions for Tom? Governor Phillips.

MS. PHILLIPS. Tom, could you expand a bit on Exhibit 1, which shows growth in federal debt turning up?

MR. SIMPSON. That is basically in keeping with the slightly larger deficit that we are projecting for 1998.

MS. PHILLIPS. Does that take the current budget negotiations into account?

MR. SIMPSON. It has our assumed fiscal package.

MS. PHILLIPS. Okay.

MR. PRELL. You will recall that our unified deficit forecast for the next fiscal year is somewhat larger than the deficit for this fiscal year. On a calendar-year basis, because of the timing of borrowing and other means of payment or cash flows in the federal government, we have more of a step-up in borrowing than one would have expected on the basis of the unified deficits for the two fiscal years.

CHAIRMAN GREENSPAN. Any further questions for Tom? It strikes me that M2 is creeping its way back into potential use. This creates interesting questions including the need to review issues that were raised yesterday such as reserve requirements and contemporaneous reserves. All these issues, including the longer-term target ranges, are in the same package. That is to the extent that M2 has no appreciable monetary policy significance, then, of course, the ranges are irrelevant except in the sense that they have a technical meaning as do reserve balances and similar measures. Frankly, the less we do in any of these areas, the better we probably are. That is because anything we do that is not required by sweeps, for example, or other unavoidable technical problems elevates the issue of money supply to a level that does not conform with the way in which we currently employ the monetary aggregates.

My impression of the current ranges for the aggregates is that at some point we probably will have to change them to capture and center the expected outcomes. But for now I would be inclined simply to reproduce what we wrote 6 months and 12 months ago as reasons for not changing the ranges and save ourselves a lot of typeface. There you have a true cost cutter at the Federal Reserve! [Laughter] It is rather fascinating to recall how good the forecasts for the growth of the aggregates have been. In retrospect, the M2 forecast of a year ago was right on the money. If M2 growth continues that way, we will have to make a decision, and a very significant decision, about the M2 range. The irony of having such a good forecast is that we are exactly where we were a year ago. My own preference, frankly, would be to retain the ranges that we have.

MR. JORDAN. I agree with that to the extent that we decide not to change the way we use the ranges for the monetary aggregates. But in anticipation of the possibility that in one, two, three or more Humphrey-Hawkins hearings down the road we may want to give a little different weight to the information M2 is providing, I think it would be useful to start preparing the Congress and the public for the change. We would alert them that the change would not be a return to the 1970s kind of monetary targeting but rather that we intended to use these aggregates as a contemporaneous monitor of how our policy actions are interacting with the real economy. I believe it would be a mistake to allow people on the outside to think that we will go back to setting target ranges in the forward-looking sense that they could provide information to trigger increases or decreases in the federal funds rate. Rather, if a range is used for monitoring and especially if, as the staff paper says, the feedback effects of interactions--the simultaneous determination aspect of nominal income and money--are getting more weight, then we will want to characterize that range as a monitor of what is going on in the economy. It is telling us something about the demand for central bank money and is not a target that we are trying to hit.

CHAIRMAN GREENSPAN. We actually have started to do that at the fringes in Congressional testimony. If these relationships hold, I think we will gradually increase our emphasis on the aggregates. In that event, this Committee is going to reach a crucial point when we will have to decide whether we should start to do something more formal. That is going to be an interesting discussion, in part because I think each of us will have slightly different time frames in mind. I must admit that I happen to agree with the view that if we get the sense that we are going to lock in on the aggregates, we will soon find ourselves backing off, to our chagrin. But that remains for a later discussion. President Parry.

MR. PARRY. Mr. Chairman, I agree with your suggestion and support alternative I. It seems to me that M2 velocity is coming closer to stabilizing, but I don't think we have enough evidence yet to put more weight on the aggregates at this time.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I also agree with your suggestion and would prefer to stay with alternative I. I want to comment, though, on a point that Jerry Jordan made. As I read the Bluebook this time, I found myself facing a choice. If I concluded that I wanted to use these aggregates as indicators of our projections, then I would choose one alternative. If I decided to use them as targets with an assumed velocity, I would choose another. If we do get to the point where we are starting to put weight on these aggregates, I think we will need a careful discussion of how we want to use them. Otherwise, we are going to have split votes as we tend to do on issues such as the interpretation of alternative I versus alternative II.

CHAIRMAN GREENSPAN. I have an old P-star memo sitting at the bottom of my desk that might help. I could blow off the dust and pull it out! President Minehan.

MS. MINEHAN. I, too, agree we should not change the ranges for all the reasons that people have given here today and that I mentioned the last couple of times we talked about this. Until we know exactly how we are using these measures of money in the formulation and implementation of monetary policy, I think we are well advised to keep the ranges the way they are. I would also encourage some further discussion down the road of exactly how to use these measures should these trends continue.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. I am delighted to see that M2 is doing better. I thought that the more detailed memo that we received was very helpful and moved the ball a little farther down the field. I agree with your proposal, Mr. Chairman; I do not think we should change the ranges at this time. But I would align myself with Jerry Jordan's comments because I think it would be useful to start to talk about the way we see M2 changing.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I certainly agree with your recommendation. I have to say that I am impressed by the increasing evidence that M2 may be coming back on track. We produced some supporting research at our Bank to supplement the excellent staff paper that was done here. On the basis of the analysis that I have seen, I think a case can be made, and the Bluebook indicates this, for setting the provisional range for 1998 under the assumption that M2 will continue to reassert its old pattern. But I would not want to do that quite yet. One of the attractive things about the 1 to 5 percent range for M2, which has been around for a while, is that in a sense it is the closest thing we have to a nominal anchor in the absence of an inflation target or similar target. I would be reluctant to give that up. Having said that, I think that if we continue to see evidence over the remainder of 1997 that M2 is coming back strongly on track, we probably ought to consider changing its 1998 range when we take another look at it in February. That's because, with more normal behavior, M2 could actually come out near the top end of a 1 to 5 percent range, and we might feel a little uncomfortable about maintaining that range as we move into 1998.

I would like to make a couple of additional comments that focus on our longer-term strategy. In these Humphrey-Hawkins meetings in recent years, I have used this agenda item as an opportunity to make a pitch for inflation targets, and I sometimes have recommended, Mr. Chairman, that you might be a little more precise in your testimony about our objective of holding the line on inflation. I want to say that I still think these are very worthy ideas, and I hope they will get some weight and attention. But you all know how I feel on this issue, and I will not repeat my arguments today.

I would like, though, to make a brief comment on a closely related matter, one that I think is an increasingly serious issue from the standpoint of the strategy and conduct of our longer-run monetary policy. These points are related to some of the things that Jerry Jordan said yesterday. That is, in the absence of a clear and firm nominal anchor for policy, almost all of the public's attention to monetary policy focuses on the federal funds rate and the prospect that it may change at a particular point in time. Obviously, this is nothing new, but it seems to me that the single-mindedness and intensity of this public focus is, if anything, a little stronger than it may have been historically. In my view, that presents some potentially serious risks to the conduct of policy going forward.

In particular, there now seems to be a widespread tendency to view almost any tactical increase in the federal funds rate as an effort on our part to reduce inflation by restraining economic growth, even if the objective really is only to hold the line on inflation. As a result, almost any funds rate increase these days is going to turn into a lightning rod. In this situation, I think it is very important that we make every effort to do a better job of explaining to the public how we expect the funds rate that we target, and for that matter other short-term interest rates, to behave in the current regime and why. Specifically, I think we need to make the point that in the current environment, where actual inflation is low and our anti-inflationary credibility is relatively high, though maybe not perfect, short-term nominal interest rates are essentially short-term real interest rates, and short-term real rates routinely will have to move up and down in order to clear credit markets.

Dave Stockton made a point like this in his Chart Show comments yesterday. Whenever future income prospects brighten relative to current prospects or perceived permanent income rises, however we want to describe it, both households and business firms are going to want to borrow against that anticipated future income, and demand for credit will rise. In that situation, short-term real rates need to rise to maintain the balance of supply and demand in credit markets, and the Fed needs to let that happen. The point is--and this is really the main point I want to make--that actions like this on our part are not restrictive monetary policy actions as they are usually portrayed in the press and elsewhere. They are neutralizing actions. In those situations, we really are not tightening policy; we simply are doing the minimum needed to hold the line on inflation and maintain the current inflation rate. Far from endangering the expansion, it seems to me these kinds of actions are essential to sustaining it. They do not really pose the kinds of risk to the economy that some of our actions necessarily did in the mid-1980s when we were indeed tightening policy in an effort to reduce inflation at a time when our credibility was relatively low.

I realize that while these points may make good economic sense and may be persuasive to some people, putting a pretty face on a funds rate increase is a tough sell when we are dealing with the media or Congress or the general public for that matter. I think we need to find a way to get this message across and to be persistent in doing so. I thought you made some similar points very effectively in your NYU speech, Mr. Chairman. We need to do more of that whenever we get the chance, and it strikes me that your upcoming testimony might be a good opportunity for another tutorial.

CHAIRMAN GREENSPAN. I think we were well aware of what would happen when we shifted to an explicit federal funds rate target. As you may recall, we fought off that apparently inevitable day as long as we could. We ran into the situation, as you may remember, when the money supply, nonborrowed reserves, and various other non-interest-rate measures on which the Committee had focused had in turn fallen by the wayside. We were left with interest rates because we had no alternative. I think it is still in a sense our official policy that if we can find a way back to where we are able to target the money supply or net borrowed reserves or some other non-interest measure instead of the federal funds rate, we would like to do that. I am not sure we will be able to return to such a regime and in the process create a whole new army of Fed watchers who interpret what we are doing, but the reason is not that we enthusiastically embrace targeting the federal funds rate. We did it as an unfortunate fallback when we had no other options, and I think the consequences are much as we anticipated. The way to get around this problem is to meet it head on, and instead of saying that we are moving rates up to curb inflation, we should say that we are moving them up to sustain long-term employment growth. That is effectively what our argument is, and it is the right argument. It involves bypassing the intermediate inflationary imbalances issue in a lot of these discussions.

My opinion is that from a public relations point of view it is very hard to sell low inflation when we already have low inflation. It works only in a period like the late 1970s when everyone was terrified of the consequences of inflation and the Federal Reserve effectively had a mandate. We do not have a mandate now, and the reason is that we have been successful. It is the fallout of being successful that we have to handle. It is a very difficult and complex public relations issue. But we have to realize that if we fail to succeed in the public relations, we may still have to move ahead and do what we have to do and take the consequences. We still have to do our job.

MR. BROADDUS. I agree with all of that. My point is that while we currently have low inflation, we do not really have what I would regard as a firm nominal anchor in a forward-looking sense. In that kind of environment, the operating regime that we have, as you said, presents risks. I don't know if there is an easy way to do it, but we need to take every opportunity to make it clear that short rates will move around. They may have to go up, and that may be perceived as an effort on our part to squeeze the economy in order to reduce inflation or hit some target. That is not correct economics, and we need to get that point across any way we can.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I agree with your recommendation. As I understand it, we would describe the money ranges as we did last time, namely as benchmarks for what we would normally expect under conditions of reasonable price stability and historic velocity behavior.

With regard to the discussion you were having with Al Broaddus, a few of us were talking about the same issue before the meeting. I think the sense of our discussion was to agree completely with exactly how you phrased the need to communicate the basis for our monetary policy actions, namely by saying that our objective is to encourage continued recovery, sustained economic growth, and further increases in employment. I realize that this is a very difficult and complex public relations issue, as you said, but I think that is the right track to go on.

CHAIRMAN GREENSPAN. I will tell you, Mike, one thing that has to be considered here is the moral tone. In the NYU speech, I said that it is irresponsible to take the risks that are involved in not trying to contain inflationary imbalances. If we give only the other side of the argument, they will beat us nine times out of nine on a moral argument. That is what they have been doing. And if we allow that to happen, we deserve to be beat upon because I am persuaded that we do have the moral high ground. We have a long-term focus rather than a short-term expediency rationale. We believe in insurance, which is a well established long-term risk-averse type of activity. I think all the ethical, moral issues are on our side. Short-termism--all of the expediency issues--is what effectively is on the other side, and their advocates make it sound as though that is the moral high ground. I think our allowing that to happen is unfortunate. It merely says how good they are, because if I had to make their case, I would not be able to do it as well as they.

MR. MOSKOW. I agree with everything you have just said. I believe that we need to spend more time thinking about how we can best communicate that message.

CHAIRMAN GREENSPAN. I absolutely agree with that because the focus of outside commentary on monetary policy in recent months has not been as good as it should have been. Considering what is going on in the world, it is really unbelievable. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I agree that we should adopt alternative I. I think it is far too early to conclude that the recent fit in V2, and therefore the use of M2, is anything like a sure thing. One of the things I believe we have to be aware of is the effect of a change in market focus on a monetary measure. We may have a monetary aggregate that tracks reasonably well when we are not using it as a policy tool. Therefore, it is a matter of passing interest but essentially of indifference to the marketplace. On the other hand, if we start using it as a tool, the markets are going to concentrate on it a lot more, and it may pick up a degree of volatility related only to its being used as a policy tool.

On the broader issue of explaining what we are doing, it seems to me that a concentration on economic growth and the creation of jobs is where the high ground is located and is what we appropriately are dedicated to. That is why I use price stability as a means to an end, not as an end in itself. I also like the clarity involved in talking about an interest rate because people in the real world understand interest rates. They do not understand reserve levels or all this other arcane stuff that we like to discuss. Our use of the latter appears to them as an effort to obfuscate. It will be more understandable to them if we say that we believe in long-term economic growth, we believe that monetary policy is a very effective tool to bring that about, and the tool that we have is the overnight interest rate. When we decide that we have to shift the overnight interest rate as a means of working toward that long-term goal, people may not like it, but at least they will understand it.

CHAIRMAN GREENSPAN. Yes, granted how far we have come. I think the only way we could go back to some non-interest-rate regime--let's assume it involved a net borrowed reserve number--would be if we believed that analytically such an approach had become the most efficient means to implement policy. We could identify our net borrowed reserves target, but instead of associating it with that huge range that we used to set for the federal funds rate, we could indicate that we expected it to be consistent with a federal funds rate within a relatively narrow range. So, we would still in fact have some focus on the federal funds rate. If we believe that the literal fixing of the federal funds rate is an inappropriate policy--a conclusion we may well reach at some point because theoretically it's very hard to make a case that fixing the rate is the optimal way to conduct monetary policy--how we would reword the directive would be of some importance, but we would then have what we would view as a superior mechanism to carry out our policy. We could explain that we expected this approach to policy to engender a federal funds rate between, say, 5-1/4 and 5-1/2 percent or some narrow range like that.

VICE CHAIRMAN MCDONOUGH. I would be very comfortable with that.

CHAIRMAN GREENSPAN. I think we could defend it. Governor Meyer.

MR. MEYER. Thank you, Mr. Chairman. Tom Simpson's presentation of the Bluebook alternatives for the Humphrey-Hawkins ranges identified two distinct decisions that we have to make today, and also a third decision that we might want to talk about and contemplate. The first is the interpretation of the ranges; the second is the boundary of the ranges; and the third is whether we want to upgrade the role of monetary aggregates in our monetary policy process.

I must admit that when I came here, I was initially uneasy about the current interpretation of the M2 range that related it to some hypothetical period of price stability and normal velocity behavior. That interpretation seemed to me to be inconsistent with the spirit and the letter of the Federal Reserve Act. But I have come to appreciate that such an interpretation might have evolved as a quite reasonable compromise, given the instability of the monetary aggregates. On the one hand, we are told to set a range. On the other, the instability of the monetary aggregates prevents us from doing so in a meaningful way--or from using the monetary aggregates in a meaningful way--in the policy process. Now that there is evidence of improved stability of M2, I think we have to ask whether this continues to be a reasonable compromise.

I agree with the Chairman that despite early signs of improved M2 stability, it is premature to reach that conclusion. I would say that we really have not stress-tested this relationship yet. It has proved stable through a very tranquil period, and I don't think we want to make the move back to the earlier interpretation and then have to reverse ourselves when we find that we are in a more turbulent period.

Having said that, I think the Bluebook also challenges us a bit because it points out that some interesting issues are involved in setting the target ranges under the current interpretation. Although we have been talking and easing our way through discussions about whether we should have explicit inflation targets, in a sense what we have been doing under this interpretation is to set target ranges for the monetary aggregates that in effect become inflation targets. Given that that is their role, we might want to consider over time whether they really are in line with where we want them to be. The discussion in the Bluebook is very interesting. It points out that the ranges are aligned very closely with what we might discern to be true price stability. Then the question is, as I pointed out yesterday, whether we really want our inflation target to be true price stability or maybe true price stability with a cushion. It forces us into making that choice.

CHAIRMAN GREENSPAN. I would say that what you are suggesting, and I would agree, is that when we get to the point of discussing these issues we should combine them because they are interrelated

MR. MEYER. Right. It is premature to get into that at this point, but I thought the discussion in the Bluebook was quite interesting and challenging. Even if we do not want to go back to the earlier practice, there might be a case for upgrading a little the role of the monetary aggregates in our deliberations. We could ask the staff to bring to the Committee information that they glean from the monetary aggregates that they think might be useful to the monetary policy process. Having said that, I do not think there is necessarily any going back to the earlier practice. I would only suggest that there is an element of hysteresis in the monetary policy process. The way we view monetary aggregates has evolved over time in part because we have had to adjust to the instability of those aggregates. In the process, we began to give more weight to our ultimate objectives, an implicit inflation target and a stabilization objective--a Taylor rule kind of procedure. We are focusing more on the ultimate objectives and less on intermediate targets. Despite the instability of M2 over the years, our track record is quite good. We might wonder whether we really want to go back to the earlier importance of the target ranges even if M2 becomes more stable.

At any rate, I would concur that we should retain the current interpretation and not elevate the role of the monetary aggregates. I would not modify the current ranges; I would just stay with them.

CHAIRMAN GREENSPAN. To return to the issue of whether or not we are against inflation or for jobs, was I mistaken, Jerry, or were you quoted in the James Glassman newspaper column yesterday or the day before?

MR. JORDAN. I hope not.

CHAIRMAN GREENSPAN. I thought it was you that he quoted. He was talking about the issue of job creation, and the example came up as to why somebody in a Chinese city had everyone working with shovels to build a dam. Was he quoting you?

MR. JORDAN. That may have come from a speech that I gave.

CHAIRMAN GREENSPAN. Why don't you set it straight for us. This actually refers to the issue of whether it is jobs or growth that we ought to be focused on.

MR. JORDAN. It was in a speech where I said that a Western businessman traveling in China visited a site where hundreds of workers were building an earthen dam with shovels. The businessman suggested that they could get an earth-moving piece of equipment to build that dam in an afternoon. The Chinese official asked what could be done about all the unemployment that would create. The businessman replied that he now understood. He thought they were building a dam, but the Chinese authorities really were trying to create work for people. So, he had a suggestion to make, namely to take away their shovels and give them spoons. [Laughter]

CHAIRMAN GREENSPAN. I don't think we ought to repeat that suggestion in too many places! It is in fact an effective argument against creating jobs directly rather than fostering economic growth to create jobs. There are stages that should not be short-circuited in that process; they involve controlling inflation in order to promote growth and more jobs. President Melzer.

MR. MELZER. Alternative I is all I was going to say. On this communications issue, I think we also have to be careful in terms of how we communicate. We use shorthand internally, but the public has the confused impression that we can affect inflation or we can affect growth. So, we need to talk about inflation in the context of how it prevents the use of real resources in a way that fosters maximum efficiency and maximum growth. We all understand that, but it involves a certain subtlety. We certainly do not want to put ourselves in the position of having the public think we can directly deliver growth when it is real factors that do that.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. I say "ditto" to all the arguments for alternative I--keeping the long-run ranges the same. On the issue of the role of M2, I think we have to spend a fair amount of time talking about this among ourselves. It is not an easy discussion. The first issue is whether M2 will be an intermediate target or an indicator, and there are various levels within that. I think we probably ought to get started discussing that among ourselves.

On the communications issues, we can do better. I think we are doing somewhat better, but we can do a lot better. Our basic problem is that our job requires short-run discipline for long-run good, and that is not an obvious virtue, given human nature. I think the way to do it is to focus on jobs and growth; that should be the approach. I think that deserves all of our attention, not just in speeches but in one-on-one conversations and in informal gatherings. We can make our case a lot better than we have.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. I, too, Mr. Chairman, would prefer to stay with the current ranges. I think the most important consideration for the moment is the signal effect, and in my view raising the ranges would risk sending the wrong signal. I have some notes from yesterday's discussion that I wanted to work into the conversation. I was going to save them for the next go-around, but let me just relate at this point my personal observation about how difficult we found it yesterday to make the argument for low inflation. My comment about how far we have to go certainly did not mean to imply that we should not work as hard as we know how to achieve our inflation objective. I think the comments that Jerry Jordan made yesterday and Bill McDonough and you made this morning about better ways to communicate clearly indicate the right direction. I am very supportive of our collectively trying to make that case in a better way than we have in the past. I wanted to weigh in on that as well.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I, too, would support alternative I. There are ways to improve this aspect of the policy process, and I look forward to discussing them in future meetings.

CHAIRMAN GREENSPAN. Governor Rivlin.

MS. RIVLIN. I, too, would go along with alternative I, but I think we should not do it just to kick a difficult decision down the road. The next few months may actually be an easier period in which to explain a change in thinking than later when one might imagine that we may be doing something really unpopular at a time when the economy is not doing very well and we are being blamed for it. One can think of a lot worse moments for explaining things than we have now.

The second point is that it is very easy to say that we are raising interest rates, if we have to do that, to sustain growth in the economy and jobs. But that explanation will not be credible unless we make the connections clear. This was Tom Melzer's point. We risk having people ask what we are talking about and totally tuning out unless we get that explanation across.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Alternative I. I have an early flight, so I will not say any more. [Laughter]

CHAIRMAN GREENSPAN. You already used up more time than you really intended. Governor Kelley.

MR. KELLEY. I concur, Mr. Chairman, with alternative I. I don't think I can add anything to the many valuable comments that have been made around the table.

CHAIRMAN GREENSPAN. We have had a fairly thorough discussion. Before we get to a vote, there is a minor question about an adjective in the directive, the word "monitoring." Don Kohn, would you explain that issue?

MR. KOHN. It has struck us in recent Humphrey-Hawkins write-ups that putting the word "monitoring" in front of debt makes it sound as if that aggregate has a quality to it that differs from the Committee's use of the monetary aggregates. I think the existing practice evolved when the monetary aggregates really were more indicators or targets, somewhere in that nexus, while debt was never intended to be a target and was on trial as an indicator. The Committee decided to call it a "monitoring" range so that people would not expect any action by the Committee if the actual behavior of debt fell outside the range. However, it has struck us that no one should expect action just because one of the monetary aggregates is breaching its range, and in fact the ranges for monetary growth are not even set with that in mind. So, the differentiation is awkward. The question before the Committee is whether we can drop the word "monitoring" in front of the word "debt" since in effect all the ranges are "monitoring" ranges.

CHAIRMAN GREENSPAN. Unless someone expresses an objection, I presume that would be appropriate. It will be fascinating to see if anyone notices the deletion. [Laughter] Would you now read the version reflecting alternative I?

MR. BERNARD. The wording for the paragraph on the long-run ranges is on page 29 of the Bluebook. It starts off with the usual general policy statement: "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. In furtherance of these objectives, the Committee reaffirmed at this meeting the ranges it had established in February for growth of M2 and M3 of 1 to 5 percent and 2 to 6 percent respectively, measured from the fourth quarter of 1996 to the fourth quarter of 1997." Then, skipping to the very bottom of the page: "The range for growth of total domestic nonfinancial debt was maintained at 3 to 7 percent. For 1998, the Committee agreed on tentative ranges for monetary growth, measured from the fourth quarter of 1997 to the fourth quarter of 1998, of 1 to 5 percent for M2 and 2 to 6 percent for M3. The Committee provisionally set the associated range for growth of total domestic nonfinancial debt at 3 to 7 percent for 1998. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
President Broaddus	Yes
President Guynn	Yes
Governor Kelley	Yes
Governor Meyer	Yes
President Moskow	Yes
President Parry	Yes
Governor Phillips	Yes
Governor Rivlin	Yes

CHAIRMAN GREENSPAN. Thank you. Mr. Kohn.

MR. KOHN. Thank you, Mr. Chairman. I will begin with some thoughts on the longer-term strategy section of the Bluebook, and I will be referring to the charts in that document. I will talk a bit about how the results of those exercises might or might not relate to the current situation and finish with some comments on proposed changes in the wording of the operational paragraph that are shown in the Bluebook. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Well, I assume there are no questions! [Laughter] President Boehne.

MR. BOEHNE. Don, I think the exercise you did on the various policy rules is quite useful, and you and your colleagues are to be complimented for helping guide us through this using that approach. As you quite properly point out, however, the Achilles heel of this is uncertainty. We do not know the underlying structure of the economy with a high degree of certainty; at least there are different views about it. There is also uncertainty, often in real time, about whether we are dealing with a supply shock or a demand shock. What happens analytically to this approach if one relaxes the rather Herculean assumption of certainty and says we really do not have a high level of understanding of the underlying structure and there is uncertainty about whether there are demand or supply shocks? Is there an analytical way to deal with that or do you just end up with something that is not very definitive?

MR. KOHN. I think "both" is the answer. The models actually do not have to differentiate as such between supply and demand shocks. In effect they do, but it should be noted that they are just reacting to output gaps and to inflation gaps. From the perspective of the rule, the ruler, I guess, does not have to say this is a supply shock or this is a demand shock. Having said that, I would like to mention that certain rules work better for demand shocks and other rules work better for supply shocks, as the other paper that was circulated pointed out more clearly. So, if you have some clue as to whether you are dealing with a supply shock or a demand shock when making policy, you would want to use that information to shape your policy response instead of adhering rigidly to a particular rule. In theory, you do not have to know what type of shock it is, but you could make policy better if you did know.

Concerning the problem of uncertainty about the structure of the economy, this is a really complex subject that President McDonough brought up at the last meeting, and it is one that I must admit I have not sorted out to my own satisfaction. As he pointed out, there is an older literature starting with Bill Brainard that says, if there is multiplier uncertainty--if you are not sure of the connection between a policy action and the response in the economy--that ought to induce some caution. If you are not sure what will happen, you go part of the way there, see how it works out, and go a little further. The so-called Brainard uncertainty should induce a much more cautious response than you would get from the Henderson-McKibbin strategy.

On the other hand, people have done other exercises in which the coefficients are known, the slopes of the lines are known, but their position is uncertain. For example, we may be uncertain about the position of the NAIRU but quite sure that we know what the slope of the short-run tradeoff is. Those kinds of uncertainties do not necessarily engender sluggish policymaking. You would proceed on the basis of your best guess with that kind of uncertainty, see what happens, and adjust later. So, there are different kinds of uncertainty.

The real world clearly is much more complex. Various uncertainties interact. You observe things happening; you do not know whether a multiplier effect is involved. Things are not happening the way you expected; you do not know whether the reaction of the economy has changed or the whole position of some function has changed. And you do not know what caused the change, whether it is a supply or a demand shock. While I do think uncertainty counsels caution in policymaking, I would get a little concerned if it counseled paralysis. The other part of the lesson is that when you see an output gap opening up, if that is your best guess, you have to do something at some point or the pressures producing that gap will mount and you will have a worse problem later. My concern about cautious policymaking is that it can get so cautious that problems build.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I am going to refer to chart 4 following page 12 in the Bluebook. I would like to get Don and perhaps you also, Mr. Chairman, to comment on an observation that I am going to make. I believe it is true that if each of us were polled individually and asked if we believe in the Phillips curve tradeoff, we would give an answer along the lines that there probably is none in the long run. We would say that there are various inflation rates consistent with a given unemployment rate in the long run and vice versa. But we probably would believe there is a shorter-run tradeoff. Comparing the top panel and the bottom panel of chart 4, it seems there is a very strong Phillips curve built in that lasts for years and years. There are a lot of allusions to the tradeoff in the Bluebook that seem to indicate a strong belief in a long-term Phillips curve.

MR. KOHN. No, there is no long-term Phillips curve built into this. I think you have to be a little careful, President McTeer, about the scale of these charts. We are talking about small declines in inflation and fairly small output gaps. The sacrifice ratio built in is 3 over a very long run. That is consistent with many, many modeling exercises. The sacrifice ratio we used in the first set of simulations, 2 over a period of 5 years, is also consistent with a lot of modeling and empirical work done over a quite long period. So, there is a short-run Phillips curve built in here. We do not have a persistent supply shock that allows us to get a free lunch in the form of lower inflation without giving up something in terms of output. These are symmetrical shocks around zero, so there are as many positive as negative ones. In order to get inflation down, you have to give up some output in these kinds of exercises. The only way you could get around that is illustrated in chart 3. If in fact you have a positive and persistent supply shock and the NAIRU is lower than you thought it was, then you have the type of favorable tradeoff that Dave Stockton talked about yesterday in another variant. But in the stochastic simulations, the shocks are all temporary. They average to zero over time, and so the short-run Phillips curve dictates that you need to give up some output to get inflation down on average over this time period. Again, there is no long-run Phillips curve built in here. In fact, there's a negative relationship between output and inflation, as I tried to point out, but no positive one. That is, the model does not produce any gain in efficiency and output from having lower inflation, though we think there really are some gains.

MR. MCTEER. I guess I was struck more by the horizontal axis than the vertical axis. There seem to be a lot of years there.

MR. KOHN. The implied sacrifice ratios are in line with what we have been using for quite a while.

MR. PRELL. I think that the model reflects the importance of price expectations in this process in a very simple way. That is why we do not have the long-run tradeoff. If expectations change gradually over time, we are going to have short-run tradeoffs.

MR. MCTEER. There's a sentence on page 6 of the Bluebook that says: "In the staff model, the sacrifice ratio over five years is about 2; that is, a 1 percentage point reduction in inflation can be achieved only by pushing the unemployment rate above the NAIRU by the equivalent of about 2 percentage points for one year." At the end of 1996, in December, the CPI inflation rate was 3.3 percent, and I think the latest reading is 2.2 percent. It has come down then on that trailing basis more than a full percentage point at a time when the unemployment rate has come down by half a dozen notches.

MR. KOHN. I think we have been facing a situation in which there have been some very favorable supply developments, and that means we have not had this short-run tradeoff.

MR. PRELL. The tradeoff is there in a sense, but it is obscured by the big drop in oil prices. That has shifted the short-run Phillips curve.

CHAIRMAN GREENSPAN. I am going to address this issue in a somewhat different form. The basic problem is that the model has a whole series of consecutive short-term Phillips curves, and its structure does not change. If you accept that hypothesis about the short-term structure and you continuously work with no change in that structure, then the results shown here are mathematically inevitable.

MR. MCTEER. Life is a series of short terms.

CHAIRMAN GREENSPAN. That is what the short-term Phillips curve is. We see this correlation historically. The trouble is that it veers off periodically, and that creates the nonexistence of a long-term Phillips curve. We are now in the veer stage! President Jordan.

MR. JORDAN. Don, I believe you provided a useful framework for thinking about demand side/supply side. The need to think about that is unavoidable. We do that implicitly. So, why not do it explicitly? It is very helpful to be forced into that framework as we think about what is going on and the policy regime with which we respond. You say that the model does not really care whether it is dealing with a supply-side or a demand-side shock; it responds to output and inflation gaps. Of course, as policymakers we have to care. It is important for us to try to evaluate a shock when it occurs even if we cannot be sure of what we mean by demand side and supply side. I think I know what you mean. Over the last 30 years, we were comfortable in thinking of the oil events of 1974 as a negative supply shock or those in 1986 as a favorable supply shock. But there are a lot of other events that shock the economic system such as international developments: certainly Suez, the Bay of Pigs, and Kuwait come to mind. There also are domestic events like the Crash of 1929, Nixon's price controls, and things like that.

I do not know whether you call them supply side, demand side, or what, but we might want to react differently in a policy sense depending upon which of those we think it is--the nature of the events. There is a potential interdependence based on the monetary policy regime that I think we have to be very careful about. It does get back to this question of when we may want to exercise caution in the Brainard sense or the Bill Poole sense or when we should worry about paralysis. I suspect--this is only a guess at this point--that to the extent we are confident that we are dealing only with a demand-side development, we would lean in the direction of caution. To the extent we believe we are dealing with what starts as a supply-side event--it may be an asset market development--then we need to resist paralysis. The reason for that is the following: We may have a series of developments that one might characterize as being a favorable supply-side shock such as the recent increase in productivity--where people perceive that the real rate of return on productive capital is rising for a whole host of reasons. The reason we worry about a pegged nominal interest rate approach to policy is that the market dynamics of people reacting to the perception of rising real returns and increasing wealth raise the opportunity costs of holding central bank money. If we have a derived demand for central bank money, a pegged nominal interest rate policy would cause us to expand central bank money. This would unintentionally convert a favorable supply-side shock into a demand shock. We would want to be a little more activist to avoid converting a favorable supply shock or a negative supply shock, say the Kuwait War, into an adverse demand shock. That is what I mean by the interdependency between the two.

Sometimes we talk about those in terms of what has happened to the natural rate of interest or something similar. We can translate these things into the kind of framework that we are talking about here. I think the analysis of whether we can convert one kind of shock into the other type of a shock, intentionally or not, needs to be fleshed out a little more to enable us to guard against an inadvertent outcome. That is just a comment and if you want to react to that, I would be glad to hear your thoughts because I don't feel that I have thought it through as carefully as I need to.

On your alternative wording for the operational paragraph of the directive, I like getting rid of the "woulds" and "mights" and all that. However, I really do not want to introduce the words "tighten" and "ease" into the directive even though it is clear that the language refers to tightening and easing conditions in reserve markets. What we are talking about is expanding or contracting central bank money. We all know that if we have a supply-side event, or possibly a demand-side event but I have not thought about that enough, we can in effect tighten or ease money market conditions or reserve conditions with an unchanged fed funds rate. Conditions in reserve markets can tighten or ease if we fail to change the nominal funds rate based on the derived demand for central bank money as modified by external shocks. The proposed directive language would imply that only our actions cause reserve conditions to tighten or ease, and we know that is not true. It is failing to change the funds rate that would cause them to tighten unintentionally or ease unintentionally, and we often are trying to guard against that.

MR. KOHN. I don't think I have a lot to add to what you said, President Jordan. You indicated that you might not react as strongly to demand shocks as to supply shocks, and I wonder about that. If you really thought that demand had shifted up in the first half of this year, starting from a position in which the economy was close to potential and was now going past potential, you would want to react rather strongly to that. On the supply shocks, I agree with what you said in the following sense: I think they are very difficult to analyze. I thought Dave Stockton in his briefing yesterday gave a very good example of the kind of supply shock you were discussing. In that example the equilibrium real funds rate rose because there was an increase in productivity in the economy, and at some point the Fed would have to tighten to avoid the overshooting in demand that you were talking about. There could be other kinds of supply shocks. I think, for example, that a NAIRU shock has a different flavor to it. So, supply shocks do require differentiating to see whether they require or will eventually require raising or lowering interest rates to equilibrate supply and demand in the economy. It is not always obvious which way that is going to go and how the tradeoffs will go. Supply-side shocks are more difficult to analyze because they come in different varieties.

MR. JORDAN. I want to respond to your point about the demand-side shock late last year and early this year. That was a case where I became increasingly concerned that what was really going on related fundamentally to the supply side, and we were inadvertently converting it into a demand-side shock by holding the nominal funds rate steady. We were unintentionally creating more demand, but the initial impetus came from the favorable supply-side surprises.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I found the simulations on chart 4 of the Bluebook extremely interesting. I would like to ask a question about the opportunistic approach to monetary policy in that chart. I am sure that in a situation where you have an adverse supply shock or a positive demand shock that causes a rise in the forecast of inflation, there is a very aggressive reaction in terms of the opportunistic rule. If one were to adjust that reaction to reflect more realistically that policymakers might not have a symmetric objective function in terms of their willingness to raise or lower interest rates, it seems to me that we could conceivably see the opportunism line on the chart reach the long-run inflation objective even beyond the year 2030. When it looks as though the model is forecasting increasing interest rates, I think it is almost human nature to begin to question the forecast. That may apply to all the policy strategy alternatives, but I think it is more explicit in the opportunistic alternative.

MR. KOHN. If you turn back to page 10, you can see that in both the target zone and the opportunism simulations we had a strong reaction to inflation outside the target zone or outside the zone of indifference for opportunism.

MR. PARRY. That's right.

MR. KOHN. And certainly, almost by algebra, you are right. If you reduced those coefficients on inflation outside the zone from 2.5 to 1.5, then you would get a less strong reaction, and it would take longer to get to price stability. On the other hand, I think we have to be a little careful. Look at the Henderson-McKibbin deliberate rule. That is a case in which the policymaker does respond more strongly to output gaps than to inflation gaps, and it performs fairly well in terms of getting to low inflation. If you have a demand shock, of course, there is no conflict. The output gap opens and that is going to raise inflation strongly in response. Both are moving in the same direction. It is with supply shocks that you get conflicts. So, it is not necessarily the case that a policymaker who puts a lot of emphasis on output relative to inflation would take a long time to get to price stability. The Henderson-McKibbin policymaker takes less time than the opportunist and only a bit more than the Taylor policymaker.

MR. PARRY. I see.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I am coming from a different direction, but I wanted to make some of the same comments. I found these simulations very interesting even though I know that nothing can be carried on until the year 2030 with any reasonable level of reliability. I must say that if we are going to keep using this definition of opportunism, I would like to feel a little more comfortable about what is involved in it. A great deal of good material accompanied the Bluebook, and it is going to take me a while to digest that. I have been reasonably sympathetic to the idea that one reacts when inflation goes above a boundary, but when inflation is within that boundary, one tries to work harder on the output side than on the inflation side. I like that as a theoretical construct, but I'm not sure that the way this is modeled is the same as the way I am thinking about it. I need some time to assimilate that. This discussion was really helpful and the paper was very helpful.

At the risk of being resistant to change for the sheer sake of being resistant to change, I must say that I have some sympathy for Don's comment about Pandora's box with reference to the proposals to change the wording of the directive. I was watching the CNN financial commentary program from 6:00 to 7:00 a.m this morning. The woman who usually does their commentary about Fed policy observed the Fed's policy decision today was a "no brainer." The really important thing was the wording of the directive from the May meeting, to be released tomorrow, and whether it would be symmetric or asymmetric. I thought, oh heavens! If we change this directive wording, it will make a lot more difference to people than we expect. We don't necessarily want to send new messages with this wording change.

MS. RIVLIN. But remember, she had to think of something to say this morning. [Laughter]

MS. MINEHAN. I suppose.

MR. KELLEY. That change would give her six months' worth of new material!

MS. MINEHAN. Yes, that's right.

CHAIRMAN GREENSPAN. At least she said "no brainer" rather than "no brains."

MS. MINEHAN. Well, that's my interpretation of what she actually said.

CHAIRMAN GREENSPAN. It does strike me that we have to go back to the drawing board on this. My maximum likelihood estimate is that it would take us 4 hours, 52 minutes, and .4 seconds to get this issue resolved today. We do not have that much time.

VICE CHAIRMAN MCDONOUGH. To change the wording?

CHAIRMAN GREENSPAN. Yes. What we ought to do is the following: We should try to negotiate this issue between meetings. It is too difficult to negotiate directly here. We have to figure out another way to do it. The reason people interpret this directive differently is that its constructive ambiguity has worked. That is the problem. We are all looking at the elephant from different directions. So, unless somebody disagrees with what I am saying, we will try that approach. I am more than willing to support what is being proposed here.

VICE CHAIRMAN MCDONOUGH. I am super more than willing to support it.

MS. RIVLIN and MR. PARRY. Me, too.

MR. MEYER. I have some question about how the wording on symmetry and asymmetry is handled. However, our practice when we set a target for the funds rate of describing that in terms of reserve conditions seems to me to be somewhere between embarrassing and amusing. I think the time has come to make at least that change in the directive.

MR. PARRY. I think it could take us many hours of discussion to decide whether or not we ought to include a reference to symmetry in the directive. But I don't understand why it would take us four hours to make the words clear. We are merely saying it in English.

CHAIRMAN GREENSPAN. Why don't we do the following. This should not be a vote of just the Committee members because some are on the Committee and some are not currently, but the concern is general. Why don't we go around the room and get a quick statement from everyone as to whether or not they accept the recommendation as is, or with very minor changes, or they do not accept it. We will find out very quickly. Why don't you start, Governor Rivlin.

MS. RIVLIN. I like the recommended wording. I think it is simpler and clearer.

MR. KELLEY. I would retain the traditional wording until we explain to the public how and why we are changing it; the explanation should be released in advance of the actual publication of the reworded directive.

MR. KOHN. Mr. Chairman, it might be useful to ask the members to differentiate between the first sentence and the second sentence. Some may favor changing one and not the other.

CHAIRMAN GREENSPAN. Yes, I thought about that. We ought not change one and not the other one until we are sure that one is acceptable and the other is not. Doing this in two steps is not a good idea. I'm sorry, go ahead President Minehan.

MS. MINEHAN. I totally agree with Governor Kelley.

MR. MCTEER. I pass.

MR. MELZER. I'm not sure any change gets us much. I worry a little about reinforcing this idea that we are in a more rigid interest rate targeting regime at the very time we are thinking about the possibility of some alternative regime, though I know that is a decision for the longer-term future. Secondly, I worry a little about what Jerry Jordan was pointing out. Presumably, we could at times maintain current conditions in reserve markets with an increase or a decrease in the funds rate. We would have to allow for that here, and in the event that might be quite confusing to describe.

CHAIRMAN GREENSPAN. You said it. President Stern.

MR. STERN. I think I agree with Tom Melzer's reservations.

CHAIRMAN GREENSPAN. Tom is saying it is very complex.

MR. STERN. Yes.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. I would very much like to clear up the difficult wording, but I would suggest taking the preamble portion that applies to the second sentence and have it apply to both sentences with the alternate wording.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I like the changes. When we change the federal funds rate, we now announce that following the meeting. So, including the rate in the directive does not seem to me to be much of a change. I also like the clarity of the alternative wording suggested for symmetry and asymmetry. The only reservation I would have is that I think Jerry Jordan has raised an interesting point.

MR. HOENIG. I would like to see clearer language. We might want to negotiate whether this is it, but I think we definitely could use clearer language.

MR. GUYNN. I think the suggested rewording raises enough issues that it's not worth the trouble it might bring us if we introduced it at this time. I would leave it alone for now.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. In recent years we have moved in the direction of transparency and clarity in terms of making public what we do. We debated for years, for example, whether we ought to announce our decisions promptly. I think we are much better off because we now announce them. We were concerned about what would happen if we released the transcripts, and I am not aware of any adverse results from our doing that. I think the proposed rewording of the directive is just a continuation of our movement toward being more transparent and clear. One can quibble about the words and we don't necessarily have to make the proposed changes today, but as a general matter I think it would be helpful to continue to move in this direction. There are times when one may want constructive opaqueness, but I am in favor of the proposed rewording because it points toward more openness and transparency.

MR. JORDAN. I do not think this language is ready for prime time.

MR. BROADDUS. Mr. Chairman, I like the transparency aspect of the proposal very much. However, in the current environment where we do not have a very specific long-term goal, I worry about the point that Tom Melzer made. This rewording is going to reinforce the focus on the funds rate. One other point that Tom made intrigued me, though. If we could at some future point consider linking in that first sentence the notion of "maintaining current" with an increasing funds rate and explain that in some way, that might be a way to get around the problem. But for now, I would leave the wording unchanged.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. I view this as an improvement, an increase in explicitness and transparency. I don't see any reason why only professional Fed watchers should understand the directive. I think we have to bring it into conformity with what we say in our announcements. I also object a little to the idea that the new wording is a problem because it would tend to reinforce the notion that we control and move the federal funds rate. That is what we do! As long as that is what we do, that is what we should say we do.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. I am a bit more comfortable with the proposed first sentence because, as Larry Meyer said, that is what we do. That is what we have been focusing on, and I think we should update that directive sentence. I must say with respect to the symmetry sentence that I worry about substituting one archaic expression for another. I also feel that every time we vote for a given symmetry, it is for a different reason. When we vote for a particular symmetry at one meeting, it does not mean the same thing as it does another time. So, I am not sure that whatever change we make in the wording of that sentence is going to help much.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. I think the proposed first sentence merely says in the directive what we already say in the press release, so I cannot see any reason why one would not wish to adopt that rewording. In the current second sentence, I find the "woulds" and "mights" to be embarrassing nonsense. I think that wording is the ultimate in obfuscation and truly silly. Therefore, anything that is understandable English has to be an improvement, and I find the proposed language to be just that. So, I am happy with the proposal.

CHAIRMAN GREENSPAN. During the intermeeting period, why don't we try to find a mechanism to communicate our views on this question and bring perhaps two or three alternatives to the next meeting, with some sense of where everyone stands. In other words, let us not just throw the issue on the table. We could then have a discussion in which hopefully we will reach some consensus. The issue is rather tricky and we may end up agreeing, for example, on the first sentence and not on the second. Maybe we can find a choice of words that people will support.

With respect to the issue of locking in the funds rate, I am not terribly concerned about that because if we do move away from the funds rate, we will change the language. I think the language should reflect what we are doing, but I do not see why the new wording in itself should be seen as reinforcing our focus on the funds rate any more than the current wording does. I cannot see how it does that, provided that we in the Committee recognize that this rewording is merely an endeavor to describe how we operate under the current regime. It does not prejudge how or when we might improve the current regime and employ new language in the directive to describe it. If you go back and read some of the very early directives, they do not look anything like the current directives. The Committee has changed the wording of the directive innumerable times. The directive is not a constitution; it is more like a statute and not a terribly good one. Why don't we break for coffee?

[Coffee break]

CHAIRMAN GREENSPAN. Are there any other questions for Don? If not, let me start off and go to the directive specifically. As you may remember, I indicated a hope at our last meeting that we would have a credible basis for tightening today on the grounds that the balance of risks that I saw at that time, which are not materially different today, suggested that a very gradual rise in the federal funds rate would be consistent with what we knew and what we did not know. In my view that was the likely policy outcome, given our incomplete knowledge at that time. However, it has become quite obvious in the last several weeks that the data do not yet make a credible case for tightening. I suspect that such a case will emerge by the time of the August meeting, but even that is not clear because there is something different going on in the economy. I do not know if the word "fundamental" is the appropriate term to describe it, but we are observing something that is different from what we have experienced over the years, and it is increasingly difficult to argue that we are dealing only with statistical noise or minor aberrations in our model of the functioning of the economy.

The most important policy consideration, however, is whether policy inaction at this time would put us behind the curve. What is reassuring is that we are hard pressed to find any evidence of rising inflationary pressures in the data, whether we are looking, for example, at the pipeline numbers or at the wage structure. Wherever we look, we are getting little, if any, evidence of mounting inflationary pressures, and that has to raise some questions about how we view the economy at large. I recently glanced through the Beigebook of about 18 months ago, and it seemed to me that I could take its cover off and replace it with the cover for the latest Beigebook. That may seem a bit shallow analytically, but if we think about it, this is telling us something quite important.

It is hard at this stage to look at the errors produced by our equations and conclude that they reflect the usual statistical noise. The evidence no longer suggests in my opinion that that is a credible view. We tend to construct, in either a formal or a less formal manner, some econometric structure that reflects the way we think the economy works. We try to fit that structure to the available data and derive specific fixed parameters. To the extent that history is a useful guide to the current structure, we will get parameters that do not show any drift. If we use that model, we presumably will come up with a forecast that is truly replicating the dynamic forces in our economy at this stage.

The interesting specification in virtually all such models is that, under current conditions, prices go up if any element of a Phillips curve tradeoff or some other set of relationships incorporating tight labor and tight product markets is involved. If we lock in those parameters and run a simulation, given the present level of labor market tightness, any historical data will engender an immediate acceleration in inflation. Yet, what is happening currently in the real world clearly is something other than that. The reason I think we have to be exceedingly careful is that as we go around this table and listen to the descriptions of very tight markets, which are unquestionably there, the usual implication is that such markets of necessity lead to an acceleration in wages and prices. Implicit in that translation from tight markets to expected wage and price acceleration is that the parameters in question are still valid and that their signs are correct. The reason we are not getting the predicted results is that something fundamental is happening that is not reflected in the structure of our models. Our problem at this stage is that it is much too early to say what the full force of those changing parameters may be or how long it will take for them to exert their effects. I'm not saying that the explanation I have given is the only one that will stand up, but it is clear that our existing models do not account for what has been happening. They do not, in any configuration of which I am aware, explain what has been happening to the price level as the unemployment rate has fallen. However, if we compare the forecast in the previous Greenbook to that in the current Greenbook, it is obvious that appropriate adjustments are being made in the model to capture certain ongoing developments.

I think there is a series of simple relationships that in fact might explain all that is going on. The issue is whether the developments underlying these explanations are sustainable. I refer to the notion, not dissimilar to the argument that Paul David of Stanford was making back in 1989, that fundamental technological changes that occur once every 50 or 100 years can explain what is happening. Whether in fact that is a viable explanation is the open question. As I have argued before, I think that the uncertainty associated with the rapid introduction of new technology has created insecurity. Until 1995, we observed that changes in wages tended to fall well below what any of our equations would have predicted. Since then, the one-year changes probably have been in line with the short-term Phillips curve, but they have not retraced the shortfalls that occurred in 1993, 1994, and 1995. This is suggesting that the more recent acceleration in wage increases is fitting into a short-term Phillips curve model. It does not in any way restore the wage levels that we would have expected had we been projecting them four or five years ago.

The actual accounting explanation of what is going on is the one that I mentioned at the last meeting, namely that the increase in unit costs in the nonfinancial corporate area has slowed to virtually zero for all practical purposes. This largely results from a limited rise in unit labor costs of only about 1 percent at an annual rate. This outcome can be separated into factors relating to the impact of technology. First, the uncertainties stemming from the rapid introduction of technology are engendering a considerable amount of fear that has induced lower wage gains as a tradeoff for increased job security. It is very difficult not to acknowledge that that is happening in some form or other. One cannot argue, as far as I can see, that because people are saying that jobs are more plentiful and they are more confident about the job market, it therefore follows that they have significantly less job insecurity. People can be totally insecure about their own jobs and still say, "I can get another one, but I am not sure how much it will pay." Uncertainty is essentially an irrational phenomenon, and the phenomenon of diverging views is nothing new in the world. Unless we can explain why wages are being held down below historically predicted levels for other reasons, I find technology-induced uncertainty the most credible explanation, although I grant you it is by no means a necessary explanation of that phenomenon.

The issue of profitability is, however, the crucial question because it involves a combination of subdued wages and a stronger rise in productivity than one would expect at this late stage in the business cycle. It is true that we can explain a goodly part of this productivity increase by the acceleration in economic activity, but the latter too is very tough to explain at this late stage in the business expansion. I think we will have a very important test in the upcoming period. If productivity is indeed accelerating in a cyclically-adjusted sense, we should see it reflected in the second-quarter data. This is because economic growth has come down very dramatically in the second quarter from the rate of the previous six months. To be sure, productivity accelerated in the fourth and the first quarters. However, one can argue that that is nothing more than a reflection of accelerating output. But if productivity growth held up in the second quarter, something different is happening. We obviously do not have much data for the second quarter, but we do have some evidence suggesting that profit margins were not under severe stress in that quarter. If we look at unit labor costs, prices, and the like in the manufacturing sector, we get very little evidence of rising inflation, maybe some shade of a decline. If we look at security analysts' evaluations, the second quarter appears very strong. If in fact it turns out to have remained strong, the only explanation is that unit labor costs have not accelerated. Since we know roughly how wages and salaries per hour are tracking, this suggests that productivity growth is not easing significantly in the second quarter. Indeed, the manufacturing data through April and May show an insignificant decline in unit labor costs, for whatever that is worth. If this is in fact the case, it explains what is happening. It does not explain how long the process will continue, but it does tell us that a different structure is currently exerting an impact on the markets.

Having said all that, we are still confronted with certain undeniable facts, namely that employers are digging into the bottom of the barrel for workers. We are experiencing demand growth at this stage that probably requires roughly one million additional workers at an annual rate in excess of what can be sustained with the normal growth in the population. There are roughly six million people outside the labor force who say they would like a job if they could get one. They are not seeking one and therefore they are not in the unemployment pool. I am sorry; I think I just misspoke. I said six million were seeking jobs, and I think that number is wrong. What is the figure? [Pause] I take it back; it is 5.9 million. [Laughter] In any event, we obviously still have room in the economy, but we have a lot less than previously. The level of economic activity is getting to a point where something has to give. While one may argue that at this stage we are not seeing any evidence in the product markets that we are running into significant difficulties, clearly if we run out of labor at some point, capital basically will not help no matter how much we may have. Therefore, the inflation risks certainly remain on the upside, although there is no urgency for a particularly aggressive move as yet.

Superimposed on all this is quite startling evidence of how much of the growth in the GDP, how much of the growth in productivity, and how much of the increase in profit margins is confined to a very small segment of the economy, the high-tech area representing roughly 3 percent of the economy. That sector of the economy has accounted for one-third of the total economic growth--maybe slightly less depending on what indicators one looks at. It accounts for a very significant part of the increase in profit margins and productivity gains that we are experiencing. The significance of this bimodal distribution is as yet unclear. We always have this phenomenon to one extent or another, but it is particularly pronounced in this period. As I mentioned at the last meeting, the acceleration in capital investment by high-tech industries starting in 1993 and continuing at a very substantial pace until now is an indication that they see significantly improved productivity growth from the synergies of the various new technologies. This is the reason why I think an alert, so to speak, on watching the productivity numbers is very important to give us a heads-up on policy.

At the moment, as I said before, I think we have the luxury of waiting to see how all this proceeds. I do not think we have the luxury of relaxing our vigilance because it may turn out that the productivity gains we have seen in the last six months are strictly a reflection of faster economic growth that is temporary for any number of reasons. We may not fall behind the curve very quickly, but clearly we could find ourselves behind the curve if we waited too long. I think the demand elements in the economy are essentially quite strong. The Greenbook is probably right regarding acceleration in the third and fourth quarters. It is hard to believe that we will sustain the degree of sluggishness we have seen in the first part of the second quarter. Nonetheless, the data indicate that motor vehicle sales are poor. We are not seeing, except in certain areas, a big rise in retail sales in June. I would be surprised if we did not get that, and I think the producers of the Greenbook would be more surprised. I think that is the best forecast that we can make at this stage.

I have been in a rambling mode today because I think it is appropriate to the levels of confusion that I sense. In the circumstances, I believe the wisest thing we can do today is to adopt "B" asymmetric and continue to monitor the outlook. If we begin to see signs of a pickup in demand that threatens to exceed the available supply of workers, I think we will have no choice but to start to move. For the moment I believe we have the luxury of standing pat. Governor Rivlin.

MS. RIVLIN. I strongly support your recommendation. You amused me yesterday by saying I was too agnostic. You sound rather agnostic yourself at the moment about knowing what is actually happening.

CHAIRMAN GREENSPAN. No, I said you are too agnostic, but so am I. [Laughter]

MS. RIVLIN. Fair enough. I think in view of the uncertainty and the fact that there clearly is not enormous pressure to do something, doing nothing is the wise course. But the risks are, as you say, still on the high side.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I agree that there is a great deal of uncertainty and that the risks are on the high side, which certainly argues for asymmetry no matter how confusing the existing wording of the directive may be. The right decision now is to watch and wait but to watch quite carefully. So, I believe "B" asymmetric is the right decision.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Mr. Chairman, I agree with your policy recommendation for today. I want to spend a few minutes talking about policy in a somewhat longer-range perspective. I think our semiannual two-day pre-Humphrey-Hawkins meetings give us the opportunity to take that broader perspective on monetary policy. To take advantage of that, I want to talk about the policy that I think would be appropriate over the remainder of the year. This in no way binds me with respect to future policy decisions, as my prescription will always respond to unexpected developments in the data and associated changes in my forecast.

Based on my current assessment of the outlook, which is very similar to that of the Greenbook in terms of the path for the unemployment rate--growth is well above trend in the second half of the year and the unemployment rate declines further--I believe that we should plan to raise the funds rate by 50 basis points over the remainder of the year in two 25 basis point increments, one in August or September and the other in November or December. I would, in effect, be pushing forward to the second half of 1997 the increases in the second half of 1998 that are incorporated in the Greenbook forecast. I think such a path would put us in a better position to limit the increase in inflation projected over 1998 and especially into 1999 as well as reduce the risk of a still sharper increase in inflation than is projected in the Greenbook. I might also note that the environment in the second half, at least as projected, provides an unusually good opportunity for tightening: above-trend growth, a falling unemployment rate, rising long-term interest rates, and building expectations of Fed action. That same window of opportunity will not be so evident when the economy slows to trend in 1998.

I view this recommendation as consistent with the long-run simulations presented in the Bluebook. The most important conclusion that I reach from those simulations is that, even given the very optimistic assessment of the inflation outlook in the base forecast, monetary policy needs to tilt toward greater restraint to prevent an increase in consumer price inflation over time to above 3 percent. The second conclusion, perhaps more implicit than explicit, is that putting some restraint in place in the near term enhances the prospect that any required restraint will be modest, will be imposed gradually, and can be done without threatening a recession. I think the simulations with alternative policy rules reinforce this recommendation. They establish that any of those rules would have yielded an improved tradeoff between inflation and output variability compared to actual policy over the historical period. One reason for this is that they require aggressive moves in the federal funds rate in response to changes in inflation to insure that inflation does not lower the real federal funds rate. The Greenbook follows this pattern by assuming a rise in the nominal funds rate in 1998 to prevent the higher inflation from lowering the real funds rate. Another reason these rules are successful is that they all insure systematic responses of the real funds rate to evolving economic conditions. This is consistent with my view that increased flexibility in the response of interest rates to changing economic conditions might contribute to a better macroeconomic performance.

I interpreted our decision to hold policy steady at the last meeting as reflecting a desire to move gradually and to postpone further tightening until there was clearer evidence of a rebound in demand following the slowdown in the second quarter. The data since the last meeting do not yet clearly signal that that expected rebound is under way. I am, therefore, comfortable with the recommendation of no change. I also think in light of the balance of risks in the outlook that an asymmetric directive is appropriate.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, although a clear implication of both our forecast and that of the Greenbook is that we will have to tighten policy soon, I am willing to support Bluebook alternative B and asymmetric language.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Our basic dilemma is that the real world is operating differently from what our preconceived notions would suggest. We do not know if this divergence between our models and actual experience is temporary or permanent. At a minimum, this situation suggests caution and a wait-and-see attitude. At this point, I think "B" asymmetric captures that posture nicely and I support it.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. I also support no change, alternative B. I have a reasonably strong preference for an asymmetrical directive on the basis of either of two interpretations people might put on it. First, although I am not sure we have fully corrected for our past tendency to overestimate inflation, I certainly don't know any more than anyone else how to take account of some of the fundamental changes that are taking place. My best guess is that we are likely to face a situation that we will decide is unsustainable and we will tighten. Second, we do not circulate our individual assumptions about policy for the Humphrey-Hawkins submissions, but I want to confess that my own submission was based on the assumption that we will in fact decide that we are experiencing unsustainable rates of economic growth. Accordingly, I have built into my submission some moderate tightening over the period ahead. I also would be comfortable if others want to interpret our asymmetrical directive as a commitment and resolve to hold the line on inflation. So, either of those interpretations of an asymmetrical directive would be just fine with me. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I can accept your proposal today with no difficulty. However, I do want to make a couple of comments. I will preface them by observing that I understand the complexity of the issue that was raised in our discussion over the last couple of days and illustrated by the models in the Bluebook. But I also must confess that I am a person of the price stability faith. With that in mind, I think it is interesting that as output has strengthened, inflation has declined. Though there are difficulties involved in explaining that, as you have pointed out, Mr. Chairman, it is a fact that we have seen an improvement in output even as inflation has fallen from modest levels to more modest levels. We need to keep that in mind. I also believe, however, that we are not yet at price stability. So I have to wonder if some small increase in the federal funds rate might not be wise. I see the desirability of some tightening not just as an insurance policy against increasing inflation but as a further step toward price stability where the tradeoffs between recession and inflation are less dangerous in my opinion. We may have an opportunity here, if not now then at some time in the near future, to move toward price stability if we do it carefully. In my view, that is one of the objectives in addition to preventing higher inflation that we should consider as we contemplate policy in the future.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. I too support your recommendation essentially because I agree with you that we do not have a credible basis for tightening at this point.

Let me comment on your description of the situation in which we find ourselves. I agree with that description, but I am not sure that it is as much a departure from past experience as you suggest. The reason for my view is illustrated by a chart of the relationship between unemployment and inflation going back over a long period of years. This is perhaps not the most rigorous way to go at it, but I find it a useful way to start the analysis. Several things pop out as we look at that chart. First, the relationship between unemployment and inflation is nonlinear. Secondly, if there is a NAIRU, it bounces around a lot. Thirdly, there is a variable lag between when low unemployment is achieved and when inflation accelerates noticeably. Because we have had the benefit of analyzing this relationship over a number of years, we may find our view of its history to be simpler today than it was earlier. Now, there obviously are several caveats about getting into the analysis in this way. One, of course, is that the history of this relationship was predicated on policy at the time, and I am not analyzing it with contemporaneous data and so forth. But I think the chart is instructive because it suggests that the kinds of discussions and the kinds of uncertainty that we are facing today do not differ greatly from past experience.

Where that leads me, at least tentatively, is that I think the risks remain in the direction of an acceleration of inflation, and I worry that we may be ill prepared to address it properly.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Mr. Chairman, I am in agreement with your proposal because I think, as President Stern mentioned, that we probably do need a greater element of credibility in taking action than we have right now. But I do want to sound a couple of notes of caution and to pick up on a couple of things that Bill McDonough and Ed Boehne pointed out yesterday and today. Both of them discussed the need to be forward-looking with monetary policy, given the long lags that are involved and the fact that we have to rely on forecasts as a result. Both of them, particularly Ed today, noted a sense of disconnect between the theory involved in most of our forecasts and the reality of what we see in terms of a highly competitive business environment and a commitment within that environment to stable, if not declining, prices even in the face of rather tight labor and other capacity constraints. I agree with that. We have seen the same process in our own District, and I have heard a million anecdotes about cost-cutting and productivity improvements. There really does seem to be a new environment out there.

However, it seems to me that while theory and reality can be slightly divergent in the real economy at present, the same may be true in the financial markets, only in the opposite direction. In the financial markets, theory suggests that real interest rates are high by historical standards. However, we have the reality of booming capital markets, enormous liquidity, and incipient real estate booms that people all around the table mentioned in our discussion yesterday. It is true that some staff material we received yesterday with a salmon-colored cover suggested that it is difficult to find evidence of a real estate boom nationally. But, we certainly do see it in Boston. Current conditions in the financial markets and apparently starting to emerge in the real estate markets say to me that real interest rates in reality are not high, and that monetary policy at this point may be a bit too accommodative for those kinds of markets. I do not believe that monetary policy ought to be used to reduce stock market prices or asset prices, but I do think we run the risk that the ebullience we have today in financial markets will flow over into real estate markets and even increase the sense of wealth that consumers and businesses now have.

This is where the boom/bust scenario that I mentioned yesterday comes in. We all know what happens when asset bubbles occur in financial and real estate markets. We saw that in the late 1980s in this country; we saw it in Japan as well. People begin to believe that the prices of their assets can only go up. Banks begin lending for any project, viable or not. Everyone who can pick up a hammer becomes a construction worker, and all of this feeds back into the economy in the form of increasing pressures and rising prices. I think the boom is inevitably followed by a bust and the anecdotal evidence suggests the bigger the boom, the bigger the bust.

There is no question that our economy right now is about as good as it gets. As President Boehne and others have pointed out, we should be very pleased about that, and I think there is good reason for waiting and seeing right now. But with strong continuing forward momentum in economic activity, tight labor markets, and indications of incipient if not fully realized asset bubbles, I think there are real danger signs. You have mentioned, Mr. Chairman, the need over the near term to think about tightening monetary policy. I am very much in agreement with that. I wanted to interject this note of caution from the financial as opposed to the real side of the economy, but I am, as I said, in favor of your recommendation at this meeting.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. I agree with "B" asymmetric. Since inflation and pipeline inflation look pretty benign, it seems to me that there is time to see whether the economy will slow to a more sustainable growth rate. With regard to symmetry, since there is more likelihood that we are going to tighten than to ease and since we adopted an asymmetric directive at the last meeting, I think the asymmetry should be continued. Should we tighten in August or early fall, we would look rather foolish if we had just removed the bias. I continue to believe that we will have to tighten in view of the strong labor and equity markets, but it does seem to me that there is time to let the situation develop a bit. At 5-1/2 percent, the federal funds rate may not be that far out of alignment, particularly as long rates have come down. So, I think we should conserve our monetary tools for now.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. Thanks, Alan. I would favor alternative C. Basically, my rationale would be that we should be acting to protect against the prospect of a future rise in inflation, if not to lock in the recent windfall in terms of the decline in inflation we have actually witnessed. Having said that, I recognize the implausibility of acting now when we didn't last month with arguably a stronger case in terms of current as opposed to forward-looking data. But relating where we are to the discussion we had yesterday, I think the current situation we find ourselves in demonstrates what I would call the emptiness of an opportunistic disinflation strategy in the absence of a clear goal. The way I look at it, what better time than now to act opportunistically when the economy is strong and the risk of recession is low? It really is inconceivable to me that we would exercise monetary restraint in or immediately after a recession to achieve lower inflation. Circumstances would conceivably be different now if the public had a clear idea that 3 percent inflation was not price stability in our view. I think prudent actions on our part to achieve a lower rate of inflation would be anticipated and better understood in the context of a clear price stability objective.

I believe it is extremely important that our discussion of yesterday be continued and broadened, with the ultimate aim of agreeing on a sensible long-term monetary policy objective and strategy. In a sense, our hands are tied right now because we have not been clear in that regard.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you. I agree with your recommendation, Mr. Chairman, that at this point no action is the best course mainly because any rationale we might have for taking action would not be well understood and would not be credible. And therein lies the challenge of moving ahead from here. How do we make any rationale that we have credible to the array of audiences that we have out there? I think that what is credible as a rationale changes depending on the nature of the economic environment and trend. Certainly, it makes quite a difference if we are facing pure demand-side or pure supply-side forces. If we are experiencing a favorable productivity shock, then we would expect downward pressure on the level of output prices and an increase in asset prices. One version of opportunism would be to want to lock in that lower level of output prices. But an inadvertent conversion of a favorable supply development into a demand shock or an excess demand situation would not be seen in rising unit labor costs or in rising output prices. We would not see it in those markets. While we tend to look at retail sales and other nonfinancial areas of the economy, that is not where we would see it. We would see it in speculative developments and asset prices. Like Cathy Minehan, I too was struck yesterday by how many of you are hearing what I am starting to hear about growing signs of speculative activity in farm land, residential real estate, and commercial real estate. I worry a little that these symptoms of speculative excesses, rather than the sort of things we normally look at, may be the first early warning signals of developments down the road that we would have to react very sharply to. As we move from here to August, I think we need to be looking for and worrying more about indications of speculative activity than about conventional indicators of wage-push or cost-push inflation such as unit labor costs and that sort of thing.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I think the economy is operating beyond its potential and that we will have to increase interest rates eventually. But I also agree that we do not see any early evidence, certainly no credible evidence, of wage and price acceleration at this point. So, I agree that we should wait for now.

Gary Stern stated his concern that we may not be willing to act promptly to address early signs of rising inflation. I certainly hope that we will be willing to act promptly and preemptively as we did earlier this year. My concern is that we are going to start to see a little inching up of inflation--a tenth here, a tenth there, no really large increases. The methodological changes that the BLS is introducing are going to make it more difficult for people outside to detect this inching up of inflation, and there will be a lot of pressure for us not to take any action in those circumstances. There may be some reluctance on our part to act as well. That is something we have to be very careful about and very concerned about, but for now I agree with your recommendation of a "B" asymmetric directive.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I agree with your recommendation.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, we have had a lot of favorable reports over the period since the last meeting, and like everybody else I am encouraged by them. At the same time, as Cathy Minehan emphasized very appropriately, we need to keep our perspective. The level of economic activity is still very high. Labor markets, if anything, are tighter than they were at the time of our last meeting. The data suggesting that aggregate demand is softening may reflect temporary rather than permanent developments; we just don't know. Certainly, the fundamentals seem to be in place for a reacceleration of consumer spending in the third quarter. This is an expansion in which on a number of occasions we have seen a weak quarter followed by a resurgence in the following quarter.

With respect to the structure of the economy, I certainly hope you are right that it is changing in a way that can help us in conducting monetary policy. But we just do not know that, as Jerry Jordan said. I think we have to be careful and cautious about jumping to any unduly firm conclusions in that regard. I have tried to balance these considerations as best I can. If it were up to me, I would still prefer to take out some insurance now mainly because it seems to me, in line with what Tom Melzer was saying earlier, that the risk of taking out that insurance is less on balance than the risk of not taking it out. I also would make the point that a small move would not be a tightening of monetary policy. That goes back to some things that I said earlier.

I believe that we do have a rationale for moving today, but I do not think it is a rationale that the public is ready to accept. We need to do a better job of preparing the public to accept it. At the same time, the recent news is encouraging. I feel at least a little more comfortable than I did at the last meeting. I can support your recommendation, Mr. Chairman, but I would definitely want an asymmetric directive.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mr. Chairman, healthy humility is a virtue in the eyes of the Lord, and I think you have given voice to a certain level of humility that we all feel in the light of our lack of understanding. Happily and fortunately, the conditions that we do not understand are favorable, and so far they are holding. I think your recommendation accommodates these uncertainties. It recognizes the state of affairs as they exist, and it anticipates the most likely course of upcoming events. So, I support your recommendation.

CHAIRMAN GREENSPAN. Please read the directive with the old language. [Laughter]

MR. BERNARD. I will be reading from page 30 in the Bluebook, starting toward the bottom: "In the implementation of policy for the immediate future, the Committee seeks to maintain the existing degree of pressure on reserve positions. In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, somewhat greater reserve restraint would or slightly lesser reserve restraint might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with moderate growth in M2 and M3 over coming months."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
President Broaddus	Yes
President Guynn	Yes
Governor Kelley	Yes
Governor Meyer	Yes
President Moskow	Yes
President Parry	Yes
Governor Phillips	Yes
Governor Rivlin	Yes

CHAIRMAN GREENSPAN. Our next meeting is on August 19.

END OF MEETING