CONDUCT OF MONETARY POLICY

Report of the Federal Reserve Board pursuant to the Full-Employment and Balanced Growth Act of 1978, P.L. 95–523 and The State of the Economy

HEARING

BEFORE THE

COMMITTEE ON BANKING AND FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

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CONDUCT OF MONETARY POLICY

TUESDAY, JULY 25, 2000

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON BANKING AND FINANCIAL SERVICES,
Washington, DC.

The committee met, pursuant to call, at 10:00 a.m., in room 2128, Rayburn House Office Building, Hon. James A. Leach, [chairman of the committee], presiding.

Present: Chairman Leach; Representatives Roukema, Baker, Castle, Lucas, Metcalf, Kelly, Paul, Hill, Ryan, Terry, Green, Toomey, LaFalce, Frank, Waters, Sanders, C. Maloney of New York, Watt, J. Maloney of Connecticut, Sherman, Meeks, Lee, Mascara, Inslee, Schakowsky, Moore, Gonzalez and Forbes.

Chairman LEACH. The hearing will come to order.

The committee meets today to receive the Semi-Annual Report of the Board of Governors of the Federal Reserve System on the Conduct of Monetary Policy and the State of the Economy. We welcome Chairman Greenspan.

As Members are aware, although the Chairman's appearance before the committee today is no longer a requirement of law, there is little more important congressional oversight responsibility than that of the Banking Committee's semiannual review of the Federal Reserve's Conduct of Monetary Policy. In this regard, I have been working with Senator Gramm on legislation renewing the Federal Reserve's reporting requirements; and I am optimistic that the statutory reporting mandate will be renewed before the adjournment of this Congress.

Turning to the state of the economy, it appears that the Fed is succeeding in monitoring the rate of the U.S. economic growth without precipitating a hard landing, while providing a soft cushion for fiscal policymakers. Inflationary pressures remain relatively modest due, in part, to the Fed's restraint and, in part, to the ongoing improvements in productivity in the economy.

On the other hand, we are all aware that the U.S. continues to run a substantial current account deficit that must be financed from abroad. We look forward to any comments that the Chairman might make on how long this situation can persist, its possible impact on the dollar, and what steps policymakers can take to bring national savings and investment into balance.

With reference to fiscal policy, the moderation of Federal spending brought about by difficult decisions by the Congress over the past five years has contributed, along with the Fed's Monetary Policy decisions, to much sooner than expected end of Federal budget

deficits than anyone ever envisioned and to a far greater extent than anyone ever projected.

I sometimes joke to constituents that there appear to be three political parties in Washington today: the Republicans who suggest that taxpayers should be rewarded with a tax cut; the Democrats who argue that the fiscal surplus makes more spending a social imperative; and the Greenspanites who say Congress should do nothing, at least until the deficit is wiped out. In any regard, maintaining the economic progress of the United States is a challenge to the monetary policymakers of the Fed and to the fiscal policymakers here on the Hill. We welcome the perspective of the Chairman in this regard.

Mr. LaFalce.

[The prepared statement of Hon. James Leach can be found on page 58 in the appendix.]

Mr. FRANK. Mr. Chairman, may I ask the gentleman to yield briefly? I am wondering if the Chairman was switching parties. We might be making more news today.

Chairman LEACH. No, but I do expect that the most important question to be asked today is whether Mr. Greenspan turned down the vice presidential possibility.

Mr. LaFalce.

Mr. LAFALCE. That assumes he is a Democrat. Otherwise, I understand it has been filled. Mr. Chairman, we will keep a spot open for you if it is really close.

I would like to thank Chairman Greenspan for agreeing to continue the Humphrey-Hawkins report to Congress, notwithstanding what I hope will be only the temporary lapse in the statutory requirement for the report. An independent Central Bank is critically important for a well-functioning economy, but an independent bank only functions well within a democracy when it is subjected to appropriate public oversight. The Humphrey-Hawkins law ensured that a dialogue on monetary policy would take place between the Federal Reserve and the American people through their elected representatives, and that is why I think it is important for the Senate to adopt the House-passed bill that would renew the Humphrey-Hawkins Report and other important reports that provide important information to the Congress on the state of our economy and our banking system, the protection of our consumers, and the state of housing in America.

Many individuals, institutions and phenomena deserve credit for today's economy. Much of that credit must go to the enormous strides that have been made in technology, strides that are beyond the wildest expectations we had a decade ago. And much credit must go to the decision of President Bush in 1990 to enter into a compact with the Congress, the decision of President Clinton and Vice President Gore to enter into a compact with the Congress in 1993, and so forth, so that we could have fiscal sanity within the budget process. And much credit must go to the Federal Reserve Board and the Open Market Committee and particularly to its leader, Chairman Greenspan, who has helped more than anyone over those years to guide us to the 112th month of economic expansion.

Our House Banking Committee has now had the luxury for five days to study Chairman Greenspan's report to the Senate Banking Committee, and in Chairman Greenspan's testimony last Thursday he forecast an unemployment rate of approximately 4 percent for the remainder of the year. However, I am concerned that the Federal Open Market Committee believes that there still is a risk of higher inflation, notwithstanding signs of slower growth and continuing increases in productivity.

It is important to note that we have not felt the impact of the last three rate increases which took place in February, March and May of this year. According to the Federal Reserve, interest rate increases take about six months to have an effect on the economy. So we do not yet know how the last 100 basis points of interest rate increases will affect growth. I think it would be a serious error to raise interest rates now, amidst substantial evidence of a slowing economy and with the impact of the last increases still unknown.

It was for those reasons, amongst others, that I joined with David Bonior, Barney Frank, Maxine Waters, and Nydia Velazquez and others in a letter not so long ago to the Federal Open Market Committee in which we warned that further efforts to slow down the economy would likely result in increased unemployment and adversely impact many American families, particularly those who have yet to benefit from the substantial prosperity we now enjoy. That is a very, very serious problem in our body politic, this disparity, income disparity in wealth, disparity in totality of benefits; and we can never forget that.

Millions of Americans have benefited from the current economic expansion. Their prosperity has been a benefit, a blessing, both for them and for our Nation. But our current good times have not reached millions of other American families; and for those less fortunate amongst us life remains a struggle, because they lack decent and affordable housing, they lack wages that can sustain a family, they lack adequate health care or any health care, they lack enough food to eat.

Our Congress needs better information on the quality of life of Americans up and down the socioeconomic ladder in order to evaluate the effectiveness of our country's overall economic policies. When Chairman Greenspan testified last February, I raised the need for this type of information. Maybe we should have the Chairman of the Council of Economic Advisors before us in order to have his perspective on these issues.

But today, we have the Chairman of the Federal Reserve Board, and so today I address Chairman Greenspan and hope that he will be able to shed some additional light on these quality-of-life issues, such as the true purchasing power of both minimum wage workers and average workers during the course of today's hearing. If that is not possible at this hearing, I would hope our committee might have another hearing that particularly focuses on these specific issues. It is simply not good enough for us to speak in broad generalities about macro-economic facts and figures; we must understand how current economic policy impacts the lives of our citizenry.

Mr. Chairman, I thank you; and I look forward to Chairman Greenspan's testimony.

Chairman LEACH. Thank you.

Generally at these hearings I like to just call on the Chairman and Ranking Member of the two subcommittees of jurisdiction, but neither are with us at the moment. Does anyone on this side wish to be recognized briefly?

Mr. Frank.

Mr. FRANK. Thank you, Mr. Chairman. I will be brief to get to the questions.

In general, I want to express my hope that the moderation we saw from the Federal Open Market Committee at the last meeting continues, and I appreciate the extent to which the Chairman has been a moderating force against some people whose belief that interest rates must rise when unemployment drops is irrefutable, even in the face of the evidence.

I am struck by the tenacity of the belief of some that a 4 percent unemployment rate must bring inflation, and I am surprised when I read the speeches of some on the Fed to learn that a form of Marxism has taken root there. It is Chico Marxism: Who are you going to believe, me or your own eyes? And they persist in believing themselves and not our own eyes, which say that a 4 percent unemployment rate has been quite consistent with low inflation.

I do have one question, Mr. Greenspan, that I hope you are going to be able to address; and it is the equity issue. One of the problems we have is that we have greatly increased our wealth, but there has always been an exacerbation of inequality. On page 16 of the Monetary Report, there has been an example of the problem. You note that there has been an acceleration in the employment cost index, and the Fed cites the fact that this was most striking in the finance, insurance and real estate industry, perhaps because of commissions, reflecting the compensation structure there.

Then you do go on to say: "However, the uptrend in wage inflation that surfaced in the first quarter ECI has not been so readily apparent in the monthly data on average hourly earnings of production or non-supervisory workers."

This is the dilemma we have not collectively dealt with appropriately. It is especially going to be a problem if, in fact, at some point the FOMC returns to the notion that inflation has become a threat, it certainly has not yet become a reality, and decides it has to raise interest rates, slowing down growth and reducing wage pressure. The problem is, as your Monetary Policy Report quite correctly notes, the benefits of this have not primarily gone to people in the production and non-supervisory fields; and that is the dilemma we face.

As long as we have a situation where there is inequality in the way in which these gains are transmitted through the economy and our only response to the fear of overheating is an across-the-board slam on the brakes, which then will rain on the just and the unjust alike, we are going to have a problem; and that is the problem that is going to continue to manifest itself in the degree of opposition to global economic integration that you and others lament.

So I just again want to emphasize I think we can cite this report as an example of our problem. The ECI is going up. That bothers

people, as it should, given certain contexts. But the report itself cites the fact that that reflects an inequality, and when the wages of production and non-supervisory workers are not showing any inflationary pressure, but they may have to suffer because of inflationary pressures elsewhere in the economy and that, of course, includes the stock market, then we have problems.

Thank you, Mr. Chairman, for the indulgence.

Chairman LEACH. Dr. Paul.

Dr. PAUL. Thank you, Mr. Chairman.

I would like to just take one moment to thank the Chairman of the committee, Mr. Leach, for holding these hearings. I understand under the law now these are not required. I consider them very important, so I appreciate very much his efforts to continue these hearings.

I am a little bit disappointed in the trend away from the emphasis on monetary policy; and I would be concerned, even if we continue with these hearings, that we might be talking about central economic planning more than monetary policy; and I think the intent originally was that we would be talking about monetary policy.

I believe it is very clear in the Constitution and very clear in my mind that we do have a responsibility here in the Congress to protect the value of the dollar; and too often we forget about this and we allow the dollar to be controlled by outside forces and we do not concern ourselves about protecting the value. I say this with concern for a serious problem. To me, the nature of an inflated currency really undermines the middle-class and the lower-middle income. These are the people that the left would like to just subsidize by further taxation, but I see this as a consequence of an inflated currency. So I hope Chairman Greenspan will continue to be willing to come and talk about monetary policies.

I imagine we won't have any more targets to look at any more, because targets do not work very well, and I would understand that. And, over the years, my guess would be that the targets on money supply probably were never met about 90 percent of the time. But, still, the money supply is important. We should not ignore it. And I appreciate very much that we are still having these hearings. I hope they will continue. I thank the Chairman of the Committee on Banking for making an effort for these hearings to proceed.

[The prepared statement of Hon. Ron Paul can be found on page 60 in the appendix.]

Chairman LEACH. Well, thank you very much, Dr. Paul.

Mr. Sanders. I wanted to do just two and two on each side as opening statements.

Mr. LAFALCE. Mr. Chairman, I would suggest two Republicans, two Democrats and one Independent.

Chairman LEACH. Let me just say we will offer an option to Mr. Sanders, of course, and then to Mr. Baker.

Mr. Sanders, you are recognized.

Mr. SANDERS. Thank you, Mr. Chairman. Thank you for holding these hearings; and thank you, Mr. Greenspan, for again joining us.

I would agree with those who have already indicated the importance of these hearings; and I hope that, by law, we maintain them.

I would also agree very strongly with the points that Mr. LaFalce and Mr. Frank have already raised; and I think, Mr. Greenspan, we need to hear more from you on this issue. In one sense, there is no question but the economy is doing well; and there is widespread agreement. But I would hope that you will speak out to the American people and say what is obviously the truth, that despite the so-called booming economy there are tens of millions of American workers today who are working longer hours for lower wages than was the case 25 years ago.

So while Mr. Gates and other people are doing very well, that does not mean to say that there are not many, many other people who are struggling very hard to keep their heads above water. What we have got to do, and I would hope you would agree, is create an economy that works well not just for the people on top, but for ordinary people.

I would hope that perhaps later on you might want to comment on how, in the midst of this booming economy, the average American workers have now achieved the dubious distinction of working longer hours than the workers of any other country on earth. We recently surpassed the people in Japan. In fact, the average American worker today is working 160 hours a year more than was the case 20 years ago.

So, again, when we look at the booming economy, we need to see how it affects the average American worker. I think that Mr. LaFalce is quite right, that we need information which tells us that. How is the average American worker doing?

Second of all, I would hope that you will comment on not only the issue of the fact that the United States has the most unequal distribution of income in the industrialized world, but also the impact of us having, by far, the most unequal distribution of wealth. Is it good economics that, in the United States today, the wealthiest 1 percent of the population owns more wealth than the bottom 95 percent and that the gap between the rich and the poor is growing wider? Is it good economics that one person owns more wealth than the bottom 45 percent of the people in this country? And then go beyond the individual and look at what is happening to the economy in terms of corporate control of one segment of the economy after the other.

This committee, of course, deals with banking. Do you have concerns about the fact that we have lost thousands of banks in the last 20 years and that the concentration of ownership in the banking industry rests with fewer and fewer very, very large institutions? In the media, concentration of ownership rests with fewer and fewer large corporations. In many other industries, that reality exists. Should we feel comfortable that so few own so much and have so much power over the American economy? I would hope that when you get a chance to speak you can address some of those issues.

Thank you, Mr. Chairman.

Chairman LEACH. Thank you, Mr. Sanders.

Mr. Baker.

Mr. BAKER. Thank you, Mr. Chairman.

Chairman Greenspan, I will be very brief. I don't have a question during this opening statement period, but I do wish to make reference to a portion of the Monetary Report, specifically, page 21 in which the Chairman cites: "The Treasury and the Federal Reserve suggest it would be appropriate for Congress to consider whether the special standing of these institutions"—referencing the GSEs, Mr. Chairman—"should continue to promote the public interest and that pending legislation would, among other things, restructure the oversight of these agencies and reexamine their lines of credit with the U.S. Treasury."

I don't intend to ask questions today on that subject, Mr. Chairman, but I wanted to make you aware that we are trying to construct the appropriate method of inquiry to your office during the month of August perhaps for you to instruct us further as to appropriate policy that would be least disruptive to the markets. As you know, the committee has been involved for some time now in examination of these questions, and your inclusion of this statement in your report I found very significant, and I wanted to thank you for that.

Thank you, Mr. Chairman.

Chairman LEACH. Thank you very much.

I would also, before turning to the Chairman, want to notify the committee that the second bill up today is a bill that has a title, I believe it is going to be called Title VI, the American Private Investment Company Act, which is a bill that came from this committee. So it is possible that people might want to speak to this on the floor, and people ought to be aware of that.

Chairman Greenspan, please proceed, and welcome back again to this committee.

STATEMENT OF HON. ALAN GREENSPAN, CHAIRMAN, BOARD OF GOVERNORS, FEDERAL RESERVE SYSTEM

Mr. GREENSPAN. Thank you very much, Mr. Chairman. I very much appreciate the opportunity to appear before this committee to present the Federal Reserve's Report on Monetary Policy.

I must say I subscribe to the comments that many of you have made that we at the Federal Reserve found exceptionally useful. And, indeed, in our judgment, as I believe Mr. LaFalce indicated, in a democratic society where you have an independent Central Bank, it is incumbent that we appear before the Congress at fixed times in the year to explain in as best detail that we can. I think we recognize that the system functions best if oversight is complete and instructive, if I may put it in those terms.

The Federal Reserve has been confronting a complex set of challenges in judging the stance of policy that will best contribute to sustaining the strong and long-running expansion of our economy. The challenges will be no less in coming months as we judge whether ongoing adjustments in supply and demand will be sufficient to prevent distortions that would undermine the economy's extraordinary performance.

For some time now, the growth of aggregate demand has exceeded the expansion of production potential, which, if it continued, would produce disruptive imbalances. The key element in this dis-

parity has been the very rapid growth of consumption resulting from the effects on spending of the remarkable rise in household wealth. However, the growth in household spending has slowed noticeably this spring from the unusually rapid pace observed late in 1999 and early this year. Some argue that this slowing is a pause following the surge in demand through the warmer-than-normal winter months and, hence, a reacceleration can be expected later this year.

But other analysts point to a number of factors that may be exerting more persistent restraint on spending. One they cite is the flattening in equity prices on net this year. They attribute much of the slowing of consumer spending to this diminution of the wealth effect through the spring and early summer.

Another factor said by some to account for the spending slowdown is the rising debt of households. In addition, the past year's rise in the price of oil has amounted to an annual $75 billion levy by foreign producers on domestic consumers of imported oil, the equivalent of a tax of roughly 1 percent of disposable income. Mentioned less prominently have been the effects of the faster increase in the stock of consumer durable assets—both household durable goods and houses—in the last several years.

Those who focus on the high and rising stocks of durable assets point out that, even without the rise in interest rates, an eventual leveling out or some tapering off of purchases of durable goods and construction of single family housing would be expected because the stock of consumer durables and houses may be running into upside resistance.

The softness in outlay growth being so recent, all of the aforementioned hypotheses, of course, must be provisional. It is certainly premature to make a definitive assessment of either the recent trends in household spending or what they mean, but it is clear that, for the time being at least, the increase in spending on consumer goods and houses has come down several notches, albeit from very high levels.

In one sense, the more important question for the longer-term economic outlook is the extent of any productivity slowdown that might accompany a more subdued pace of production and consumer spending, should it persist. The behavior of productivity under such circumstances will be a revealing test of just how much of the rapid growth of productivity in recent years has represented structural change as distinct from cyclical aberrations and, hence, how truly different the developments of the past five years have been.

So far there is little evidence to undermine the notion that most of the productivity increase of recent years has been structural and that structural productivity may still be accelerating. New orders for capital equipment continue quite strong—so strong that the rise in unfilled orders has actually steepened in recent months. Capital-deepening investment in a broad range of equipment embodying the newer productivity-enhancing technologies remains brisk. And, for the moment, the drop-off in overall economic growth to date appears about matched by reduced growth in hours, suggesting continued strength in growth in output per hour.

A lower overall rate of economic growth that did not carry with it a significant deterioration in productivity growth obviously would

be a desirable outcome. It could conceivably slow or even bring to a halt the deterioration in the balance of overall demand and potential supply in our economy.

In recent years, the sizable gap between the growth of domestic demand and potential supply has been filled both by a marked rise in imports as a percent of GDP and by a marked increase in domestic production resulting both from significant immigration and from the employment of previously unutilized labor resources.

However, there are limits to how far net imports or—the broader measure, our current account deficit—can rise or our pool of unemployed labor resources can fall.

The current account deficit is a proxy for the increase in net claims against U.S. residents held by foreigners. So long as foreigners continue to seek to hold ever-increasing quantities of dollar investments in their portfolios, as they obviously have been, the exchange rate for the dollar will remain firm. Indeed, the same sharp rise in potential rates of return on new American investments that has been driving capital accumulation and accelerating productivity in the United States has also been inducing foreigners to expand their portfolios of American securities and direct investment.

But there has to be a limit as to how much of the world's savings our residents can borrow at close to prevailing interest rates and exchange rates, especially if a narrowing of disparities among global growth rates induces a narrowing of rates of return here relative to those abroad. In addition, our burgeoning budget surpluses have clearly contributed to a fending off, if only temporarily, of some of the pressures on our balance of payments.

By substantially augmenting national savings, these budget surpluses also have kept real interest rates at levels lower than they would have been otherwise. This development has helped foster the investment boom that in recent years has contributed greatly to the strengthening of U.S. productivity and economic growth. The Congress and the Administration have wisely avoided steps that would materially reduce these budget surpluses. Continued fiscal discipline will contribute to maintaining robust expansion of the American economy in the future.

Just as there is a limit to our reliance on foreign savings, so there is a limit to the continuing drain on our unused labor resources. Despite the ever-tightening labor market, as yet, gains in compensation per hour are not significantly outstripping gains in productivity. But as I have argued previously, should labor markets continue to tighten, short of a repeal of the law of supply and demand, labor costs eventually would have to accelerate to levels threatening price stability in our continuing economic expansion.

The more modest pace of increase in domestic final spending in recent months suggests that aggregate demand may be moving closer into line with the rate of advance in the economy's potential, given our continued impressive productivity growth. Should these trends toward supply and demand balance persist, the ongoing need for ever-rising imports and for a further draining of our limited labor resources should ease or perhaps even end.

But, as I indicated earlier, it is much too soon to conclude that our concerns are behind us. We cannot yet be sure that the slower expansion of domestic final demand, at a pace more in line with po-

tential supply, will persist and there is still uncertainty about whether the current level of labor resource utilization can be maintained without generating increased cost and price pressures.

Inflation has picked up—even the core measures that do not include energy prices directly. Higher rates of core inflation may mostly reflect the indirect effects of energy prices, but the Federal Reserve will need to be alert to the risks that high levels of resource utilization may put upward pressure on inflation. Moreover, energy prices may pose a challenge to containing inflation if they become embedded in long-term inflation expectations.

As the financing requirements for our ever-rising capital investment needs mounted in recent years—beyond forthcoming domestic saving—real long-term interest rates rose to address this gap. We at the Federal Reserve, responding to the same economic forces, have moved the overnight Federal funds rate up 1¾ percentage points over the past year. To have held to the Federal funds rate of June 1999, would have required a massive increase in liquidity that would presumably have underwritten an acceleration of prices and, hence, an eventual curbing of economic growth.

By our last meeting in June of this year, the appraisal of all of the foregoing issues led the Federal Open Market Committee to conclude that, while some signs of slower growth were evident and justified standing pat at least for the time being, they were not sufficiently compelling to alter our view that the risks remained more on the side of higher inflation.

The last decade has been a remarkable period of expansion for our economy. Federal Reserve policy through this period has been required to react to a constantly evolving set of economic forces, often at variance with historical relationships, changing Federal funds rates when events appeared to threaten our prosperity and refraining from action when that appeared warranted.

Early in the expansion, for example, we kept rates unusually low for an extended period when financial sector fragility held back the economy. Most recently, we have needed to raise rates to relatively high levels in real terms in response to the side effects of accelerating growth and related demand-supply imbalances. Variation in the stance of policy—or keeping it the same—in response to evolving forces are made in the framework of an unchanging objective, to foster as best we can those financial conditions most likely to promote sustained economic expansion at the highest rate possible. Maximum sustainable growth, as history so amply demonstrates, requires price stability. Irrespective of the complexities of economic change, our primary goal is to find those policies that best contribute to a non-inflationary environment and hence to growth. The Federal Reserve, I trust, will always remain vigilant in pursuit of that goal.

Thank you, Mr. Chairman. I would ask that my full remarks be included for the record.

[The prepared statement of Hon. Alan Greenspan can be found on page 61 in the appendix.]

Chairman LEACH. Without objection, your full statement will be in the record.

Let me just return to one part of the economic picture that seems to me to be most imperfect at this time, and I don't want to dwell

on it, because there is always something that is up and something that is down. But the trade deficit does seem to be remarkably high. Would you care to lend your perspective on that and what can be done to reduce that deficit and what views you have on how this may be developing or help the economy?

Mr. GREENSPAN. I think, Mr. Chairman, that we recognize where it is coming from and what the underlying causes are.

The first time it appeared as though there were some abnormalities in the American trade balance that occurred many years ago. Indeed, back in the 1960's, certain analysts observed a persistent tendency on the part of the United States to import at a far higher rate relative to changes in income than existed among our trading partners. Arithmetically, that meant that if everyone was growing at the same rate throughout the world, we would be creating an ever-increasing chronic trade deficit, while others, of course, would have a corresponding trade surplus. Because of the fact that for many years following that period we grew at a slower pace than the rest of the world, that abnormality essentially was hidden in the differential growth rates, and, as a consequence, we maintained fairly substantial export surpluses for quite a substantial period.

Two things have happened since. One, of course, is that the tremendous acceleration in economic activity in the United States has outstripped the growth rates of our trading partners, and, hence, we have had a double effect: our increasing growth rate expanded our net of exports, but that old basic coefficient of the relationship between imports and income has remained, quite remarkably.

Second, the very forces, as I indicate in my prepared remarks, that engender this very substantial rise in economic activity, namely dramatic increases in potential rates of return, have attracted very substantial amounts of capital into the United States, which has meant that we could sustain a very substantial and indeed expanding rate of imports to GDP without pressure on the dollar's exchange rate. Indeed, in certain measures, the dollar has actually firmed in this most recent period, suggesting that the propensity to invest in this country is actually, in a certain sense, marginally more powerful than our propensity to import goods and services.

The difficulty that is fairly obvious is, as I mentioned in my remarks, that this cannot go on indefinitely. That is, the current account deficit is, with a few statistical and accounting adjustments, equal to the net change in the debt and, indeed, equity claims as well, of foreigners on U.S. residents. So long as they are willing to expand their portfolios of claims against the United States, everything is fine when we are in balance, and indeed, that is what has been going on for a number of years.

At some point we have to expect that there will be a lessening interest on the part of foreigners in increasing their portfolios of dollars, at which point we are going to begin to get, invariably, some pressure on our accounts, and the adjustment processes will begin.

Fortunately, also as I mentioned earlier, this rising surplus in the budget, and I emphasize the word rising as distinct from the level, has been a very major buffer preventing negative effects occurring to our economy as a consequence of our international deficits. And, I would suggest that we be quite conscious of the really

quite important elements of our economic stability that we now observe that come directly from not only the level of budget surpluses, but the fact that they are still rising. And I think that the longer-term outlook of how we are going to address and adjust the trade balance suggests to me immediately that above all, the thing that the Congress, and indeed the thing that economic policy most generally can do to ease the adjustment on the international side, is to maintain the momentum of these budget surpluses, because I think it will only be in retrospect that we will truly understand how important they were to this prosperity we are now experiencing.

Chairman LEACH. Well, thank you very much, Mr. Chairman.

Mr. LaFalce.

Mr. LAFALCE. Thank you very much.

Mr. Chairman, about a month or so ago, I went to a one-person post office in my district in Middleport, New York, and the postmaster there told me the biggest complaint he ever gets from individuals who have to go and pay their bank bill, checking account, with certified mail, registered receipt requested, and they have to pay $3 to $5 in order to avoid a $29 late penalty. In that small little village, he said, there are at least 20 to 30 people per week who do that.

Last Wednesday, I wrote about half a dozen checks myself that had a due date of July 23rd, which was Sunday, and I thought, "Gee, if I get it in the mail tomorrow, Thursday, I am wondering if I am going to get a late fee, because they might not be received until Saturday, it might not be posted until Monday, the 24th, and here it was last Wednesday. I am going to be interested to see what happens on that." Then Monday morning, I went to the post office in Kenmore, New York 14217, and the woman in front of me was doing the same thing, trying to make sure that there could be some delivery the next day to avoid a $30 fee.

The statutory requirement for the Fed report to Congress on bank fees has expired. I wrote to you on Friday requesting that you don't wait until the legislation passes to begin this, that you could do this on your own. What is the disposition of the Fed to continuing the study on bank fees? I think that this is a very important issue.

Mr. GREENSPAN. I understand the problem quite well, Congressman. I don't fully have an answer yet to respond to your letter, but if the Congress does not pass the legislation, implying that it is the congressional will to, in fact, eliminate that particular report, we are then in a position where we would be overriding the Congress and that would require, obviously, a whole series of procedures that we would have to go through.

Mr. LAFALCE. You can study anything at any time that you think is important without a mandate to study it, could you not?

Mr. GREENSPAN. Well, I hesitate to respond fully to your question as indeed I have not, nor has my staff, fully come to grips with how to respond to you on this question. I am giving you our early thought patterns. It is not that we question the substance at all. I mean, on the contrary, obviously it is an important issue to a number of people.

Mr. LAFALCE. OK. Let me go on then, and then I will await an answer from you at some later date.

There are a number of phenomena that I would like to talk about very briefly. Globalization, a lot of good, a lot of problems with it. Tremendous increase in technology, particularly in the financial services sector; a lot of good, a lot of problems with it.

My first question is, what problems do you see with globalization and the increased use of technology? Who will experience those problems, and what options are you coming up with, if any, for the Fed to do something about it within your limited sphere, and what recommendations for others, including the Congress, to do something about it within our sphere of influence?

The next question if we have time, one of the biggest concerns of mine is the increased need for financial literacy in this newly globalized and technological world. I am wondering what the Fed with its various offices around the country might be able to do, working in concert with others, the Department of Education, to significantly enhance the level of financial literacy of our constituents?

Mr. GREENSPAN. Congressman, the issue of globalization is probably one of the most important issues confronting not only the United States, but all of our trading partners as well. The cause is fairly evident; that is, the technology that has emerged has blossomed forth in a remarkable way, and the proliferation of financial products has created strong pressures to deregulate, because, in a sense, the markets were creating very significant efficiencies, and the need to break down barriers came up fairly quickly. And I must say, to the Congress' credit, the response over the years, I think, has been really quite appropriate and, indeed, quite rapid, and it has enhanced the United States' position in the global world.

However, one of the characteristics of rapid globalization is that it is rapid, and rapidity creates mistakes, it creates instabilities, and it creates very significant concerns on the part of the people who are dealing in an environment which they have difficulty understanding in the sense that things are moving too fast and are not readily understandable.

Nonetheless, the bottom line of globalization by all of the evidence that we can marshal is that it has been a major factor in increasing living standards not only in the United States where it is quite evident, at least on average, but pretty much around the rest of the world. And as a consequence of that, the one thing we ought to be very careful about is to be sure to recognize that there are shortfalls and difficulties in the implementation of a globalized economy, and indeed, we must address them as best we can.

The thing we ought to avoid like the plague is anything which undercuts the actual continuation of that progress, because there is too much poverty in the world which is being addressed by this dramatic globalization. I should think that all of us, observing the unquestioned advantages of improved trade across national borders and the efficiencies that that evokes, that we ought to be acutely aware of how important that is to living standards. I do not deny that it carries with it the side effects which have all sorts of negative consequences. I think they have to be addressed, but we should

be as forthright as possible not to inadvertently upend this process of globalization which is doing so much for everybody.

With respect to the second question relevant to financial literacy, we at the Federal Reserve endeavor to do that. Indeed, a number of the individual Reserve Banks have all sorts of mechanisms and seminars and the like to communicate to the public as best we can on numbers of issues on improving financial literacy.

I do believe that the degree of financial literacy in this country, on average, has gone up dramatically in the last two or three decades. There are still, obviously, problems. There is a lot of difficulty in understanding certain technical interest rates and discounts and other financial matters that it would be helpful if there was more awareness of a lot of these issues.

I do think, however, that progress is being made, but we at the Federal Reserve look forward to doing whatever it is that we can do in that regard.

Chairman LEACH. Thank you very much.

Mrs. Roukema.

Mrs. ROUKEMA. Thank you.

Mr. Chairman, we greet you again today, and we acknowledge the fact that you are doing an excellent job, and testimony to that was that the day after your testimony before the Senate on this subject, stocks rose 100 points, and I don't know what is going to happen tomorrow after your testimony today, but let's hope we are looking at the same kind of thing.

But seriously, I believe that you have given us good advice and set a good standard for us, and that we have our job to do in continuing to pay down the debt and dealing intelligently and appropriately in a fiscally responsible way with the surplus, as you have outlined.

But, I have a specific question with respect to looking at safety and soundness and continuing banks operations in the short term, as well as the long term. Of course, financial institutions today are benefiting from the strong economy, clearly, but many seasoned bankers remember the days when the times weren't all this positive. And as many say, some of the worst loans are made in the best of times.

I don't know if you agree with that or see any evidence of that in this climate particularly, but that is why I have been so concerned about a recent accounting proposal made by the American Institute of Certified Public Accountants. The proposal, as I understand it, would seem to constrain—it is a proposal to the Financial Accounting Standards Board, and it would seem to constrain the ability of bank management to set an appropriate level of loan loss reserves.

I sent a letter to the SEC and to FASB expressing my concerns. It is only a recent letter, I have not gotten an answer back, but the letters addressed my concerns over this draft proposal, and I think that I would like to have your opinion concerning this.

What level of direction do you believe is appropriate for bank management and the Federal bank regulators in setting sufficient loan loss reserves? That is the heart of the question. Do you believe that having a strong level of loan loss reserves in this strong economy would lessen and kind of anticipate potential problems and

diffuse them if and when there is a financial downturn? I am deeply concerned about that, and I think it gets to the heart of safety and soundness questions that we have dealt with in the recent past.

Mr. GREENSPAN. Well, we share your concerns, Congresswoman. Indeed, the banking regulators have sent a letter to the AICPA indicating that we thought that the proposed rules were counterproductive to the safety and soundness of the banking system.

The problem that we have, of course, is that the banking regulators can do whatever they choose, but if the accountants specify that you cannot include in reserves generalized estimates of where risks are, which is effectively codifying management's views, but are required instead to only create those reserves on the basis of absolute evidence of losses or potential losses, it strikes me that we would get a very significantly suboptimum degree of bank reserving, and that, in my judgment, would be a mistake.

I think that the criteria that are being set up for the purposes of making a judgment as to when the generic reserve can be put in place is far too high a barrier, and, indeed, it tends to mechanize what is a very sophisticated banking procedure.

The one thing that banking is all about is judging future losses, and the extent to which you are a good banker is the extent to which you can do that. You are going to make loans which fail, which are not repaid. You don't know which they are, or obviously you would not make them, but you have a general sense of what is out there. What differentiates good from bad bankers—is those who can do that, and it strikes me to inhibit that particular characteristic of banking from being reflected on the books of the bank is a mistake.

Mrs. ROUKEMA. Well, then, we should all be working together to counteract this action and to assure that it is not going to take place and not going to be put into procedure, correct?

Mr. GREENSPAN. Well, I should certainly hope so.

Mrs. ROUKEMA. Well, we will keep this conversation going and align ourselves and take whatever action we need to.

You haven't gotten a response yet, or have you?

Mr. GREENSPAN. Not to my knowledge.

Let me just say this on behalf of the SEC. Their concerns are legitimate—that bank reserves not be manipulated to alter the per share earnings estimates and expectations of companies traded on organized exchanges. We had a long discussion with the SEC, and we have come to a general agreement, but that is not reflected, at least that is my understanding, in the AICPA.

Mrs. ROUKEMA. That is my understanding as well, but we can all work together on that and come to a precise definition.

I will recognize that Mr. Baker has already raised the subject of the GSEs, Fannie Mae and Freddie Mac and the Federal Home Loan Banks. I would simply say that I am going to be listening very carefully, and we have gone through a number of hearings on this subject. And of course I recognize the legitimate questions that Mr. Baker's subcommittee is addressing, particularly the mission creep aspect of it, but I will be holding off and listening very carefully to your responses to those particular subjects of Freddie Mac and Fannie Mae. But I do want to state to you unequivocally that

I think there are so many complexities on this that we should not be rushing to judgment and would want to work in a very thoughtful and profound manner on the subject as we move forward on the issues.

Mr. GREENSPAN. I just want to say that clearly nobody wishes to rush to judgment, but the notion that the issue is on the table and must be examined, I think, is going to be healthy for all parties concerned, including the GSEs, I might add.

Mrs. ROUKEMA. Yes. I agree. Thank you very much.

Chairman LEACH. Mr. Frank.

Mr. FRANK. Preliminarily, Mr. Chairman, just in line with what Mr. LaFalce noted with regard to the banks, and this is really, for me, a kind of a model of the broader issue to get into. One of the problems we have, I think, is that the consolidation we have seen in the financial industry generally has been a good thing, but the problem is it creates macro-efficiencies and micro-inconveniences, to the public, the micro-inconveniences are far more clear. I would urge both the regulators and particularly the institutions themselves to worry more about those inconveniences, because the cumulative negative effect of the inconveniences builds up, and you have opposition to the kind of public policies that would move forward.

That is really what I want to get into with regard to globalization. I was interested, as you have in the past, you have candidly acknowledged that there are some negative side effects. The problem is that I think the way in which you now structurally address policy, I am talking now about the Fed and the rest of the Federal Government, we are helpless to ameliorate the side effects, and the negative side effects buildup to counter our ability to go forward.

I say that even though I want to acknowledge that I think you have been very constructive in holding off the Luddites who do not think productivity is relevant to the unemployment/inflation issue, and the fact that you have resisted pressures to raise unemployment unnecessarily is a benefit.

But here is the dilemma we have. You acknowledge that there are negative side effects. In your speech in April of 1999 in Texas, you acknowledged again that some production workers are hurt by the very factors, globalization, changes in the economy, that help all of us. Now, you explained then, in part, that they were experiencing the Schumpeterian phenomenon of creative destruction. I tried it out, and it doesn't buy you a great deal when you explain it to them. But the problem we have is, OK, if Schumpeter does not get us out of this dilemma with the people who are losing their jobs, what will? And here are the problems.

Your charge, as you see it, is price stability. I am struck—it does seem to me at the close when you say, our primary goal is to find those policies that best contribute to a non-inflationary environment and, hence, to growth, is kind of a de facto amendment of the act here; that the two goals which had been coequal of growth and price stability, what happens is that price stability becomes the goal, and growth becomes the second goal.

But here is the problem. You list some problems that may require you to reduce aggregate demand. In the past you have ex-

pressed concern about the excessive variation of the stock market. Today you address both in your comments and in the report the problem of a growing trade imbalance. You also talk about the problem of increasing pressure on wages, because of the shrinkage of the available labor pool. Now, all three of these are problems that could lead to inflation or other dislocation. The response in every case is to reduce aggregate demand by raising interest rates, by slowing down economic activity.

As you say, you welcome here—a lower overall rate of economic growth that did not carry with it a significant deterioration would be a desirable outcome. Well, from the macro sense, yes. But if you are one of those workers who has not been doing very well, it is not a desirable outcome. It is an undesirable outcome with undesirable consequences.

Here is the problem. What do we do about this? Ultimately you say we may have to drop aggregate demand because of the trade imbalance. Your report on page 16 notes that we have some wage inflation, but not primarily for the lower income people; for example, non-supervisory and production workers. People on commissions, people in the newer economy sectors are the ones who benefit. Certainly when we have to think about slowing down, because the stock market is improving, we are not helping people at the low end.

Now, some of us have said, all right, well, maybe there will be some Government intervention, but you also want us not to spend any Government money. You want to keep the surpluses growing. Now, as the Chairman pointed out, that is a problem for the people who want to cut taxes, and it is a problem for the people who want to raise spending.

Well, if the response to wage inflation primarily among upper-income people and not among lower-income people, is an increased stock market, for upper more than lower, a trade deficit which in itself hurts the workers, so here is the real problem for them. They are hurt in the short term by the trade deficit, and then the response of the trade deficit that hurts them is, we have to hurt them again, because we have to slow down aggregate demand, and then if we don't spend any money to help them with health care, and so forth, all I can tell you is don't be surprised when Schumpeter is a lot less persuasive to them than it might be in another context and they are going to continue to oppose the very things you talk about.

You say you don't want to see globalization undermined. Well, the major force undermining globalization in this country today is the reality and the perception of inequity. They overlap, they are not identical, but they are both important facts; the reality and the perception of inequity, and all of what I just talked about exacerbates that. If the only response we have to the trade deficit, to wage inflation, to the stock market, if the only response is to reduce aggregate demand by raising interest rates and not to increase any kind of governmental spending to try to help out, then, as I said, you are going to have to continue to cope with this resistance, and that, more than anything else, will be the negative factor that you will face.

Mr. GREENSPAN. Let me comment on a few points that you are making, Congressman. First, let me just say for the record we do not and have not been targeting the stock market for purposes of endeavoring to stabilize this economy. We react if and when stock market price changes impact on the economy. We respond to the economy.

Mr. FRANK. I understand that, and I don't say that you are.

Mr. GREENSPAN. I just want to say that for the record.

Mr. FRANK. I appreciate that, but here is what you have acknowledged, and it is the same point. I spoke in shorthand, and I apologize. You have noted that the wealth effect, if the market goes up, how that contributes to spending, so once again we have a phenomenon where as people at the higher end of the economy do very well, that generates inflationary pressures, the brunt of which are felt by people at the lower end when we take corrective measures.

Mr. GREENSPAN. Let me first say that the economy has been moving at a fairly dramatic pace, as you well know. The effect of this is to essentially stop the erosion that was occurring in the labor markets, where, as a consequence of a number of technological problems, the dispersion of incomes, the inequality of incomes, was increasing. That has stopped in recent years, and everybody in this economy is, at least, moving higher.

The problem that exists here is that unless we can close the gap between supply and demand by accelerating productivity, which we are doing in part, that the remainder has to occur on the demand side. If it does not, then the prosperity which everyone is experiencing will be put at great jeopardy.

I did not say, and I do not say, that I am against all actions that ameliorate the problems of those, for example, who have been impacted by trade liberalization. Indeed, I have said on many different occasions that it is the problem of retraining and addressing their problems rather than endeavoring to protect the industries from adjusting to the marketplace which ultimately they will lose, a process that will occur in any event. So I am not against the issue of expenditures or other governmental programs which actually assist and assuage the problems that occur as a consequence of globalization. I am against all of those activities which prevent the economic problems, economic adjustments from occurring, because you cannot hold back the dam. All you do is you hurt the people whom you are trying to help.

Mr. FRANK. Mr. Greenspan, the effect of—and I appreciate if I could get one more minute, Mr. Chairman—I acknowledge, yes, it has been the growth that has stopped the erosion, but what we have are other people on the Fed, and I appreciate the fact that you have stood against them, who want to stop the very trend that has prevented the erosion, and the only thing that has dealt with inequality in recent years has been the great rate of growth. If we slow that down, we get back into it. So I welcome your resistance to some of them, but I fear the consequences of a renewed slowing down of growth.

But the other issue is, I am glad to hear you say you are for these programs, but to be honest, it comes in response to my questions, the thrust of your remarks doesn't leave us a lot of room for them, and I would then appreciate if you would give us your eval-

uation. Obviously my time is up. Are we doing enough in this area, and if not, what more should we be doing? Because unless we are doing more than we now are doing, you are going to continue to have this resistance.

Chairman LEACH. Mr. Baker.

Mr. BAKER. Thank you very much, Mr. Chairman.

Chairman Greenspan, as all others have, I compliment you and those on staff for exceptional and adroit skill in management of financial markets, allowing significant economic growth without aberrant inflationary consequences.

I think it important to note, however, that technological diversity and marketplace changes are inevitable; that there were those in the manufacture of steam locomotives who were very adversely impacted by developments of more efficient and environmentally responsive methods of moving freight. And the economic history is replete with examples that worked in one instance which no longer are valid.

In your managerial responsibility, if it were not for the consequences of slowing unwarranted rates of growth, the very people some Members have concerns about would be the most adversely impacted, with increasing interest rates, the higher cost of goods and services, and diminishing wage rates, as pressures in the competitive market have that consequence. Those low-income individuals are the least capable of adapting to the inflationary consequences of an uncontrolled, unbridled growth.

So it is a very difficult mission. On the one hand, control the growth to not promote inflationary forces, but don't slow it enough to where opportunities don't continue to develop in the market with new investment.

So I think there has been exceptional skill demonstrated in that arena. In fact, as a result of the managed growth, the unexpected revenue increase to the Government has caused us to see extraordinary paydown of public debt, which I think all of us agree is a positive development.

At the same time, and I quote from page 20 of the report: "Aware that distortions in Treasury yield are likely to become more pronounced as more Federal debt is paid down, market participants have had to look for alternatives in the pricing and hedging roles traditionally played by the Treasury in U.S. financial markets." And you go on to cite interest rate swaps as a significant contributor. In fact, over the decade, the derivative market has had an extraordinary rate of growth, and the notional amount of those securities is exceedingly high. In fact, of that derivatives market, in excess of 90 percent, I am told, are now purely financial transactions in nature.

The reason for this short background is that now pending is a debate in the Congress about the appropriate role of Federal financial regulators in relation to this derivatives market. Given the fact that there is an enormous amount of these transactions which are purely financial, the fact that they have developed over a very short period of time, have achieved international market penetration, not just domestic, given the consequences of missteps in that marketplace to the soundness of future economic growth, would you feel more comfortable in our determinations on this matter if the

primary regulator of these activities were a Federal financial regulator as opposed to an agricultural commodity regulator, given the history, the dynamic growth, the complexity? And I think you make reference somewhere else later in your report that something less than a month ago, the market developed a new futures product relating to Fannie and Freddie, extraordinarily complex institutions, very difficult to understand the consequences of a misstep, and that these securities point to the likely direction of the development of this derivatives market in the years to come. We can't even define what they are, much less satisfy ourselves that we thoroughly understand the risks they present.

I, for one, would be much happier with a financially competent regulator looking at these activities and recommending appropriate action to the Congress.

Are you comfortable in responding to that?

Mr. GREENSPAN. Congressman, let me just say that the bill that is proceeding through the Congress, hopefully prior to the expiration of the Commodity Exchange Act—I think it is September 30—has got some very important and very useful aspects to it. It creates, finally, legal certainty on the whole structure of over-the-counter derivatives. Over-the-counter derivatives are not unregulated. Financial institutions regulate them. In other words, the banking agencies are the regulators of the over-the-counter derivatives market.

The question of whether, in fact, the CFTC should continue to regulate the exchanges on which derivatives are traded is another question. My own judgment is that they have been doing a reasonably good job of it, and indeed, the most recent rulemaking on the part of the CFTC seems to address a number of the issues that have emerged over the years, which have created a degree of competitive imbalance between derivatives traded on exchanges and those over the counter.

Indeed, the way in which all of us in the Working Group perceive that that is appropriately addressed is to balance the regulatory structure in a manner which looks forward to legal certainty on over-the-counter derivatives and the expansion of the derivatives markets, with the CFTC, the banking agencies and the SEC all doing their appropriate role, in recognition of the importance of this market and how crucial it has been to the economic prosperity we are now experiencing.

I think there is a general agreement amongst financial institutions and, as best I can judge, within the Congress on this issue, and it is really quite a remarkable consensus, and I trust that the inevitable endeavors to fine-tune the edges of this in many different areas will not prevent the essential thrust of this legislation getting through this summer.

Chairman LEACH. Ms. Waters.

Ms. WATERS. Thank you very much, Mr. Chairman.

Chairman Greenspan, it is good to see you. We welcome you back. Of course, you come in on the heels of recent testimony at the Senate and a very interesting article written by Mr. Arbach, who creates more discussion about the fact that there is a strong belief that you are using monetary policy to target the stock market. I think, even though it was alluded to in the last discussion,

well, in the discussion you had with Mr. Frank, I would like to hear a little bit from you about whether or not there are transcripts from the 1994 meetings of the Federal Open Market Committee indicating that you were going to target the stock markets with statements like, I think there is a lot of bubble left around, and the comments by Mr. Arbach, and if this is not true, why do you think there is lingering discussion about your using monetary policy to target the stock market?

Mr. GREENSPAN. No, that is a very important question. Just subsequent to that particular transcript to which you are referring, I raised in a speech the whole broad issue of whether monetary policy should direct itself, in part at least, at asset values generally. Prior to then, and indeed it was reflected in my views in 1994, I frankly wasn't clear on whether we should or we shouldn't. I raised the general notion in a speech in, as I recall, December of 1996 about whether it is appropriate or not.

In subsequent evaluations and a good deal of thinking about the process, I concluded not, and it is my judgment as of today, and indeed, it has been my judgment for the last two or three years. It was not my judgment in the earlier period, and indeed, it was not my judgment in 1994.

Ms. WATERS. Well, thank you. I appreciate that clarification.

Let me just say that, again, each time you come before this committee, I am reminded of your visit to my district and the walk that you took along one of the avenues where we had vacant lots and boarded-up buildings. And while the economy is doing extraordinarily well in some places, there are many places in this country, such as the street you walked down and in some rural areas, that are not doing so well. And what I really want to understand is when you talk about Government surplus and you say to us that we must continue in ways that will help to have a Government surplus and pay down the deficit, because this is good for the economy, I want to know, is there room for discussion about what is a prudent reserve or surplus; and what does the Government do to further the aims and goals and elimination of poverty; and what good, if any, is tremendous investment in job training; what does a trained people do to help foster the growth and development in an economy; and should the Government have a role in that? Does that eliminate poverty; does that create growth?

And second, while I know that you don't particularly favor Government investing in business opportunities in these areas or in any areas, when do you send a message to those who are doing well that investment—not subsidies, but investment—in inner city and rural areas would be good for the economy, and that is what we should be doing when we are experiencing such growth in our economy?

Mr. GREENSPAN. Well, Congresswoman, I have always supported endeavors by the private sector to take more risks in our inner cities, because, as you know, my view is that we are plowing too much in the way of debt in the cities and creating a large debt obligation. What we really need is equity. And indeed, I think the extent to which we can encourage investments in the inner cities, we will find that that is, by far, the best way to create significant improvements.

I have not been very favorably disposed to a large number of the job training programs which I have seen occur over the years in which we appropriate funds, we set up a program, subsequently we review it, and find out that it didn't do anything. Indeed, there has been a very significant effort on the part recently of the Administration, indeed, recent Administrations, to consolidate a number of these particular programs.

In my judgment, the best job training is on the job, and there is no substitute for getting people employed. The dramatic decline in the unemployment rate of those with lesser skills in this economy is by far the most important job-training process that we have had in this country in a very long period of time. People have been able to pick up job skills, which has enabled them to get on the first rung of the job ladder and to climb up, and in the event of the next economic downturn, a far greater proportion of the lesser-skilled people will have gotten sufficiently secure in their jobs that they will not, as they have so often in the past, be laid off as in the earlier stages of an economic recession.

So as far as I am concerned, the most important thing that we as a Government can do to enhance the economic capabilities of the lesser-skilled people in this country and the inner cities is to keep this economic growth going, keep it producing the type of job demand that we see, and create significant, strong improvements in the underlying skills of our work force.

The one caveat I raise with respect to this issue is that there is a quite legitimate question of whether we get to the point where we have gotten labor markets at such a tightened level that they cease to be a net positive on balance, doing the type of good they have been doing for so long. It is possible to get markets which are too tight, which create inflationary imbalances and ultimately undercut the recovery. In my judgment, it is appropriate for us to find the right balance.

There is, to be sure, dispute within the economic fraternity, as has been alluded to previously, as to where the appropriate balance is. At the moment I think the evidence is difficult to come by on both sides of this, but that there is such a point, which is an optimum balance of a tight labor market, creating job training, job skills, and forward momentum in the whole area of employment. There is a point at which that is maximized, but there also is a point, if you go too far, at which it becomes counterproductive.

Ms. WATERS. If you will yield for one moment so that I can be clear. Are you saying that you recommend that some level of unemployment is good for the economy?

Mr. GREENSPAN. I would say there is some level of unemployment in which you can create an imbalance in the labor markets in which you get wage inflation rising faster than productivity. There is a big dispute as to where that level is. This is not, incidentally, the nature of the NAIRU question, which is another issue. It is the question of how we can make this economy function in an efficient way.

There are those in the economics profession who believe we have already gone beyond the point at which we are creating instabilities. I personally don't believe that, but, to be fair to all sides in this argument, the evidence is not yet clear which side is right.

Ms. WATERS. Let me just ask, for those in your world that recommend that there is some level of unemployment that is basically good for the economy, that is stabilizing, are there any subsequent recommendations about what you do for the people who are caught in the situation who will be the unemployed? Then does the Government have a greater role to do something because it is in the best interest of everybody for them?

Mr. GREENSPAN. Remember, when we talk about unemployment, it is important to distinguish between so-called frictional or quasi-voluntary unemployment and the actual level. In other words, there is invariably, in a free labor market where people are free to quit, to get a job, do whatever they wish, a number of people who are between jobs for voluntary reasons—they want go on vacation, or what have you. They are, in most instances, counted as unemployed at that particular point. So that the issue here really relates more to the question of the voluntary, so-called frictional unemployment level, not to the necessity, as some people put it.

I agree that you need a number of people who are unemployed to hold wages down. I don't believe that is what the issue is. It is an issue of trying to define at what point do you create instabilities in the labor market which are counterproductive to everybody's interest, including those who seek a job. Because one of the characteristics of a low unemployment rate is that for those people who are out of a job, their unemployment spell is much shorter than it is in periods when the unemployment rate is high. So it is to everybody's interest to keep this market working as efficiently as possible, and that is a difficult issue to make judgments on, and there are legitimate differences amongst those who are specialists in this area.

Ms. WATERS. Thank you.

Mrs. ROUKEMA. Thank you.

Mr. Castle.

Mr. CASTLE. Thank you very much, Madam Chairwoman.

Good morning, Chairman Greenspan. It is a pleasure to have you here. I am going to shift gears enough that it may even throw you off a little bit to a subject that you are not that familiar with, but it is something that is under the Federal Reserve that is of particular interest to me for reasons which I will explain.

And that is I was a sponsor of the legislation that created the 50 State quarter program and the new golden dollar program. So as a result of that, when there are concerns about this, I seem to hear about it I guess a little more than perhaps some other Members of Congress; and about two months ago we convened a meeting in Bloomington, including representatives of the Federal Reserve, about some coinage shortages across the United States of America and as they pertain particularly to the Bloomington, Delaware, area, but seemingly reflected elsewhere.

This is obviously a Mint problem, a Treasury problem, but also a Federal Reserve problem as the distribution agency for coins and paper currency to financial institutions around the country. The problem basically is that these programs have been perhaps more successful than had been anticipated. In fact, many of us who had never thought about collecting coins at all are collecting coins al-

most to the point of every American family in some way or another collecting coins and taking them out of circulation.

The manufacturing of these coins, which as you know takes place at our Mint sites throughout the United States of America, has indeed forced shortages I guess in other areas, based on what I am hearing. That is in pennies, although there are many people who think we should eliminate pennies. We have not. We still need to distribute them. The banks still need to deal with them.

While all this is fun and highly educational in terms of the quarter programs and people are enjoying it, this is creating some real-life problems for the banks across the United States of America. Again, I am not sure you are familiar with this. I don't know if I am going to be asking about a specific answer, but just for you to look into it. But the bottom line is, I have been talking to the people again in Delaware about this, and I understand that the Federal Reserve is only allowing banks to order 50 percent of their normal orders for pennies and 80 percent of their normal order for quarters at this present time. Again, I think it is because of the Mint usages which is going on.

The next quarter to be issued is a New Hampshire quarter on August 7th, and apparently the security people who deliver the quarters are saying they are going to have to wait for three shipments from the Federal Reserve before they can deliver them, and then all of those quarters go at once. There are lines, there are people who are frustrated, because they can't get them, and that is a problem.

The Federal Reserve's position is, once they are in circulation that there are plenty of quarters, that there is not an inadequate number of quarters per se, and you can mix them together, that is, all the various States and every other quarter that ever existed, and redistribute them, which is probably correct.

But the bottom line is the banks have this huge demand for the new quarters as they are being issued; and, because there are sufficient quantity overall of quarters, the statement is we are not going to make more in terms of the various States. And I am not necessarily suggesting they should, but I am saying the banks are complaining vociferously about this to the Mint, to the Treasury and to the Federal Reserve.

So that is a concern that I have, but the greater concern may be some of the shortages which are occurring—and, quite frankly, I am not totally convinced that all of these separate agencies are speaking to one another about these problems and with the banking community in terms of actually finding solutions, or I may be wrong about that, because I am not familiar with the internal workings of what is going on at the Federal Reserve.

I have a hunch this is beneath your particular pay grade in terms of the things you have to think about in respect to all the global issues. But, quite candidly, when you deal with the banks, they are raising quite a fuss about this. And it comes to me, and I hear about it.. And I said, I think I know exactly the man to ask. And here we are, and that is my question to you, if you could help me.

Mr. GREENSPAN. I think you indicated the cause of the problem originally, Congressman, in that there is a remarkable accumula-

tion of all sorts of coins somewhere, because we know they are produced. We know in a general way what probably is required for transaction balances throughout the system and the numbers of coins produced are really quite beyond that.

I have forgotten what the number is, I think it is something like half the new dollar coins are out of circulation, in somebody's piggybank or whatever. And one of the problems that you are getting, I assume, is the fact that, perhaps because of the general level of prosperity, people perceive that coins are throwaways in some form or another, that you stick them in a drawer and they just sit there without interest.

I admit to the fact that I probably have a lot more pennies than I probably should have. That is because when you get change they add up, and you don't know what to do with them. I think it is a problem which the Mint is struggling with mightily, and I would scarcely argue, as you indicated, that I am in any way an expert on this issue.

I am aware of the problem. I do know that there is very good interaction between the Federal Reserve people at the Federal Reserve Banks, at the Board, the Treasury, the Mint and the like. So I know the coordination is going on. But I am sure they have got a solution to this. I just don't know what it is at the moment.

Mr. CASTLE. If I could just follow up, Madam Chairwoman, just very briefly with a statement. With respect to the people's treatment of coinage, I don't think people are treating particularly the 50 State quarter program as if it is insignificant from a monetary point of view so much as a brilliant investment.

Mr. GREENSPAN. Are you saying we shouldn't have done the State program?

Mr. CASTLE. I think it is an excellent program. I think it has worked extraordinarily well. I just think we as a Government need to make the adjustments to it to make sure that our banking system can meet the needs.

Let me just say that if you had purchased the Delaware quarters initially you would have about a 400 percent return in a couple of years. There are not many stocks which have done that. I think actually people are hoarding these quarters on the basis that they are going to become more valuable, which was never the intent, but that really is a factor out there that has to be taken into consideration.

Mr. FRANK. If the gentleman would yield, don't get him started on another wealth effect.

Mr. CASTLE. I wasn't trying to do that. I would just point out that little fact out, and I do think we do need to communicate. The program is infinitely more successful than anybody expected. That is generating revenues, as you know, for the Federal Government. So I think it is a good program, but we do need to address the problems. I hope you will continue to communicate, and I yield back the balance of my time.

Mrs. ROUKEMA. Thank you, Mr. Chairman.

Now we have Mr. Sanders of Vermont.

Mr. SANDERS. Thank you, Madam Chairwoman.

Madam Chairwoman, one of the reasons in the United States that we have by far the lowest voter turnout of any major country

is that I think, increasingly, the average American no longer sees a connection between what takes place in Washington and what takes place in his or her life. They hear us talking; and they say, "Well, that is very interesting. Does it impact on my life?"

And I would suggest, Mr. Greenspan, that when you and perhaps some Members of this committee say today that this economy is really doing well for everybody, the average American looks around and says, "Well, maybe the friends that Mr. Greenspan has in the country club, that they are doing well, but they are not doing well for the average working person."

I regard it as an insult to keep talking about the so-called booming economy when, in fact, millions of Americans are working longer hours for lower wages, when the minimum real purchasing power of the minimum wage is significantly lower than it used to be, when large numbers of people who want to work full-time jobs are now working part-time jobs or they are working temporary jobs with even no benefits or inadequate benefits, when low-wage workers in the United States are the lowest paid low-wage workers of any major country, when 20 percent of our children live in poverty, which is many times higher than the child poverty level of Europe or Scandinavia.

How do we talk about a booming economy when we have the insult of having the highest rate of childhood poverty in the industrialized world, when millions of elderly people cannot afford their prescription drugs and are cutting their dosages in half, when 44 million Americans have no health insurance, when in city after city we have major housing crises and working people are paying 30, 40, 50 percent of their limited income for housing? I would suggest we stop the nonsense about talking about how the economy is booming for everybody.

Mr. Greenspan, the Federal Reserve's most recent survey of consumer finances, your own agency, says that the mean income of poor families, those earning less than $10,000, and middle income families, those earning between $25,000 and $99,000, actually fell between 1989 and 1998 after adjusting for inflation; while high-income families, those earning $100,000 or more, saw their average incomes rise. That is your report from the Federal Reserve. That is the first point that I want to make.

The second point that I want to make is that I have real concerns—maybe no one else does, but I do—about the growing concentration of ownership in this country and in fact throughout the global economy.

Mr. Greenspan, as you will remember, Mr. Leach held an important hearing here several years ago on the fact that the Federal Reserve Board orchestrated an international bailout of a $5 billion hedge fund known as the Long-Term Capital Management; and you, of course, testified at that hearing and played an important role in that bailout. That hedge fund had borrowed heavily to make losing bets on currencies, and you were concerned and helped put together a consortium of folks in the banking community to participate in that bailout. You were concerned that the failure of Long-Term Capital Management threatened its lenders with losses that could disrupt the entire United States financial system. That is how concerned you were about that.

Now my question is, if you had to act so boldly, erratically—I think you held a Sunday morning meeting that you put together with a consortium of bankers—what do you think about the fact that we are seeing recently mergers such as that between Travelers Insurance and Citicorp to form a company with assets of almost $700 billion, 140 times larger than the assets of Long-Term Capital Management? We are seeing big banks becoming bigger and the question is, what happens if their loans go south? What is going to happen to our economy? How many meetings are you going to have to take to put together consortiums to bail them out? How much money are the taxpayers of the country going to have to come up with in order to preserve the economy?

So those are my two questions.

I would prefer, strongly prefer, that you not continue to talk about the so-called booming economy. Come to me to Vermont where two weeks ago I was at a food distribution program for senior citizens and see them lined up, people earning less than $9,000 a year who are in need of Federal commodity food programs. Come to them and tell them about the booming economy and talk to millions of other American workers about the so-called booming economy when, in fact, it is benefiting the wealthy, but it is not benefiting large numbers of middle income and working families.

Those are my two questions, Mr. Greenspan.

Mr. GREENSPAN. Let me say, first, that the LTCM so-called bailout, as you put it, was not a bailout.

Mr. SANDERS. I understand that, but you were deeply concerned, were you not?

Mr. GREENSPAN. No, what I am trying to communicate is that what that was, in fact, was bringing together those who were the shareholders of that organization to indicate to them that they ought to look at the issue of whether they wanted that institution to liquidate or not from their point of view and their interest.

Mr. SANDERS. Were you not concerned about the overall impact on the national economy?

Mr. GREENSPAN. We were. That is the reason we suggested to them that they look at it. But it was their choice. It was not taxpayer funded.

Mr. SANDERS. I understand.

Mr. GREENSPAN. What you are raising secondarily, which is this issue of too big to fail, all I will say to you is the fact that there are no institutions in this country which we perceive as too big to fail. There are institutions which we believe should be liquidated in a manner which does not disrupt the structure of the financial system. And, as I have said previously with respect to this issue, if and when such an event occurs, the immediate effect would be for the shareholders to be liquidated immediately. And to the extent that there was any endeavor on the part of either the Federal Reserve or other agencies of Government to create a situation in which there was a stable liquidation of a whole structure of assets, to the extent that we want an orderly reduction in an organization of that sort, we would get involved. But in no way would the shareholders get anything or in fact could the debtors assume that they would not be getting significant handouts.

Mr. SANDERS. That wasn't my question. My question was, aren't you concerned with such a growing concentration of wealth that if one of these huge institutions failed that it will have a horrendous impact on the national and global economy?

Mr. GREENSPAN. No, I am not. I believe that the general growth in large institutions has occurred in the context of an underlying structure of markets in which many of the larger risks are dramatically, or I should say, fully hedged. That is not to say that I have no concerns that at some point we are going to run into institutional failures. We will. We always have. There is no conceivable scenario of which I am aware which says that we will not have those types of problems.

I think the crucial issue is, one, how do we keep the probabilities that they will occur to a minimum; and, secondarily, how to be certain that when and if they occur we have mechanisms in place which effectively either insulate or significantly diminish the impact of such failures on the rest of the economy.

Mr. SANDERS. Will you back up then? I don't agree with you, but will you back up and go to the question—as I understand that a little while ago you were talking about how everybody is doing well in this economy. That is your own report. Did I hear you correctly say that a few minutes ago?

Mr. GREENSPAN. Yes. If you also take the report from 1995 to 1998 you will find that a goodly part of that decline is 1989 to 1995 when indeed there was a significant erosion in the real incomes of many of our workers in the lower areas of the income group. That has since stabilized.

Mr. SANDERS. I am reading the last report that you published.

Mr. GREENSPAN. I know, but I am basically saying that if you look not only at our data, but everybody else's data, they all show that an erosion was occurring in real terms from the 1980's into the early part of the 1990's, and that since 1995 or perhaps, depending on which data you use, 1996.

Mr. SANDERS. I am looking at your data which says 1998.

Mr. GREENSPAN. No, but you are taking 1989 to 1998. I am saying all of that decline that you are referring to actually occurs between 1989 and 1995 and that since 1995 it has not continued.

Mr. SANDERS. Are you suggesting that there are not millions of workers today whose real income, compared to 25 years ago, is not lower today than it was then?

Mr. GREENSPAN. No, indeed there are, but I am just basically saying that five years ago——

Mr. SANDERS. OK. Well, if there are, then how can you talk about booming economy?

Chairman LEACH. Mr. Metcalf.

Mr. METCALF. Thank you, Mr. Chairman.

I have a short introduction and then a question.

I read some time ago in the *London Economist* and elsewhere that the Fed has dropped the use of monetary indicators like M-1 and M-2 for determining Fed policy. I was led to understand that another indicator has been adopted called wage inflation.

Now it is my understanding that the underlying cause of inflation is too much money chasing too few goods. I thought at one time that this was your understanding also. I can understand why

employers would want to see wages constrained, driven downward by interest rates, but I fail to see the wages of workers as some kind of indicator for impending inflationary pressures. Wages are the consequence of so many other factors, not the least of which is workers negotiating better wages after a corporation registers record profits.

I believe in the name of price stability the Fed reduces wages rather than inflation itself by raising interest rates. This assuredly throws workers out of work. I am surprised then that your own Federal Reserve Bank of Cleveland has produced a policy paper that argues against measuring wage inflation as a tool to control inflation. In fact, it argues that wages have no effect on inflation, but that expanding the money supply certainly does and that the best indicator—and is the best indicator still. The paper was entitled, "Does Wage Inflation Cause Price Inflation?" The author persuasively answers, no.

So I would ask, Mr. Chairman, is wage inflation the cause of price inflation? Should American workers' wages be a determining factor at all?

Mr. GREENSPAN. Wage inflation by itself does not. The issue basically is the question of whether wage inflation, as you put it, or, more appropriately, increases in aggregate compensation per hour are increasing at a pace sufficiently in excess of the growth in productivity so that the unit labor costs effectively accelerate and generally drive up the price level. It is not wages per se. Indeed, to the extent that our goals should be maximum sustainable economic growth, implicit in that is actually a maximum increase in real wages.

The issue is that what you do not want to encourage are nominal increases in wages which do not match increases in productivity, because history always tells you that that is a recipe for inflation and for economic recession.

We discarded using M-1 and M-2 not because we believed or changed our view that inflation is at root a monetary phenomenon. I do believe it is, and I think it is almost by definition, because it is the exchange rate between goods and money. The difficulty we have been having is to try to find that particular set of proxies in the monetary accounts which represent the true concept of money as a force in the issue of inflation or non-inflation.

We have not succeeded in doing that. All the various different measures we use do not obviously relate to the way money is functioning in our system. That is not to say that it is not functioning. It is just that we—nor, in fact, has anybody else been able to find the appropriate proxy. And remember, all of these measures we use are proxies for real money.

My guess is that what is happening in our system is that with all of the new financial products that have been created in recent years the central focus of what really is money is changing from period to period faster than we can capture its underlying relationship with the economy. So we have not abandoned money in that sense. Nor have we, as you indicated, chosen wages as some indicator of monetary policy. That is not the case.

What we are trying to do is, as I indicated before, to maintain maximum sustainable economic growth. And in our judgment the

crucial variable there is price stability, and to that extent the approximate goal of Federal Reserve policy is price stability, largely because we believe it is a necessary and probably a sufficient condition for maintaining long-term growth in the economy and maximum rates of growth in real earnings.

Ms. CARSON. Mr. Chairman.

Chairman LEACH. Yes, I want to go in order, but please go ahead.

Ms. CARSON. OK.

Chairman LEACH. Excuse me, did you have a question to the Chair?

Ms. CARSON. OK, I will yield, but then I am next. I do have a question of Mr. Greenspan.

Chairman LEACH. Mrs. Maloney.

Mrs. MALONEY. Thank you, Mr. Chairman; and welcome, Mr. Chairman, and congratulations on your leadership.

These Humphrey-Hawkins appearances before Congress mark one of the limited opportunities for the outside world to gain an explanation of the Fed's current thinking and plans for the future. As Members of this committee, we have been fortunate to be here during a period of economic growth and low unemployment, but should we experience a substantial slowdown in the economy I believe that our constituents would be very disturbed that Congress allowed the requirement that the Fed Chairman make a semi-annual appearance on Capitol Hill to expire. And I just want to state how important it is that we reauthorize Humphrey-Hawkins in this—as we have in this committee—but the Senate has yet to act.

Earlier, Mr. Chairman, you responded really to questions of Congressman Frank and Congresswoman Waters and you said that the Fed does not target stock markets. I think that is a substantial statement, and I would like to place in the record the article that they both referred to. It is in *Barron's* this week. And I think it is important to note and that prior to 1994, because in this article they quote the minutes from the meetings, you felt that monetary policy could target the stock market and that is what basically was quoted in here. So I would ask——

Mr. GREENSPAN. As I indicated in my response, at that time I thought it might be appropriate and, indeed, on occasion thought it was. I have since changed my mind on that issue.

Mrs. MALONEY. I think that is a substantial statement, and I just wanted to make sure that this was in the record.

[The information can be found on page 59 in the appendix.]

Mrs. MALONEY. Mr. Chairman, one of the most important current consumer issues in the financial area is the growing problem of predatory lending. As you are aware, predatory lenders target unsophisticated borrowers and often use deceptive sales techniques to persuade them to enter into high-cost loans that often lead them to financial ruin.

In May, this committee held a hearing on the topic; and a bipartisan consensus emerged that the financial services regulators must be more aggressive in using their existing authority to target predatory lending. At that hearing, Federal Reserve Governor Gramlich said that the Fed would study what additional steps it can take under its current statutory authority to deal with abusive

mortgage lending practices under the 1994 Home Ownership and Equity Protection Act such as lowering the rate figures.

Last year, the General Accounting Office released a report that urged the Board to conduct examinations of bank holding companies subsidiaries that engage in subprime lending. While I know that it is Fed policy not to conduct consumer compliance exams of non-bank subsidiaries, I urge you and your staff to carefully consider the recommendations of the GAO as you study this issue. I believe that if the Fed is serious about combatting abusive lending it has an opportunity to do so in this area. Subprime lending is an area where the Fed's macro-economic management and its actions as a bank regulator may interact.

While I strongly believe in expanding access to credit for traditionally underserved communities, the number of subprime home equity loans has exploded from 80,000 in 1993 to 790,000 in 1998. Mr. Chairman, what progress has the Fed made since May, if any, in deciding how to combat predatory lending and from a macro standpoint does the explosion in subprime lending pose any type of danger to the economy?

Mr. GREENSPAN. Well, Congresswoman, we have been aware of the issue of predatory lending for quite a while, and indeed I think it is quite a number of months ago that I commented on it when we began to see signs that practices were emerging amongst the subprime lenders which clearly were inappropriate by any standard that we could see.

Part of the problem, as you alluded to, Congresswoman, is the very dramatic rise in subprime lending itself. And that in and of itself should not be a problem, because indeed there are many good things that occurred as a consequence of that. Numbers of people have not been able in the past to get loans because they had marginal credit capabilities, and I think what has occurred is a general awareness that, while there were higher losses in these types of lending activities, that there is nonetheless a market out there which is useful and, if appropriately managed, is a positive net addition to our financial system. But I suspect as a consequence of the very dramatic rise that has occurred—the tremendous growth that has occurred in this market—that numbers of regrettable activities have emerged as a consequence. And, as Governor Gramlich has said, he mainly has been focused on this issue quite assiduously in recent months. As a consequence, he has scheduled hearings, and he has endeavored to find mechanisms by which we will get a far better understanding of what basically has been going on.

We have already scheduled four hearings: in Charlotte, Boston, San Francisco and Chicago over the next two months. I should hope that, at the conclusion of those hearings, we will have accumulated enough information which would give us some basic better insight into, one, what authorities the Federal Reserve has to address what problems we find; and two, to the extent that the problems are of a significant nature which cannot be readily addressed by the Federal Reserve under its existing authorities, whether additional authorities are appropriate.

Chairman LEACH. Thank you.

Mrs. Kelly.

Mrs. KELLY. Thank you, Mr. Chairman.

Mr. Greenspan, thank you for being so patient with us all this morning. I was looking and realized that the conference board just came out with a new consumer confidence number this morning. They reported that consumer confidence has risen to 141.7 in July, because confidence is up in six of nine regions in July, but fewer households expect business conditions to improve and buying plans have weakened. To what extent do you intend to take these two factors into account when you are thinking of a possible additional rate hike in August?

Mr. GREENSPAN. We find that, historically, various different elements of the consumer confidence indices—both those of the Conference Board and of the University of Michigan—have been useful indicators of the direction of consumer spending and some of its composition.

As you point out, these data that were released this morning are too new to get any particular evaluation of. The rise that occurred in the July index still leaves it somewhat below the May index, which, as I recall, was in excess of 144, but, nonetheless, it is clear that consumer confidence remains quite high in this country and that, despite the evidence of some slowing down in consumer buying, we are not confronted with a buyer strike by any remote sense of the meaning.

So, in that sense, what happens in these markets over the next number of weeks—and there are a number of weeks before the FOMC has to make a judgment—will clearly have an impact on what type of decision the committee makes. There is an awful lot of information about what is happening and what is likely to happen which will occur between now and our scheduled meeting, and I think it will have a significant effect upon what action the committee chooses to take.

Mrs. KELLY. Since confidence is up in six of nine regions, will you take a regionality approach to this when you look at it?

Mr. GREENSPAN. No, we do not, Congresswoman. And the reason is that, unlike the American economy of, say, 70, 80, or 100 years ago, when there truly were regional economies, we have, for good, I think, ended up with a single integrated economy in this country. We have certainly ended up with a single financial market in that whereas, you know, 30 or 40 years ago you used to have significant differences in mortgage rates, say, in California versus the East Coast. That no longer exists. The Federal Reserve has only one Federal funds rate that we handle, and indeed we no longer have the capacity, as indeed we did in years past, to have different discount rates in different areas of the country reflecting differences. Now the system has to be uniform, because if it is not uniform it will be arbitraged very significantly to nobody's good.

So the answer to your question is that while we recognize that there are differences that are occurring area by area in this country, and while I would not say that there is a disconnect between various areas because there are differences in levels of economic activity in various different areas of our country, but monetary policy, regrettably, cannot address that. We only have one tool, and that is an issue for other economic policies of governments—State, local and Federal.

Mrs. KELLY. I have just one other question to ask. I find it interesting that wholesale prices in retail sales were slower in June and I wonder if you feel that is a direct result of the Federal Reserve rate increase or do you think it is just too soon for that to have shown?

Mr. GREENSPAN. It is hard to judge. Part of it probably is. I mean, certainly part of it is a result of the significant rise in real corporate long-term interest rates, which have moved mortgage rates that has been going on for a good deal of time—not a good deal longer, but somewhat longer than we have been moving interest rates. So, interest rates have had to have some effect in that regard.

But, as one of your colleagues mentioned earlier, there is still a significant amount of recent interest rate changes, which clearly have not yet impacted the economy. Remember that what we are observing at this particular point is an economy, which is still out of balance in the sense that demand does exceed underlying potential supply, even though it has eased down. And one way to evaluate what we have already done with respect to interest rates is that the process is moving forward and the interest rates are beginning to adjust the economy, as indeed we hope they would and should.

We don't know and cannot know at this particular stage whether that process is accelerating, slowing down or the like, and we will not know for a while. We will know more, I would presume, by the time of our next meeting, and at that particular point we will make a judgment as to whether or not further action or no action is the more appropriate policy for the purpose of creating a more balanced economy which has the capacity to continue this quite extraordinary 112-month expansion.

Mrs. KELLY. Thank you very much.

Chairman LEACH. Mr. Watt.

Mr. WATT. Thank you, Mr. Chairman.

Chairman Greenspan, let me start by thanking you for the Fed's recent baseline study on the impact of CRA. While some of us had some concerns about some of the process issues related to it, I continue to believe that having a baseline study will improve the quality of debate in the future and enable us to have a more fact-based debate as opposed to just speculating about what impact CRA is having on lending and on economic development in some of our communities. So we thank you for that.

I wanted to zero in on one particular part of your testimony, Chairman Greenspan, starting with pages one and two of your prepared comments. You indicated that household spending has slowed, and you talked about several theories about why that has occurred—flattening in equity prices this year, which I guess is a reduction in the so-called wealthy effect that I think you testified about on a prior trip to the committee.

The one aspect of this that I wanted to zero in on, however, is the second one of these, which is—second reason for the spending slowdown, which is the rising debt burdens of households. A number of us are concerned about the rising debt burdens of households, and I am wondering if you could just talk a little about what impact that has on the economy.

It is described in your statement almost as if it were a good thing to slow down the economy, but I doubt that that is what you intended by the comments. I think that is just the way it kind of played itself out in the section that you talked about it.

But one of the things, I recall that you were very adamantly opposed to increasing deficits and debt spending by the Government. And I am wondering whether family household deficits and debt spending, as opposed to family savings, which would be, I guess, the equivalent to our surpluses at the Federal Government level, have pretty much the same impact in the private sector that debt and deficits have in the public sector. If you would just talk about that. I don't have a specific question, but I am trying to get a framework for my own evaluation of the impact of family and household debt and the impact that is likely to have if substantial debt continues over a long period of time.

Mr. GREENSPAN. It is a very important issue, Congressman. I would first distinguish the debt creation by the Federal Government, as distinct from households in the sense that the Federal Government can borrow at any time as much as it wants with no limit. Households, obviously, cannot. And in that regard the behavior of debt in the household is quite significantly different in its impact in the economy generally.

To be sure, all debt is effectively purchasing power which must balance with potential supplies to make sure the economy is running at a stable pace. What we know about household debt is that even though the ratio of debt to income has been rising, that the debt service burdens, meaning the actual monthly payments as a percent of disposable incomes, have been rising, and although they nonetheless have been rising in the last couple of years or so as I recall. There is very little evidence to suggest that rising debt burdens on the part of households per se are a trigger for economic recession. Most people have a generally good idea of how much debt they can carry, and they don't go beyond it. The problem is not that rising debt will create a problem for the economy, but that should the economy turn down then the high debt burdens could create some significant debt problems for a number of America's households. That has been the typical pattern over the years.

Consumer debt has been a remarkably munificent force in moving people into the middle class in this country over the last two or three generations, and it continues to be a very potent and very desirable financial feature, but you are quite correct in raising the issue that there are potential concerns. The concerns are, however, when the potential recession occurs. Evidence certainly does not suggest that is a problem now.

Mr. WATT. Thank you, Mr. Chairman.

Chairman LEACH. Dr. Paul.

Dr. PAUL. Thank you, Mr. Chairman.

Mr. Greenspan, I have a couple of questions today. One is a general question. I want to get a comment from you dealing with the Austrian free market explanation of the business cycle. I will lead into that, as well as a question about the productivity statistics that are being challenged in a few places.

But first off, I would like to lead off with a quote that I think is important that we should not forget about our past history.

"Every new era in our history"—and we have had several—"has been based upon the exaggerated enthusiasm and the inflationary forces set in motion by some single new industry or industrial activity." This was written by *Businessweek* in 1930, a couple of days after the crash.

Also, I would like to remind my colleagues about surpluses, and I know we look forward to all the surpluses. First, that portion of the national debt we pay the interest on is still going up. So there is a question about if we have true surpluses. But even if we did, I would like to remind my colleagues that we were, as a country and as money managers, reassured in the 1920's that our surpluses in the 1920's would serve us well, and it did not predict what was happening in the 1930's.

Basically, the way I understand the Austrian free market explanation of a business cycle is once we embark on inflation, the creation of new money, we distort interest rates and we cause people to do dumb things. They overinvest, there is malinvestment, there is overcapacity and there has to be a correction, and the many good members or well-known members of the Austrian school, I am sure you are well aware of them, Mises, Hayek and Rothbord, as well as Henry Hazlitt, have written about this, and really did a pretty good job on predicting. It was the reason I was attracted to their writing, because certainly, Mises understood clearly that the Soviet system wouldn't work.

In the 1920's, the Austrian economic policy explained what would probably come in the 1930's. None of the Austrian economists were surprised about the bursting of the bubble in Japan in 1989, and Japan, by the way, had surpluses. And of course, the best prediction of the Austrian economists was the breakdown of the Brettan Woods agreement, and that certainly told us something about what to expect in the 1970's.

But the concerns from that school of thought would be that we still are inflating. Between 1995 and 1999, our M–3 money supply went up 41 percent. It increased during that period of time twice as fast as the GDP, contributing to this condition that we have. We have had benefits as a reserve currency of the world, which allows us to perpetuate the bubble, the financial bubble. Because of our huge current account deficit, we are now borrowing more than a billion dollars a day to finance, you know, our prosperity, and most economists, whether they are from the Austrian school or not, would accept the notion that this is unsustainable and something would have to happen.

Even recently I saw a statistic that showed total bank credit out of the realm of day-to-day activity in control of the Fed is increasing at the rate of 22 percent. We are now the biggest debtor in the world. We have $1.5 trillion foreign debt, and that now is 20 percent of the GDP, and these statistics concern many of the economists as a foreboding of things to come.

And my question dealing with this is, where do the Austrian economists go wrong? And where do you criticize them and say that we can't accept anything that they say?

My second question deals with productivity. There are various groups that have said that our statistics are off. Estevão and Lach claim, and this was written up in the St. Louis Fed pamphlet, that

the temps aren't considered and that distorts the views. Stephen Roach at Morgan Stanley said we don't take into consideration overtime. Robert Gordon of Northwestern University says that 99 percent of the productivity benefits were in the computer industry and had very little to do with the general economy, and therefore, we should not be anxious to reassure ourselves that the productive increases will protect us from future corrections that could be rather serious.

Mr. GREENSPAN. Well, I will be glad to give you a long academic discussion on the Austrian school and its implications with respect to modern views of how the economy works having actually attended a seminar of Ludwig Mises, when he was probably 90, and I was a very small fraction of that. So I was aware of a great deal of what those teachings were, and a lot of them still are right. There is no question that they have been absorbed into the general view of the academic profession in many different ways, and you can see a goodly part of the teachings of the Austrian school in many of the academic materials that come out in today's various journals, even though they are rarely, if ever, discussed in those terms.

We have an extraordinary economy with which we have to deal both in the United States and the rest of the world. What we find over the generations is that the underlying forces which engender economic change themselves are changing all the time, human nature being the sole apparent constant throughout the whole process. I think it is safe to say that economists generally continuously struggle to understand which particular structure is essentially defining what makes the economy likely to move in one direction or another in the period immediately ahead, and I will venture to say that that view continuously changes from one decade to the next. We had views about inflation in the 1960's, and in fact, the desirability of a little inflation, which we no longer hold any more, at least the vast majority no longer hold as being desirable.

The general elements which contribute to stability in a market economy change from period to period as we observe that certain hypotheses about how the system works do not square with reality. So all I can say is that the long tentacles, you might say, of the Austrian school have reached far into the future from when most of them practiced and have had a profound and, in my judgment, probably an irreversible effect on how most mainstream economists think in this country.

Dr. PAUL. You don't have time to answer the one on productivity, but in some ways, I am sort of hoping you would say don't worry about these Austrian economists, because if you worry too much about them, and these predictions they paint in the past came true, in some ways we should be concerned, and I would like you to reassure me that they are absolutely wrong.

Mr. GREENSPAN. Let me distinguish between analyses of the way economies work and forecasts people make as a consequence of those analyses. The remarkable thing about the behavior of economies is they rarely square with forecasts as much as one should hope they did. I know there is a big dispute on the issue of productivity data. I don't want to get into that. We would be here for the rest of the month. I think the evidence, in my judgment, is increas-

ingly persuasive that there has been an indeed underlying structural change in productivity in this country.

Chairman LEACH. Thank you.

Ms. Carson.

Ms. CARSON. I too want to thank you, Mr. Chairman Leach, certainly you, Mr. Greenspan, for being here and raising the intelligence, if you will, of this prestigious committee.

Having said that, I would like to know your comment earlier when Congresswoman Waters was here about believing not in consumption, but in equity, and believing that we don't need training programs, we rather need on-the-job training. And I am from Indianapolis, Indiana, where a major bank merger occurred which propelled unemployment up for a while because the banks merged. 4,000 people, as a result of that merger, were laid off. Their jobs were taken away from them, the tellers and the clerks and less and sundry individuals who wanted to work and who were productive in their jobs, but who were laid off because of the merger.

Now, were you suggesting, just from my information, not to be combative at all, that those 4,000 people don't need other kinds of job training since the job that they had are no longer available?

Mr. GREENSPAN. No, Congresswoman, I was merely reflecting on the experiences I have had being in and out of Government now since the early 1970's, and I have seen an extraordinarily large number of Federal job training programs year after year, which all look very good politically and made a lot of people who initiated them think they were doing something useful for people who needed the skills to get jobs. I am merely raising the basic question, did they, in fact, do what they were supposed to do? And from what I could judge, they fell far short of what they were originally projected to do, and in my judgment, the funds could probably have been used far more effectively in other ways.

What I have been able to observe looking at industry, looking at the job market generally, is that the best job training that exists unquestionably is on-the-job, doing something specific, learning something directly relevant to a particular activity in an organization and learning in that process. The trouble with job training programs generally is, of necessity, they are generic. They tell you how to do various general things, but rarely can they get to the specific activity which you need to know in order to do a job correctly.

And it is no fault of the job training program, because you do not know what type of individual activity you are going to need to have, and therefore, I think that to the extent that we can keep this economy going, to the extent that we can keep the extraordinary demand for labor continuing is, in that regard I believe, the best program for improving the skills of all the various people in the structure of our labor markets to get jobs.

Ms. CARSON. OK. I don't want to belabor the point much longer. Thank you very much for your response.

Congresswoman Maloney talked about predatory lending. Credit card companies can charge you any amount of interest that they want to charge you. They can charge you 30 percent, 40 percent, speaking of predatory lending, and they also send a lot of their customers checks in the mail where they can make them out for any amount they want to. Ordinarily, people would get credit cards who

would be prime for predatory lenders or people who the banks have turned down for credit, so there is this abundance of credit card use in existence. Does there exist regulatory authority over the amount of interest rates that can be applied by credit card companies on to consumers?

Mr. GREENSPAN. I do not believe so.

Ms. CARSON. How does that escape predatory lending observations?

Mr. GREENSPAN. Let me suggest to you the reason for this. In the past, we have had innumerable statutes which indeed endeavored to cap rates, the effect of which was for the market to be eliminated. I think the really challenging issue that confronts us today is how to maintain the tremendous growth in subprime lending, which, in my judgment, has done a lot of good and created lending capabilities for a lot of households, which were able to pay off the loans, but whose credit was quite marginal, without the obvious negative consequences that have occurred, probably as a consequence of the very rapid growth itself. In my judgment, the task here is to find the appropriate balance. I do not believe that you get very much in limiting interest rates, in other words, limiting the rates that people can pay, and in effect, imposing usury statutes.

I think over the years they have not been terribly successful in doing what people thought they were going to be doing. They almost never created lending at lower rates. What they created was no lending, and that strikes me as not the appropriate means of handling this.

I do think that there are a lot of issues, and this is, in fact, the general purpose of these hearings, which Governor Gramlich has scheduled for four different cities in the next two months. We are going to learn, I hope, a good deal of what we need to know to find out how does one maintain a significant degree of subprime market growth without the adverse secondary consequences, which are resulting as a consequence of that growth.

Ms. CARSON. Thank you.

Chairman LEACH. Well, thank you, Mrs. Carson.

Mr. Hill.

Mr. HILL. Thank you, Mr. Chairman and Chairman Greenspan, thank you. I echo the comments of my colleagues. Thank you for being here today.

In reading your report and your testimony, I don't think you are saying much different today than you said when you were here three months ago or so about the state of the economy and where we are. I think you said then that aggregate demand exceeds supply, and at that point you suggested interest rates were going to have to go up until they got back into balance. I think you just stated earlier that we are still out of balance, demand and supply are not yet in balance.

Mr. GREENSPAN. The data that we have for the first quarter still suggest as of then it was out of balance. As I indicated in my prepared remarks, we seem to be moving closer to balance in the last two or three months, but we do not as yet have adequate data to suggest how much closure has occurred, and we will not have for a while.

Mr. HILL. And the consequence of this imbalance is higher inflation than we had last year, higher interest rates than we had last year, and a larger trade imbalance than we had last year; is that correct?

Mr. GREENSPAN. Yes, sir.

Mr. HILL. You stated in your testimony, I think, and in the report, that the Government surpluses that we are experiencing today have been a buffer for you. It has given you more flexibility, perhaps, in your monetary policy by virtue of the fact that our fiscal policy has been more responsible. I just want to ask you, isn't it true that the spending constraint of Government has been the largest contributor to that, the fact that the nominal rate of growth of Government spending is down and also a percentage of GDP Government spending is down?

Mr. GREENSPAN. Well, it has certainly been a factor, because growth in Medicare spending seemed to be accelerating at a clearly unsustainable pace, and I think that the endeavors on the part of the Congress and the Administration to come to grips with that clearly historically have been successful. The major cause of the surplus, however, is on the revenue side. We have had an extraordinary increase in revenues, in large part, as a consequence of significant asset price increases, not only capital gains taxes, but a very substantial amount of revenue that occurs in the individual, both withheld and non-withheld accounts, which we can't now fully explain, but which, in retrospect, we are going to be able to attribute directly to the fact there has been a very large increase in assets, and the consequence of that is that we have an unexplained element of revenue increase, which has been a major factor here in this extraordinary rise in surpluses.

Mr. HILL. But in terms of the issue of balance, if Government spending goes up, it crowds out spending by consumers and crowds out spending by business and business investment, doesn't it?

Mr. GREENSPAN. Yes.

Mr. HILL. I mean, consumer spending and business investment are good things for the economy, and so if Government spending goes up, it creates further imbalance, pressure for higher interest rates, and higher inflation.

Mr. GREENSPAN. There was no question that if we did not have the acceleration of surpluses, which are coming both from the revenue side and the expenditure side, that we would have had a higher degree of instability in this economy, and far more difficult problems to address than indeed we have today.

Mr. HILL. You did note in your report, however, in the fourth quarter of 1999, Government spending was accelerating again. Does that cause alarm to you?

Mr. GREENSPAN. Well, I have to be a little careful. Some of that, as I recall, is a result of significant progress payments being made on military contracts which get offset at a later time, so it is sort of like inventory in process being financed, which unwinds, and that indeed is what has happened since then.

Mr. HILL. One of the big debates.

Mr. GREENSPAN. I might add, however, that in general, total unified outlays have been accelerating quite significantly in the last two or three quarters.

Mr. HILL. That could cause problems, further imbalances if it is not constrained.

Mr. GREENSPAN. Yes, I agree with that.

Mr. HILL. You also note in your testimony that the effect of these higher oil prices represents the equivalent of a $75 billion tax increase on the American people by about 1 percent of the GDP.

Mr. GREENSPAN. 1 percent of disposable income.

Mr. HILL. I stand corrected, which is going to have a damaging effect on the economy as these higher interest rates probably will as well. I guess one of things we are debating, of course, is what to do with the surplus. You are on the record repeatedly, we ought to let it just ride, if you will. It doesn't appear that Congress is going to do that. But I would note that the $75 billion tax increase, this higher oil price, represents greater than the combination of all the tax reductions that have been proposed in this Congress together, and by the same token, during the markup of the appropriation bills, there were literally dozens and dozens and dozens of amendments offered to those appropriation bills, almost all of them ruled out of order because they exceeded the budget that would have dramatically increased spending even beyond the amounts we have noted earlier.

How important is it that we stay within this budget in terms of controlling spending and maintaining these surpluses and maintaining Government savings?

Mr. GREENSPAN. Well, I never expected when the original Budget Control and Empowerment Act of 1974, as I recall, was enacted that it was going to do anything, and in retrospect, all of the budgetary mechanisms that we placed on ourselves, so to speak, have had a really quite dramatic and very positive effect in restraining spending. I never believed that caps were going to work or PAYGO was going to work, because all it required was a majority of the body to override them. But apparently, there has been a very significant desire on the part of the American people for far more fiscal responsibility than we had exhibited in our earlier years, and that message clearly has gotten through. The effects of it have been very positive on our economy, and I think that we should recognize that these various mechanisms which we put in place, which have done so much good, should be kept in place and function in a manner which will keep balance in our fiscal affairs.

Mr. HILL. Thank you, Mr. Chairman:

Chairman LEACH. Thank you very much, Mr. Hill.

Mr. Sherman.

Mr. SHERMAN. Thank you, Mr. Chairman.

Chairman Greenspan, I want to thank you for the written answers that you provided to questions I raised the last time you were here. And perhaps some of the questions I raise now you won't have a chance to answer except in writing, and it is a great way to communicate. I asked you then what we could do to raise real wage rates. You pointed out that real wages were dependent on productivity, two ways to increase productivity, more capital investment and more education. You came down on the side, really, I think of more capital investment and indicated that one way to do that would be to reduce taxes on returns to capital.

I would point out that I think education may do just as much for productivity and has the additional advantage that the asset, the education, is owned by the worker, and so whatever increase in productivity occurs is more likely to accrue to the worker's benefit, whereas additional capital may increase productivity, but it is fundamentally owned by the owner of capital, and I would expect it to lead to higher profits before it led to higher wages. I would.

Mr. GREENSPAN. It does, but not for long. I mean, you are quite right, it does lead initially to higher profits, but at the end of the day, it leads to higher real wages.

Mr. SHERMAN. I would point out that increased capital investment can be literally moved offshore and taken away from the benefit of American workers, whereas when we educate American workers, all that benefit is inherently——

Mr. GREENSPAN. I happen to agree with you. I am not sure if I have phrased it the way you are suggesting, as putting down the advantage of education. I would certainly not mean to do that, because I think you can't have capital equipment if no one can run it.

Mr. SHERMAN. At the margins the decisions we have to make in Congress are do we cut taxes on capital or do we invest in education, and I would like to answer the question yes to both, but obviously we can only do one or the other to a limited extent, and would argue more in favor of investing in education than cutting taxes on capital. If we do want to reduce taxes, another way to do it, of course, is to reduce taxes on working families by increasing the earned income tax credit.

I want to shift to the trade deficit, but before I do that, just a word about economic statistics. You testified back when I was on the Budget Committee that the consumer price index overstates inflation, and I assume that in setting monetary policy, you have a way to adjust, or at least mentally take into account the fact that the CPI, which at times might be alarming, may simply be overstating inflation. I know that you are loathe to see any increase in Federal spending, but one area that might be useful is to spend more on gathering economic statistics so that they are more accurate, more useful and more timely, and I wonder if you would be willing to provide to Congress or to this committee a plan for investing more and gathering more timely or more relevant economic statistics to help the Fed and other economic policymakers do their job, and would this be a good place to invest?

Mr. GREENSPAN. It has always created a problem for me, because I generally have been strongly, over the years, urging spending restraint, and I felt that it seemed a bit hypocritical to find areas which might be useful to me or my agency that were exempt from that general proposition, but I am hard-pressed to disagree with the position you are taking as the rate of return to the society from very small amounts of money can create quite significant advantages, I find it also difficult to disagree that to the extent that we can enhance the capability of understanding what is going on in our economy, not referring only to Government officials or to the Federal Reserve, but the business community generally, I think that knowledge is terribly crucial and timely. Knowledge is very important for the types of decisions which business people can

make which can keep our economy generally stable. And I do think that since the amounts are really quite small, that I feel less of a violation of my general principle than ordinarily.

Mr. SHERMAN. I would hope that you would furnish us with a blueprint, a wish list, because I do think that it would be a good investment. On the trade deficit, I would just point out that we have the largest trade deficit in the history of life on this planet. It may very well grow to $400 billion or $500 billion a year for as long as the eye can see. Do you think we could just run another $5 trillion accumulated trade deficits over the next decade without problem? And do you have an emergency plan for what happens if the dollar crashes, not this year, but after a few more years of unbelievably high and unsustainable trade deficits?

Mr. GREENSPAN. Well, I addressed that issue in considerable length when your Chairman put this question "number one," so that it indicates that it is a priority issue. It is a very important issue, and I think it is probably the most difficult one which we economic policymakers, Treasury, ourselves and others, have to confront.

As I indicated in my earlier comments to Chairman Leach, at the moment we are observing a remarkable balance in the sense that the propensity to invest in the United States, because of very high rates of return is just about offsetting the amount of demand for imports, with the net effect being the exchange rate hasn't changed very much, and indeed, it is the exchange rate which is at the fulcrum of this balance of supply and demand for external finance. We recognize that over the very long run, that you cannot continue this addition to external claims against the United States, which, of course, the current account deficit is almost, by definition, the net change in net claims.

So at some point something has got to give, and we don't know when it is going to be. We don't know whether it will be protracted over a very long period of time, in which case the adjustments will occur in the normal manner without any significance, or whether they will occur more abruptly. We don't know the answers to those questions. We are aware of the consequences of various different scenarios and we and the Treasury have spent a considerable amount of time involved in evaluating various different alternatives.

However, we have been concerned about problems of the current account deficit for a number of years. The markets have adjusted. There has been no evident, particular problem as a consequence, and conceivably this could go on for quite a while longer, but it is an issue which has very much drawn our attention.

Mr. SHERMAN. With the Chair's indulgence, since there might be a crash, do you have a plan, an emergency plan?

Mr. GREENSPAN. Well, first of all, I would never admit to there being a crash or if or when, and indeed, all I can suggest to you is that we have an awful lot of analyses that go on for various different scenarios to which we attribute very small probabilities, but you recognize that very low probability events occur on very rare occasions, but they do occur, and so you ought to be able to have, as indeed I believe Government policymakers have had over the generations, all sorts of plans to address vast numbers of contin-

gencies, 99.8 percent of which never happen. That doesn't mean you still don't have contingencies.

Chairman LEACH. Thank you, Mr. Sherman.

Mr. Ryan.

Mr. RYAN. Thank you, Mr. Chairman.

I just have two questions I want to address to you.

One, I am interested in your take on a debate that is waging among economists between how you measure productivity, and I was very intrigued with your comments that there are structural changes in productivity, and that implies that we will have structural changes in the way we measure productivity, but what I am specifically interested in is your opinion between sort of the old economy theorists which have theories that are now considered sacrosanct, but may be turned on their head, such as law of diminishing returns, the fact that value is added with scarcity, that those ideas and concepts may be replaced with, some people refer to as network economics.

What is your take on this idea of network economics? Do you believe that in some significant sectors of our economy, the law of diminishing return is being replaced for law of increasing returns, that value is being added with abundance, and that some of these older theories are indeed being replaced with subsequently the reverse of their theories. What is your take on that?

Mr. GREENSPAN. Well, I would argue that there is nothing changed as far as the conceptual relationship is concerned. What has happened is that there are clearly certain industries and certain endeavors which have extremely high fixed costs, but negligible variable costs, software industry being a classic case where an awful lot of effort and capital expense are put into developing a very elaborate software program which does lots of marvelous things. To reproduce a new version of that could be 3 cents, because all it requires is just making a copy off of the actual program itself. That does have economic consequences. It creates a very interesting market force which tends to lead toward natural monopolies, at least temporary natural monopolies, until newer technologies undercut those monopolies, and you get into a different sequencing of events.

I would never argue, however, that these new types of processes are undermining the older principles of economics. It is just that they have different characteristics. I mean ordinarily, when you built a steel mill 50 years ago, you had a significant fixed cost, but also a fairly significant variable cost as well, and that indicated how you would engage in the marketplace and what type of competition you would have. And we often found that the pressures for natural monopolies in the vast, vast majority of industries of that type never really existed. You did get them, however, compared with the old electric utility markets where we had the tendency for a natural monopoly, we have today a lot of wheeling of power by generators across all sorts of boundaries. But that is within the realm of all the old notions of how markets work, and indeed, while networking has obvious very interesting implications as to the way competition functions, as to the way markets function, as to the way incentives work, it is still based on a lot of the old principles; it is just that the parameters are different.

Mr. RYAN. Do you think the parameters imply that you have to readjust the way you measure productivity growth?

Mr. GREENSPAN. No, I think productivity is measured technically as real value added per hour of input. It does mean that the endeavor to determine what is real implies that you can define what is price and sometimes trying to define what is the price of a particular piece of software, and therefore, what is its real value is very difficult. It is certainly true that in the current environment, the measurement problems are far more difficult because of the price issue, but it doesn't mean that productivity means something different.

Mr. RYAN. Last, I would like to turn quickly to an issue that we have dealt with quite a bit here on this committee. We are having a hearing right now on the Budget Committee talking about Government-sponsored enterprises, specifically the housing GSEs; and you have testified here a number of times on the need to reduce and eliminate the public debt, on how that is a very important, worthy goal in the conduct of monetary policy and fiscal policy.

I would be interested in what your impression is on GSE debt, but specifically with respect to GSE debt that is raised for repurchasing of mortgage-backed securities. Do you believe that what some refer to as excessive debt or Fannie and Freddie's debt attributed to repurchasing mortgage-backed securities introduces a new type of risk on their books of business such as a prepayment interest rate risk? Do you believe that it is excessive debt and do you believe that it is mission-critical debt and do you believe that the existence of this debt raises the similar concerns that, given the implied taxpayer liability, raises a similar kind of concern that you have voiced in this committee with respect to the national debt and the public debt?

Mr. GREENSPAN. Well, Mr. Ryan, one of the things we don't yet understand is why, in fact, the GSEs have been able to effectively buy mortgage-backed debt at a yield which is in excess of the yield which they themselves can get in the marketplace, which is attributed apparently, you point out, to the prepayment premiums that they are able to achieve in the marketplace. We don't at this stage know the extent to which the prepayment premiums are a function of the subsidy they have on the sale of their debentures, and this is a critical issue to understand because it gets to the whole series of questions which Congressman Baker has been raising with respect to the GSEs and their financing and their subsidies and their role within the intermediation process.

I think we don't understand the answer to that yet, but I do think that everyone is looking at this question now that the issues have surfaced. Hopefully, we will be able to get far greater insight into exactly what the incidence of the subsidies on the debentures are. Indeed, as I understand it, CBO is in the process at this particular stage of updating the study it made five years ago, as I recall, and in that process I think we are going to learn a great deal more about how this whole process works.

Mr. RYAN. But at this time in the conduct of monetary policy, you are not looking at their debt in much the same way as you look at Treasury debt.

Mr. GREENSPAN. We look at overall agency and corporate debt as we look at Treasury debt, as parts of a very large financial system, and they impact and they have effects. And to the extent that they have effects which engender actions on the part of the Federal Reserve then you can say that they affect monetary policy, but, again, so do fifty other things that are going on in the economy.

Mr. RYAN. Thank you.

Chairman LEACH. Thank you, Paul.

Mr. Meeks.

Mr. MEEKS. Thank you, Mr. Chairman.

Mr. Chairman, I have just got a couple of questions.

One, somewhat to clarify, you stated in your testimony how important globalization was and that we need not to block it, because it is like blocking the dam, so to speak, and as a result there are side effects that may occur. But, you did not specify—we didn't talk—I didn't hear much about those side effects. I made the presumption that some of those side effects have has to deal with some of those individuals who may be left out of the booming economy and yet—I mean, they would know you are one when you speak people listen as to what we can do to remedy some of those side effects so that people who are not benefiting from this economic boom will benefit from it or will at least do better than they are doing now.

I have heard questions to you from—a number of my colleagues talked about poverty in their districts; and clearly there are some abandoned buildings and things of that nature in my district and I think throughout rural and urban America. So I was wondering whether or not you could talk about—because you said we shouldn't spend the surplus money either, you know, and we are debating in Congress. Some want tax cuts. Some want some other things like minimum wage to help disposable income for those who are on the bottom. I am wondering if you could just articulate a little bit more about those side effects and what we can do to rectify some of these side effects.

Mr. GREENSPAN. Mr. Meeks, I indicated that I thought it was very important for the surplus to keep rising. That can occur even with some tax cuts and some expenditure programs. So it is not a fact that one does nothing.

The issue that you are dealing with when you have this globalization and dramatic changes in technology is a very difficult one, because it is moving so fast. Ordinarily, over the past when you had economies evolving slowly, productivity growing modestly, you would have capital moving out of one industry and into another; and indeed that is the normal process by which standards of living rise. It would happen at a pace which was not all that inconsistent with the retirement patterns within various industries. And you would often find that the reduction that would occur in employment in a particular industry, if its demand were fading—if consumers, for example, didn't particularly want the product as much as they used to, then you would have demand declining, employment declining, but it would mainly occur through attrition and you would not have particular problems that we currently have.

Move fast forward—and I use the word fast in the context here where things are moving very rapidly—and what you have got, for example, are industries which were more modestly declining or growing very marginally all of a sudden having to compete in a market where consumers want a whole different array of products, high-tech products and a variety of other things. This essentially means that not only are the savings of the community going in to finance these new products, but you are also getting a grain of capital out of the older industries to help finance those products.

As a consequence, the pressure for reduction in those industries is far faster and it is greater than the normal attrition would be, and you are creating numbers of individuals who find that they are 45, 50 years old and are losing their jobs, which makes it very difficult for them to move on. And I do think that we must address that problem.

I do not think, however, that the solution is to freeze the economy, and say, don't let this increased productivity occur, because it is creating too many problems. That is not an option, because it is helping everybody over the long run to allow this process to accelerate, to allow globalization, productivity growth, and standards of living to rise.

It is incumbent, however, upon us to find means to address the problems of those who are left in the wake of that. Somebody said Schumpeter and creative destruction, and I do think that that issue must be addressed, and I think it will be addressed. But my main message is to be careful to pinpoint it, to do what one can.

The solution is not to slow the economy down or to put up trade barriers or other things which endeavor to fend off competition. At the beginning of the day, it may appear to assuage some of the pain that that adjustment process has. At the end of the day, it helps nobody.

Mr. MEEKS. Just one other quick question, just based upon that the Federal Reserve has been using an increase in interest rates to slow down the demand of the economy. Why is this preferential to increasing the required reserve ratio for banks? I am concerned because of higher interest rates to households that are seeking to buy homes and are automatically, therefore, finding themselves with higher rates on credit cards and credit card debt.

Mr. GREENSPAN. If we increased reserves, the effect is to increase interest rates. In other words, what we are doing, as I indicated in my prepared remarks, is recognizing that the supply and demand imbalance for funds basically in the long end of the market has created a fairly significant rise in the long-term corporate real interest rates, long-term real mortgage interest rates, and as I indicated in my remarks, had we endeavored a year ago June to keep the Federal funds rate where it was at that time, rather than calibrate it up with the rest of the market, that could only have been done by suppressing the markets by creating a massive amount of liquidity which would invariably have financed a significant further acceleration and brought this recovery to a very quick end. So it is not a choice. We don't have alternatives. When the demand for credit exceeds the supply, there are no tools other than the price of credit going up, as indeed the price of anything goes up when

demand exceeds supply to bring supply up and demand down into balance.

Chairman LEACH. Mr. Toomey.

Mr. TOOMEY. Thank you, Mr. Chairman; and thank you, Chairman Greenspan, for your testimony this morning.

I would like to get back briefly if I could to the issue of our trade and current account deficits. It strikes me as extraordinary that, despite the record size of our trade deficit and the record size of our current account deficit and the many years in which these deficits have been growing, that, nevertheless, the dollar remains relatively stable and relatively strong, as you pointed out earlier, offset by investments that have been coming in from overseas, despite even a year at least now in which the stock market has not been performing, has basically been moving sideways with respect to big industries. Some have even been declining.

Now I understood your comment earlier to suggest that you believe this combination of deficits is not permanently sustainable, this can't go on forever.

I guess my question is, given that it has been so extraordinary I think and lasted for some time now, what should we use as our early warning indicator that the problem is imminent? Is it just the weakening dollar? Is there anything else that will point to that sooner?

Mr. GREENSPAN. I think not, Congressman, largely because there are other events which will occur concurrently. But we don't measure them in the timeframe that we measure the exchange rate. Now the exchange rate is available to us 24 hours a day, minute by minute, second by second; and it is the best measure we have of the net balance between the supply of funds and the demand for funds in the sense that it is the measure which tells us whether the demand for assets in the United States exceeds or falls short of the demand for goods and services, net, on the part of the American people.

It is really quite an extraordinary system which has one single price which balances all of that whole process; and it is, in my judgment, probably the best signal that we have that the balance is changing. And I say—as I said before, there is just no evidence at this stage that that is changing. The dollar has stayed remarkably stable, and that is an indication that the high rates of return in this country are quite attractive for foreign investment.

Mr. TOOMEY. In fact, the disparity in the rates, better rates in this country relative to oversees, is what is attracting that investment. Assuming that can't last forever, it seems to me one of two things or some combination—either the dollar weakens or there is greater demand for American goods and services relative to our own imports. Do you think that we can eliminate this problem over time or diminish it dramatically primarily through economic demand from overseas rather than through a weakening of the dollar? Or is it inevitable that the dollar is going to weaken?

Mr. GREENSPAN. I don't think we know. I do think that it is incumbent on us to monitor this situation very clearly, very closely and to try to work through, as indeed we have, all the various different scenarios that can bring us to equilibrium. And that we are doing and have been doing for quite a considerable period of time.

But I don't think we have the capacity to forecast exactly how it is going to emerge. And indeed whether it is a very gradual adjustment process which virtually nobody will recognize as it is happening except the few international financial economists who work at those things, or whether it is a more disjointed type of event, I don't think we know the answer to that question.

Mr. TOOMEY. If I can ask one other question on a different topic, getting back to the housing GSEs for a moment. Clearly, there has been considerable growth in their debit issue, and it has attracted a lot of attention. One of the things I was wondering, if you could comment on it. It seems possible that the benefits that are conferred upon these entities by Government increase as these institutions grow naturally. Perhaps that creates an even greater incentive to grow than a dissimilar company might have.

At the same time perhaps, given the implied Government guarantee of the debt issued by these enterprises, there is some diminution of the market's ability to put a control, a brake on the cost, at least in the form of higher cost of funds. Although, admittedly, the market could still lower the stock price. Is there any danger that we create a dynamic where we create a greater incentive to grow and a lesser ability for the market to discipline that growth and that in the event of hard times the taxpayer is put at greater risk than might otherwise be, given this dynamic?

Mr. GREENSPAN. We are dealing with a rather complex problem. These GSEs are rather well run institutions, and they have got very good risk management procedures in and of themselves. I think the issue is less that they will run into trouble than the general impact of their size and growth as it impacts on the rest of the financial system and creates potential imbalances which could create secondary problems. I think this is the area where a lot of examination has got to be made.

It is not credible to me that you can have a subsidy—and there is a real subsidy there—without distortions occurring. I don't think that we know exactly the specific sequence of the types of problems which can or will arise. I do know that the simple notion that the big problem is that these are institutions which could fail and create major problems, that is not the highest probability, in my judgment, because they do have fairly significant hedging capabilities and their long-term liabilities are structured in a manner which prevents short-term liquidity problems. That is not to say they are invulnerable. That is sort of, obviously, not accurate, especially with their low capital ratios. But I think the issues are much broader, and I think it is wise for the Congress to have a broad view of all the relevant consequences of what happens when you get such extraordinary changes going on in a market of this size.

Mr. TOOMEY. Thank you.

Chairman LEACH. Mrs. Lee.

Ms. LEE. Thank you.

Mr. Chairman, good morning. Good to see you. It has been very interesting listening to your testimony this morning, Mr. Greenspan.

As you know, I am from northern California, Oakland, Berkeley, one of the highest cost of housing areas in our country. But in many regions of our country, wages have not really kept pace with

the high cost of housing. For example, some families making $30,000 to $50,000 would love to purchase a home, but in some areas the average cost of a house is, for instance, $500,000 or $300,000. But yet we witness this enormous boom in the housing industry and the construction industry which is good for the economy, but now we find that the average middle-income person in many areas cannot qualify for a mortgage nor can they meet monthly mortgage payments.

Also, we know that, of course, the dream of home ownership is one that we all have and it is the actual primary means for many families to acquire wealth, to send their children to college, to start up in the small businesses. That in effect is being eroded in terms of wealth accumulation due to the inability to qualify and purchase a home.

So, what I am asking you today is, what is it that you think the Congress should do, what the Federal Reserve can do in terms of monetary policy to really help to begin to mitigate against this? Because we know it is going to take a variety of strategies. But when you have a booming economy such as we have and in some areas, for instance, the technology, the success of the technology and the dot.com industry has been great, but on one hand its impact had been negative, because it has actually driven up the cost of housing. So I know it is not an easy solution, but we have got to begin to attack it, and none of the additional approaches are going to work.

Mr. GREENSPAN. Well, I think you are raising a very important question; and I don't say to you that I know the answer.

Because what we are dealing with is a limited amount of savings in the community, whether it is your community or another community. And the demand for the use of those savings in your case, say, for example, housing on the one hand and Silicon Valley on the other, both can't get all they want. There is a limit, and the limit is caused by the fact that people just save a certain amount. And supply for funds must equal the demand for funds, and there effectively occurs market adjustments. And the form of the market adjustment is what you are observing, namely, a dramatic rise in a lot of housing prices, especially amongst the high-tech area around San Jose.

And it is a difficult problem. Unless there is a massive increase in construction which just floods the market—and obviously, especially in San Francisco, of the ability to build new single family homes or new homes in general in that area is limited by regulations so that you have got a very difficult problem with—I know that Congressman Sanders doesn't like me to talk about a booming economy, but I will anyway, because indeed that is the only way to describe it.

And when you have a booming economy you get a situation in which demand exceeds the supply of savings that is occurring, and you get increased house prices which occurs in certain areas of the economy, and the ratio of house prices to income probably rises quite significantly, which makes it very difficult for a middle income person to afford housing.

Ms. LEE. But then how do we convince the average American family that home ownership is a good thing, that in fact working

makes sense and that even though they may not make $100,000—even $100,000 a year in some areas now is middle income—even though they are only making $30,000 to $50,000 a year, they have been denied now the opportunity to buy into the American dream. It seems that we have got a responsibility beyond telling them that it is the market forces and the great results of the economy that is causing this to happen. What do we tell people?

Mr. GREENSPAN. Congresswoman, these are real forces. These are not just arbitrary things that Government can just turn a knob on or create something. You can't create something out of nothing.

What we have got, regrettably, is a very difficult situation in which the type of problem that you are concerned with is real. It is not readily resolved by just some simple device.

I think what we have to do is to convince people that there is indeed opportunity at the end of the road. It may not be today. It may not be tomorrow. It may not be next year.

Look, we have all sort of grown up—I did—at the lower end of the economic ladder and struggled hard, and I knew that there was opportunity out there, but it didn't occur as fast as I would like, and it is tough. I mean, I don't know what to say in answer. I wish it were otherwise, but there are limits in the real world that we have to confront, and we have to do the best we can.

But I do think that you are absolutely correct in recognizing that the issue of people seeing that they have a shot at what everyone else has is a very crucial issue in this country, because, as I have said before, if we ever get to the point where people are going to be discouraged and think that the society that they live in is unjust, then I don't think that society can function.

Ms. LEE. Thank you, Mr. Greenspan. I appreciate your very candid response, but it is very dismal.

Mr. GREENSPAN. I wish I could say to you I have a program which will either knock $100,000 off every home or raise incomes by some specific amount. The problem is that those are paper values, but there are real things out there, I mean, real houses. It is brick, it is mortar, it is a roof, it is a car, it is an education, which is real. It is the world, and it is not the way we would always like it to be.

Ms. LEE. Thank you.

I will just conclude by mentioning Members of Congress will be participating in a regional housing summit in Oakland, California, August 12th. We are going to come up with some recommendations. We would be happy to share some of those recommendations with you for your response.

Chairman LEACH. Thank you, Mrs. Lee.

Ms. Schakowsky.

Ms. SCHAKOWSKY. Thank you, Mr. Chairman.

Thank you, Chairman Greenspan, for your patience and your stamina and for sticking with us. It is a privilege to be able to ask you some questions. I first do feel compelled to comment on what my colleague has said about the housing issue. You know, one of the byproducts of this boom system that in communities like those I represent in the north side of Chicago and some of our suburbs is that it is a terrible irony for some people, that as the economy gets better for some, this housing crisis does get worse, and I think

that is a challenge we have to embrace. How do we maintain mixed income communities? How, as we improve our cities and we gentrify our communities, do we still find a place for those people who can't afford these $100,000-$200,000 homes, and that it is not sufficient to say this is just a fact of life, these are the source forces out there, but I think we do need to figure out some interventions so that we can have the kind of fair and diverse communities that we want for people. That is not my question. I have two, actually. One, I know that——

Mr. GREENSPAN. Let me answer, I don't disagree with you. I just want to emphasize, let us make sure when we intervene it works and not—I have seen too many activities we have all engaged in which we promised people things—we say we are going to do this and this is going to happen and it doesn't happen. There is the discouragement that happens to a lot of people that I think is a potentially very sad thing that we all are too often responsible for, and you know, Government basically promises things and we can't deliver, and I think that undercuts society. I don't disagree with your general concern, but let us be careful to be sure we know what we are doing.

Ms. SCHAKOWSKY. Should be careful, but I think we cannot afford to give up on it.

Mr. GREENSPAN. I agree with that. I agree with that.

Ms. SCHAKOWSKY. There was some discussion about predatory lending, and I know I have a piece of legislation to deal with predatory lending, another problem in my community. Mr. LaFalce has a bill. We heard testimony. I know you are holding hearings. But on one particular question, I know that in other contexts that Fair Lending and the CRA come to mind, that the Fed has opted not to exercise its authority to examine bank subsidiaries. Through the various hearings that we have had, we have discovered that many bank subsidiaries actually engage in harmful, predatory lending.

I am wondering what factors will determine whether the Fed might reverse its positions and examine subsidiaries for predatory lending?

Mr. GREENSPAN. I think that will occur as a consequence of these hearings that we are engaged in at this stage.

Ms. SCHAKOWSKY. And many of the provisions in my bill as in others are really within your purview, you could do it without legislation, it seems to me, all the things we talk about, the triggers, some of the practices that need to be prohibited, like flipping or lump-sum credit life insurance funding, appraisal manipulation, and so forth. I think those are things that you could just do and that would be wonderful.

Mr. GREENSPAN. Well, I think that Governor Gramlich, who is in charge of this project for us, is in the process of a fairly extensive examination of various alternatives, on which, under existing statutes, the Federal Reserve has authority to act.

Ms. SCHAKOWSKY. One last thing. Over the years, including over the months, a year ago almost to this day at this hearing, you talked about immigration and expanding immigration in July last year, if we can open up our immigration roles significantly, that clearly will make the unemployment rates affect inflation less and less of a problem. You called for reviewing our immigration laws

in January, and then in February, after the AFL-CIO talked about a fairly broad amnesty plan, that there is an effective limit to new hiring unless immigration is uncapped. I am wondering exactly what you are proposing, or what you would think would be appropriate policies.

Mr. GREENSPAN. Actually, I am not proposing anything. The reason I am not is I think that immigration policy is a very crucial political issue for a society in which the elected representatives make very important judgments. What I am trying to do, and hopefully trying to stay away from a recommendation, is merely citing what I think the statistics and economics are saying and not making judgments as to whether H1-B should be increased, decreased, in a certain manner. I do recognize that there would be benefits involved in a number of these different types of activities, but I have tried to stop short of recommending any specific detailed program, because I do think that that is going well beyond anything that is appropriate for central banks, or anything related to issues which are major value judgments of a society which, in my judgment, are wholly within the realm, and should stay there, of the elected representatives of the people.

Ms. SCHAKOWSKY. Thank you for that. I do appreciate the direction in which your comments point, however, and thank you very much for your responses.

Chairman LEACH. Thank you, Ms. Schakowsky.

Mr. Moore.

Mr. MOORE. Thank you, Mr. Chairman.

Chairman Greenspan, I too, appreciate very much your patience here and we are just about finished.

You testified before the Senate last week that energy prices may pose a challenge to containing inflation, because, and I think this is close to a quote, because energy inputs are a significant element in the cost structure of any businesses. And you testified that recent price spikes in energy represent a one-time shift and cannot generally drive an ongoing inflationary process. And I think you conclude, and I am trying to be fair in summarizing here, that the key to whether such a process could get underway is inflation expectations, and that right now, households and investors don't view the current energy price surge as affecting long-term inflation, and I think your testimony today was essentially consistent with that and probably about the same.

And what I want to ask you, just two or three questions about today.

Chairman LEACH. If you could withhold for one second. If I could, what I would like to do, because we do have a vote at the risk of presumption, is to hold your questions to five minutes, then we can get Mr. Gonzalez for five minutes, and we can finish for the day, if that is all right.

Mr. Moore, please.

Mr. MOORE. Thank you. I wanted to ask you just very briefly about in the energy area. Americans went to the gas pumps during the last two to three months, and were, I think, shocked to find gas prices up 20, 30, 40, 50 cents a gallon, and while recent decisions from OPEC nations have brought some relief to the energy crisis in oil and gasoline areas, I think there is another emerging crisis,

and I read some of the press reports, and even the stock market indicate the next big energy crisis may be in the natural gas area, and natural gas spiked recently to an all-time high of $4.72 per million BTUs on June 27th, and some analysts are now suggesting that the price of natural gas could rise higher to as much as double, up to almost $8 per million BTU this winter.

And I guess my questions are these, and I would just like your observations if you have any in this area. First, does the evidence you cite in your testimony suggesting that expectations with regard to energy price surges will not affect longer-term inflation take into consideration the natural gas prices and what is happening there and what may happen in the near future as far as doubling, if that happens in natural gas prices?

Mr. GREENSPAN. I assume that we are going to be able to bring resources to bear. It is certainly the case that we have lagged significantly in increasing reserves of natural gas in this country relative to the increased demand, which has occurred, remember, fairly dramatically as a consequence of a fairly substantial shift from coal to natural gas in the electric power industry, and all of a sudden, where natural gas used to be perceived as a very limited and very valuable product which we shouldn't use, it all of a sudden appeared in great abundance as our new technologies are growing, all of a sudden brought forth a huge plethora of gas capability.

Our overall drilling has, however, slimmed down and when the natural gas prices were low, there was very little capital going into the natural gas industry, and as a result, we began to find that the storage quantities which we built up got down to low levels—because obviously, it is very difficult to maintain inventories of gas, but we didn't maintain even normal levels—and we got down to very low levels, which all of a sudden, with the demand for electric power, triggered a significant increase in natural gas prices.

I would presume that at these particular levels, the profitability of drilling has gone up very dramatically, and I do think that it is just a matter of time before we are going to find resources coming in which will bring up the supply, but it is a problem in the sense that it doesn't come overnight, and it is going to be two or three years before we are back in balance. I do not think that natural gas, per se, has the capacity to engender changes in inflationary expectations of the type that could be a problem, but there is no question that it is an issue which has emerged fairly recently, and to many people, it has sort of just snuck up on us, and the first time we knew anything was going on was when we began to see what was happening to inventories of stored gas.

Mr. MOORE. Which leads into my second question/observation, and I would like you to just make any observations you feel comfortable making. There currently exists, under the tax code, Section 29, to stimulate the production and supply of certain types of liquid fuels and gases, including natural gas, this credit is set to expire in about eighteen months. I just wondered if you would have any observations or thoughts about whether extension of this credit and a subsequent increase in production might relieve some of the market's expectations of future shortages or do you have other suggestions, number one?

And number two, and this will be the last question, the demand for natural gas has increased as electric power generators are switching to natural gas from coal and fuel oil to eliminate pollution emissions. And I guess several States have also moved to deregulate the electricity industry, and the last question I have is this, what impact, if any, would this move on higher natural gas prices have on your economic outlook, and maybe you answered the last part of that already.

Mr. GREENSPAN. I don't know enough about the particular tax credit that you are referring to to make a judgment on it. I do know that there is nothing more forceful than higher prices to engender investment in a particular industry, and I would wait to see exactly what type of drilling rig expansion occurs as a consequence of these prices and make judgments thereafter. So it is hard for me to tell without looking at the details of various different scenarios in that regard.

Mr. MOORE. Thank you, Chairman.

Chairman LEACH. Mr. Gonzalez.

Mr. GONZALEZ. Thank you, Mr. Chairman. Thank you very much and again, thank you for your patience, Mr. Chairman.

My question has to do with independent, small banks, community banks, whatever you want to call them, and the important role that they play in our communities. We passed the Banking Modernization Act last year. Prior to that year we passed H.R. 1151, and if you think in terms of where that placed credit unions and where that also placed the larger financial institutions, the insurance industry and the securities industry, the small banks are caught in the middle, and I don't believe that is just perception or an argument that they advance. On one end, of course, it is hard to compete against the credit unions, which I believe there is an element of truth to that. On the other end of it, they can't compete against the big guys.

Do you see that it is not a level playing field, and is there anything that we should be addressing at this point or in the future in the way of legislation?

Mr. GREENSPAN. I do think that the overall financial system of this country is undergoing significant change as a degree of homogenization begins to increase with respect to various different types of products sold by different types of vendors. My own belief is that there is a very crucial role for community banks in this country in that they are the vehicle by which a particular type of product can be put forward, which is personal lending, individual banking, which these larger institutions don't have the competitive capability of engaging in. My own judgment is that the issue of personal banking is something which will always exist in this country and the demand for it will always exist. How significant that will work its way through the banking structure, I really don't know.

As you know we are undergoing major changes all over the place. A goodly part of the problem with the community banks has been the dramatic rise in mutual funds, which has drained off a significant part of their usual sources of funds, of funding, and it is hard to know where that is going.

So that there are a lot of dynamics that are going on here and a lot of changes, and I don't venture to say that I know exactly how

it is all going to come out, or do I feel comfortable in a lot of the different proposals that I hear with respect to resolving problems, because a number of the solutions create more problems than I think the problems themselves are creating.

Mr. GONZALEZ. I am sure it is going to be addressed, because I know there have been discussions by Members of this committee of doing something to assist them, to help them remain competitive. And as you have indicated, they have a very special niche in the financial world, and believe me, the people that really make those loans have the personal relationships in the community, understand the community, have been there, and have a personal stake, are the community banks, and I really appreciate your sensitivity.

Mr. GREENSPAN. I think that gives them a competitive advantage which big banks have very considerable difficulty penetrating.

Mr. GONZALEZ. I hope so, but it does not appear that it is translating to that. You may still have some sort of that allegiance and the understanding, but what it really comes down to in the marketplace, you generally will go with what is the best deal, and it is difficult for community banks to compete in the present environment. Thank you very much.

Chairman LEACH. Well, thank you, Charles.

Mr. Chairman, we appreciate your testimony. It is thoughtful, reasonable, not market-rocking, and we thank you very much. The hearing is adjourned.

[Whereupon, at 1:30 p.m., the hearing was adjourned.]

APPENDIX

July 25, 2000

CURRENCY

Committee on Banking and Financial Services

James A. Leach, Chairman

For Immediate Release:
Tuesday July 25, 2000

Contact: David Runkel or
Brookly McLaughlin at 226-0471

Opening Statement Of Representative James A. Leach
Chairman, Committee on Banking and Financial Services
Hearing on the Conduct of Monetary Policy
July 25, 2000

The Committee meets today to receive the semiannual report of the Board of Governors of the Federal Reserve System on the conduct of monetary policy and the state of the economy. Welcome, Chairman Greenspan.

As Members are aware, although Chairman Greenspan's appearance before the Committee today is no longer a requirement of law there is perhaps no more important Congressional oversight responsibility than that of the Banking Committee's semiannual review of the Federal Reserve's conduct of monetary policy.

In this regard, I have been working closely with Senator Gramm on legislation renewing the Federal Reserve's reporting requirement and am optimistic that the statutory reporting mandate will be renewed before the adjournment of the 106th Congress.

Turning to the state of the economy, it appears that the Federal Reserve is succeeding in moderating the rate of U.S. economic growth without precipitating a "hard landing," while providing a "soft cushion" for fiscal policymakers. Inflationary pressures remain relatively modest, due in part to Federal Reserve restraint, in part to the on-going improvements in productivity.

On the other hand, we are all aware that the U.S. continues to run a substantial current account deficit that must be financed from abroad. We look forward to any comments you might make on how long this situation can persist, its possible impact on the dollar, and what steps policymakers can take to bring national savings and investment into balance.

With reference to fiscal policy, the moderation in federal spending brought about by difficult decisions by the Congress over the past five years, has contributed - along with the Fed's monetary policy decisions - to a much sooner end of federal budget deficits than anyone ever envisioned and to far greater projected surpluses than ever foreseen.

I sometimes joke to constituents that there appear to be three political parties in Washington today -- the Republicans who suggest taxpayers should be rewarded with a tax cut; the Democrats who argue that the fiscal surpluses make spending increases a social imperative; and the Greenspanites who say Congress should do nothing, at least until the deficit is wiped out.

In any regard, maintaining the economic progress of the United States is both a challenge to the monetary policymakers at the Federal Reserve Board and to the fiscal policymakers of the Legislative and Executive Branches.

With these few comments, I'll turn to the distinguished Ranking Member, Mr. LaFalce for an opening statement and then to the Chair and Ranking Member of the Domestic and International Monetary Policy Subcommittee, Mr. Bachus and Ms. Waters for their statements before recognizing Chairman Greenspan. Mr. LaFalce.

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Greenspan's Needle

Despite denials, Fed chairman takes credit for pricking the markets' bubble

BY ROBERT D. AUERBACH • When Federal Reserve Chairman Alan Greenspan testified before the Senate Banking Committee on Thursday, he made no mention of the stock market save for noting that the unsustainable pace of increase in household wealth had slowed, due to the flattening of equity prices. And while the Fed's six rate hikes over the past 12 months certainly have played a role in the stock market's slowdown, the chairman didn't 'fess up to targeting the market with monetary policy.

In private, however, his remarks have been as pointed as the needle he used to prick the market balloon. Indeed, recently released transcripts of Federal Open Market Committee meetings show that the Fed has been targeting equity prices since early 1994, when the Dow Jones Industrial Average stood around 3900.

Then, as now, the Fed Chairman indicated he was fighting expected inflation. But Greenspan's private words show another motive for doubling rates in 1994-95. And those words are likely a good proxy for the thinking behind the recent – and likely unfinished – round of tightenings.

In the February, March, April and May 1994 meetings and phone conferences, Greenspan explained the need to prick the "bubble" in the stock market, to let the air out slowly and to produce uncertainty to curb speculation in financial assets. No such motives, however, were ever officially expressed – and with good reason.

After all, the Full Employment and Balanced Growth Act of 1978 sets the Fed's "goals of maximum employment, stable prices, and moderate long-term interest rates." These goals were drawn from the Employment Act of 1946, which instructs federal government entities to "promote maximum employment, production and purchasing power." In both cases, what was to be stabilized were the prices of goods and services – not stocks.

But concern over rising equity prices clearly loomed large in the Fed's decision-making six years ago.

On February 4, 1994, the central bank raised the federal-funds target from 3% to 3.25%. This was the first of seven increases that doubled the target rate to 6% on February 1, 1995. Ostensibly, the Fed was conducting a preemptive strike against inflation, though the consumer price index rose by just 2.61% in 1994, and Greenspan contended that it was overstated by as much as 1½ percentage points. The Fed boss did testify before the Senate Banking Committee on May 27 that he thought the average stock's price was too high. He didn't, however, indicate he would use monetary policy to fine-tune equity prices.

After the first increase in February 1994, Greenspan evidently was pleased. "I think we partially broke the back of an emerging speculation in equities," reads the transcript of the February 28, 1994, FOMC conference call. "We pricked that bubble [in the bond markets] as well.... We also have created a degree of uncertainty; if we were looking at the emergence of speculative forces, which clearly were evident in very early stages, then I think we had a desirable effect."

Greenspan had expected that the Fed's higher interest-rate policy would reduce equity prices. According to the transcripts of the March 22, 1994, call, he told the FOMC: "When we moved on February 4, I think our expectation was that we would prick the bubble in the equity markets.... So, what has occurred is that while this capital gains bubble in all financial assets had to come down, instead of the decline being concentrated in the stock area, it shifted over into the bond area. But the effects are the same."

At the April 18, 1994, FOMC meeting, Greenspan heralded a decrease in the financial markets' bubble. According to a transcript of the conference call, he opined, "[T]he sharp declines in both stock and bond prices since our last meeting, I think, have defused a significant part of the bubble which had been previously built up. We let a lot of air out of the tire, so to speak...

"[The] dangers of breaking the surface tension of the markets clearly are less than they were at the time of the last meeting.... The problem, as I've argued in recent meetings, is that we have to be careful about breaking this so-called surface tension of the market and ... selling begetting selling. That is potentially quite dangerous."

On May 17, 1994, Greenspan told FOMC members that ever since the "1987 peaks after the stock market crash," uncertainty was diminishing and there was "an element of euphoria that gripped the markets." By 1993, the transcript of the meeting states, "everybody just looked as though the markets had no downside risks ... the mere fact that uncertainty did not exist was not a good; it clearly was a bad. And our endeavor to break that pattern, which we had to do even though it turned out to be a much bigger problem than we suspected, was a very purposeful endeavor to create a degree of uncertainty and readjust holdings from weak hands into firmer hands as far as speculative securities are concerned. As a consequence, we have taken a very significant amount of air out of the bubble.... And I think what we have reached in conclusion at this particular point is the defusion of a good part of the bubble.

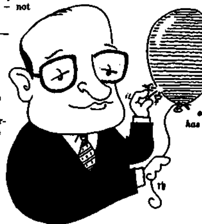
"I think there's still a lot of bubble around; we have not completely eliminated it. Nonetheless, we have the capability, I would say at this stage, to move more strongly than we usually do without the risk of cracking the system."

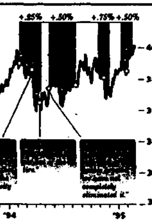
On November 15, 1994, Philadelphia Fed Bank President Edward Boehne (a non-voting FOMC participant) summed up the Fed's actions in raising interest rates: "I think you argued rather persuasively, Mr. Chairman, that we had a bubble in financial markets and that we had to deflate that rather slowly. Otherwise we could take a big hit. In hindsight, I think that was wise."

In 1994, Greenspan twice reported the rationale for monetary policy before the House Senate and Banking Committees. These semiannual appearances at the Humphrey-Hawkins hearings would have been much more productive if the transcripts had been available on a timely basis. The vague minutes of FOMC meetings are nearly worthless for revealing individual FOMC members' responsibility for monetary policy.

In the hearings, Greenspan raised topics such as the debatable theoretical point that a low real federal-funds rate is a predictor of inflation. This served to limit questions about monetary policy from most Banking Committee members who aren't versed in economics. It's a tactic used to deflect questions about monetary policy, one that was also blatantly practiced by former Fed Chairman Arthur Burns, who used to snow Congress with five definitions of money, each in unadjusted and seasonally adjusted form.

This revelation about Greenspan's role in 1994 raises questions about what he is telling the FOMC members now. If he was trying to prick the bubble in 1994, what is he doing in 2000 when the Dow is nearly three times higher? ●





▶ *Though Alan Greenspan claims neutrality when it comes to the stock market, recently released transcripts of 1994 Federal Open Market Committee meetings show that he is not averse to using monetary policy to deflate equities if he thinks the market has gotten ahead of itself.*

ROBERT D. AUERBACH, a professor of public affairs at the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin, is a former economist with the House Committee on Banking and Financial Services. He assisted in Federal Reserve oversight and hearings during the terms of four Federal Reserve chairmen.

Opening Statement of Rep. Ron Paul
Hearing on the Conduct of Monetary Policy
House Committee on Banking and Financial Services
July 25, 2000

I would like to start off by clearly thanking my friend Chairman Jim Leach for his successful efforts keeping the "Humphrey-Hawkins" tradition of semi-annual hearings by the chairman of the Federal Reserve Board on monetary policy. Monetary policy is extremely important but not well understood. These hearings provide a useful means of education as well as Congressional oversight. Chairman Leach's efforts are much appreciated.

In the testimony of Chairman Greenspan, he refers to labor pressure costs being "held in check by productivity gains," but other reports--including at least one from the Fed--question this premise. Non-farm worker productivity growth, reported by the Bureau of Labor and Statistics, averaged 1.9% a year in the 1990s, up a half-percentage point from the 1980s, with productivity growth in the manufacturing sector up a "phenomenal" four percent annual rate.

However, those estimates are based on assumptions that are challenged by many analysts. Morgan Stanley chief economist Stephen Roach maintains that these estimates have been exaggerated for several years since many workers are putting in more time than previously, thus skewing the measurements of output per worker-hour ("Productivity: Why Output Per Worker Matters So Much," Gene Epstein, *Barron's*, July 17, 2000).

In addition, a report by economists Marcello Estevÿo and Saul Lach explains that the BLS statistics overstate productivity gains because the BLS only counts those on the payroll of manufacturing firms (not those paid by someone else--such as a temporary agency) "even though they are producing output for manufacturers" ("Overblown Productivity?," Adam M. Zaretsky, *National Economic Trends*, The Federal Reserve Bank of St. Louis, June 2000). They estimate that the official statistics overstate productivity growth figures by about one half of one percent per year. In other words, there is no increase in productivity gains holding inflationary pressures in check. Jim Grant ("The great productivity delusion," *Grants Interest Rate Observer*, March 31, 2000) and other analysts have made similar arguments.

Robert J. Gordon, professor of economics at Northwestern University, notes that nearly all of the increase in productivity gains is concentrated in the high technology sector. "There has been no productivity growth acceleration in the 99% of the economy located outside the sector which manufactures computer hardware," he wrote in a paper presented to the Congressional Budget Office. Since the increase in computer hardware and software purchases and upgrades in preparation for the "Y2K" problem created an artificial clip in the statistics, it is unlikely to be sustained. Some analysts such as Frank Veneroso, et al., even question the validity of those real productivity gains.

Since real productivity gains have not kept inflation in check, where is the inflation? Robert D. Auerbach (a professor of public affairs at the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin and a former economist with the House Committee on Banking and Financial Services) argues that Mr. Greenspan himself thinks it has manifested itself in a stock market bubble. He wrote "In the February, March, April and May 1994 meetings and phone conferences, Greenspan explained the need to prick the "bubble" in the stock market, to let the air out slowly and to produce uncertainty to curb speculation in financial assets ("Greenspan's Needle: Despite denials, Fed chairman takes credit for pricking the market's bubble," *Barron's*, July 24, 2000)."

Indeed, equity prices, in comparison with current corporate earnings, are historically very dear. The price to earnings ratio (price of a typical stock to the earnings per share) for the S&P 500 was 32.4 in January 2000.

This ratio is higher than any previous annual measurement ("Stock Prices and Consumption," Christopher J. Neely, *Monetary Trends*, Federal Reserve Bank of St. Louis, July 2000). These figures suggest that we do have a stock market bubble.

The dangers of ignoring the inflation manifested in the stock market are great. Many observers have even been making Great Depression era comparisons. "Every new era in our history--and we have had several--has been based upon the exaggerated enthusiasm and the inflationary forces set in motion by some single new industry or industrial activity (*Businessweek*, January 29, 1930, cited in *AIC Investment Bulletin*, June 19, 2000)."

In the July *Richebacher Letter* (printed in *Barron's*, July 24, 2000), Kurt Richebacher ends his comments, "Adhering to the famous postulate of Austrian theory that the length and severity of recessions or depressions depend critically on the magnitude of the dislocations and imbalances that have accumulated in the economy during the preceding boom, we take it for granted that a hard, even a very hard, landing is absolutely inevitable for the U.S. economy." These sobering words are worthy of a cautionary note.

Statement of

Alan Greenspan

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Banking and Financial Services

U.S. House of Representatives

July 25, 2000

Mr. Chairman and other members of the Committee, I appreciate this opportunity to present the Federal Reserve's report on monetary policy.

The Federal Reserve has been confronting a complex set of challenges in judging the stance of policy that will best contribute to sustaining the strong and long-running expansion of our economy. The challenges will be no less in coming months as we judge whether ongoing adjustments in supply and demand will be sufficient to prevent distortions that would undermine the economy's extraordinary performance.

For some time now, the growth of aggregate demand has exceeded the expansion of production potential. Technological innovations have boosted the growth rate of potential, but as I noted in my testimony last February, the effects of this process also have spurred aggregate demand. It has been clear to us that, with labor markets already quite tight, a continuing disparity between the growth of demand and potential supply would produce disruptive imbalances.

A key element in this disparity has been the very rapid growth of consumption resulting from the effects on spending of the remarkable rise in household wealth. However, the growth in household spending has slowed noticeably this spring from the unusually rapid pace observed late in 1999 and early this year. Some argue that this slowing is a pause following the surge in demand through the warmer-than-normal winter months and hence a reacceleration can be expected later this year. Certainly, we have seen slowdowns in spending during this near-decade-long expansion that have proven temporary, with aggregate demand growth subsequently rebounding to an unsustainable pace.

But other analysts point to a number of factors that may be exerting more persistent restraint on spending. One they cite is the flattening in equity prices, on net, this year. They attribute much of the slowing of consumer spending to this diminution of the wealth effect

through the spring and early summer. This view looks to equity markets as a key influence on the trend in consumer spending over the rest of this year and next.

Another factor said by some to account for the spending slowdown is the rising debt burden of households. Interest and amortization as a percent of disposable income have risen materially during the past six years, as consumer and especially mortgage debt has climbed and, more recently, as interest rates have moved higher.

In addition, the past year's rise in the price of oil has amounted to an annual $75 billion levy by foreign producers on domestic consumers of imported oil, the equivalent of a tax of roughly 1 percent of disposable income. This burden is another likely source of the slowed growth in real consumption outlays in recent months, though one that may prove to be largely transitory.

Mentioned less prominently have been the effects of the faster increase in the stock of consumer durable assets--both household durable goods and houses--in the last several years, a rate of increase that history tells us is usually followed by a pause. Stocks of household durable goods, including motor vehicles, are estimated to have increased at nearly a 6 percent annual rate over the past three years, a marked acceleration from the growth rate of the previous ten years. The number of cars and light trucks owned or leased by households, for example, apparently has continued to rise in recent years despite having reached nearly 1-3/4 vehicles per household by the mid-1990s. Notwithstanding their recent slowing, sales of new homes continue at extraordinarily high levels relative to new household formations. While we will not know for sure until the 2000 census is tabulated, the surge in new home sales is strong evidence that the growth of owner-occupied homes has accelerated during the past five years.

Those who focus on the high and rising stocks of durable assets point out that even without the rise in interest rates, an eventual leveling out or some tapering off of purchases of durable goods and construction of single-family housing would be expected. Reflecting both higher interest rates and higher stocks of housing, starts of new housing units have fallen off of late. If that slowing were to persist, some reduction in the rapid pace of accumulation of household appliances across our more than hundred million households would not come as a surprise, nor would a slowdown in vehicle demand so often historically associated with declines in housing demand.

Inventories of durable assets in households are just as formidable a factor in new production as inventories at manufacturing and trade establishments. The notion that consumer spending and housing construction may be slowing because the stock of consumer durables and houses may be running into upside resistance is a credible addition to the possible explanations of current consumer trends. This effect on spending would be reinforced by the waning effects of gains in wealth.

Because the softness in outlay growth is so recent, all of the aforementioned hypotheses, of course, must be provisional. It is certainly premature to make a definitive assessment of either the recent trends in household spending or what they mean. But it is clear that, for the time being at least, the increase in spending on consumer goods and houses has come down several notches, albeit from very high levels.

In one sense, the more important question for the longer-term economic outlook is the extent of any productivity slowdown that might accompany a more subdued pace of production and consumer spending, should it persist. The behavior of productivity under such circumstances

will be a revealing test of just how much of the rapid growth of productivity in recent years has represented structural change as distinct from cyclical aberrations and, hence, how truly different the developments of the past five years have been. At issue is how much of the current downshift in our overall economic growth rate can be accounted for by reduced growth in output per hour and how much by slowed increases in hours.

So far there is little evidence to undermine the notion that most of the productivity increase of recent years has been structural and that structural productivity may still be accelerating. New orders for capital equipment continue quite strong--so strong that the rise in unfilled orders has actually steepened in recent months. Capital-deepening investment in a broad range of equipment embodying the newer productivity-enhancing technologies remains brisk.

To be sure, if current personal consumption outlays slow significantly further than the pattern now in train suggests, profit and sales expectations might be scaled back, possibly inducing some hesitancy in moving forward even with capital projects that appear quite profitable over the longer run. In addition, the direct negative effects of the sharp recent runup in energy prices on profits as well as on sales expectations may temporarily damp capital spending. Despite the marked decline over the past decades in the energy requirements per dollar of GDP, energy inputs are still a significant element in the cost structure of many American businesses.

For the moment, the dropoff in overall economic growth to date appears about matched by reduced growth in hours, suggesting continued strength in growth in output per hour. The increase of production worker hours from March through June, for example, was at an annual rate of 1/2 percent compared with 3-1/4 percent the previous three months. Of course, we do not

have comprehensive measures of output on a monthly basis, but available data suggest a roughly comparable deceleration.

A lower overall rate of economic growth that did not carry with it a significant deterioration in productivity growth obviously would be a desirable outcome. It could conceivably slow or even bring to a halt the deterioration in the balance of overall demand and potential supply in our economy.

As I testified before this committee in February, domestic demand growth, influenced importantly by the wealth effect on consumer spending, has been running 1-1/2 to 2 percentage points at an annual rate in excess of even the higher, productivity-driven, growth in potential supply since late 1997. That gap has been filled both by a marked rise in imports as a percent of GDP and by a marked increase in domestic production resulting both from significant immigration and from the employment of previously unutilized labor resources.

I also pointed out in February that there are limits to how far net imports--or the broader measure, our current account deficit--can rise, or our pool of unemployed labor resources can fall. As a consequence, the excess of the growth of domestic demand over potential supply must be closed before the resulting strains and imbalances undermine the economic expansion that now has reached 112 months, a record for peace or war.

The current account deficit is a proxy for the increase in net claims against U.S. residents held by foreigners, mainly as debt, but increasingly as equities. So long as foreigners continue to seek to hold ever-increasing quantities of dollar investments in their portfolios, as they obviously have been, the exchange rate for the dollar will remain firm. Indeed, the same sharp rise in potential rates of return on new American investments that has been driving capital accumulation

and accelerating productivity in the United States has also been inducing foreigners to expand their portfolios of American securities and direct investment. The latest data published by the Department of Commerce indicate that the annual pace of direct plus portfolio investment by foreigners in the U.S. economy during the first quarter was more than two and one-half times its rate in 1995.

There has to be a limit as to how much of the world's savings our residents can borrow at close to prevailing interest and exchange rates. And a narrowing of disparities among global growth rates could induce a narrowing of rates of return here relative to those abroad that could adversely affect the propensity of foreigners to invest in the United States. But obviously, so long as our rates of return appear to be unusually high, if not rising, balance of payments trends are less likely to pose a threat to our prosperity. In addition, our burgeoning budget surpluses have clearly contributed to a fending off, if only temporarily, of some of the pressures on our balance of payments. The stresses on the global savings pool resulting from the excess of domestic private investment demands over domestic private saving have been mitigated by the large federal budget surpluses that have developed of late.

In addition, by substantially augmenting national saving, these budget surpluses have kept real interest rates at levels lower than they would have been otherwise. This development has helped foster the investment boom that in recent years has contributed greatly to the strengthening of U.S. productivity and economic growth. The Congress and the Administration have wisely avoided steps that would materially reduce these budget surpluses. Continued fiscal discipline will contribute to maintaining robust expansion of the American economy in the future.

Just as there is a limit to our reliance on foreign saving, so is there a limit to the continuing drain on our unused labor resources. Despite the ever-tightening labor market, as yet, gains in compensation per hour are not significantly outstripping gains in productivity. But as I have argued previously, should labor markets continue to tighten, short of a repeal of the law of supply and demand, labor costs eventually would have to accelerate to levels threatening price stability and our continuing economic expansion.

The more modest pace of increase in domestic final spending in recent months suggests that aggregate demand may be moving closer into line with the rate of advance in the economy's potential, given our continued impressive productivity growth. Should these trends toward supply and demand balance persist, the ongoing need for ever-rising imports and for a further draining of our limited labor resources should ease or perhaps even end. Should this favorable outcome prevail, the immediate threat to our prosperity from growing imbalances in our economy would abate.

But as I indicated earlier, it is much too soon to conclude that these concerns are behind us. We cannot yet be sure that the slower expansion of domestic final demand, at a pace more in line with potential supply, will persist. Even if the growth rates of demand and potential supply move into better balance, there is still uncertainty about whether the current level of labor resource utilization can be maintained without generating increased cost and price pressures.

As I have already noted, to date costs have been held in check by productivity gains. But at the same time, inflation has picked up--even the core measures that do not include energy prices directly. Higher rates of core inflation may mostly reflect the indirect effects of energy

prices, but the Federal Reserve will need to be alert to the risks that high levels of resource utilization may put upward pressure on inflation.

Moreover, energy prices may pose a challenge to containing inflation. Energy price changes represent a one-time shift in a set of important prices, but by themselves generally cannot drive an ongoing inflation process. The key to whether such a process could get under way is inflation expectations. To date, survey evidence, as well as readings from the Treasury's inflation-indexed securities, suggests that households and investors do not view the current energy price surge as affecting longer-term inflation. But any deterioration in such expectations would pose a risk to the economic outlook.

As the financing requirements for our ever-rising capital investment needs mounted in recent years--beyond forthcoming domestic saving--real long-term interest rates rose to address this gap. We at the Federal Reserve, responding to the same economic forces, have moved the overnight federal funds rate up 1-3/4 percentage points over the past year. To have held to the federal funds rate of June 1999 would have required a massive increase in liquidity that would presumably have underwritten an acceleration of prices and, hence, an eventual curbing of economic growth.

By our meeting this June, the appraisal of all the foregoing issues led the Federal Open Market Committee to conclude that, while some signs of slower growth were evident and justified standing pat at least for the time being, they were not sufficiently compelling to alter our view that the risks remained more on the side of higher inflation.

As indicated in their forecasts, FOMC members and nonvoting presidents expect that the long period of continuous economic expansion will be extended over the next year and one-half.

but with growth at a somewhat slower pace than over the past several years. For the current year, the central tendency of Board members' and Reserve Bank presidents' forecasts is for real GDP to increase 4 to 4-1/2 percent, suggesting a noticeable deceleration over the second half of 2000 from its likely pace over the first half. The unemployment rate is projected to remain close to 4 percent. This outlook is a little stronger than anticipated last February, no doubt owing primarily to the unexpectedly strong jump in output in the first quarter. Mainly reflecting higher prices of energy products than had been foreseen, the central tendency for inflation this year in prices for personal consumption expenditures also has been revised up somewhat, to the vicinity of 2-1/2 to 2-3/4 percent.

Given the firmer financial conditions that have developed over the past eighteen months, the Committee expects economic growth to moderate somewhat next year. Real output is anticipated to expand 3-1/4 to 3-3/4 percent, somewhat less rapidly than in recent years. The unemployment rate is likely to remain close to its recent very low levels. Energy prices could ease somewhat, helping to trim PCE inflation next year to around 2 to 2-1/2 percent, somewhat above the average of recent years.

Conclusion

The last decade has been a remarkable period of expansion for our economy. Federal Reserve policy through this period has been required to react to a constantly evolving set of economic forces, often at variance with historical relationships, changing federal funds rates when events appeared to threaten our prosperity, and refraining from action when that appeared warranted. Early in the expansion, for example, we kept rates unusually low for an extended period, when financial sector fragility held back the economy. Most recently we have needed to

raise rates to relatively high levels in real terms in response to the side effects of accelerating growth and related demand-supply imbalances. Variations in the stance of policy--or keeping it the same--in response to evolving forces are made in the framework of an unchanging objective--to foster as best we can those financial conditions most likely to promote sustained economic expansion at the highest rate possible. Maximum sustainable growth, as history so amply demonstrates, requires price stability. Irrespective of the complexities of economic change, our primary goal is to find those policies that best contribute to a noninflationary environment and hence to growth. The Federal Reserve, I trust, will always remain vigilant in pursuit of that goal.

Chairman Greenspan subsequently submitted the following in response to written questions from Congressman Charles A. Gonzalez received after the monetary policy hearing of July 25, 2000, before the Committee on Banking and Financial Services:

Q.1. About a month or so ago, you wrote a letter to Rep. Richard Baker suggesting growth of the housing Government Sponsored Enterprises (GSEs) is creating "systemic risk." I believe you were referring to two issues: (1) the huge percentage of mortgages either owned or guaranteed by Fannie and Freddie, and (2) the magnitude of GSE investments (stock and mortgage-backed securities) that insured institutions now hold on their balance sheets. Just how significant is this risk, both in absolute terms and relative to other risks in the financial services marketplace? Do the Federal Home Loan Banks present similar risks? What steps might Congress consider to address these risks?

A.1. As I wrote to Congressman Baker, as a general practice, the Federal Reserve does not comment on any institution or a particular group of institutions with regard to systemic risks. The GSEs--the Federal Home Loan Banks (FHLBs), the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac)--collectively dominate the United States residential housing markets. They clearly benefit from government sponsorship--particularly from their ability to borrow funds at a lower cost than comparably situated private sector borrowers. The lower borrowing costs of these institutions, of course, reflect the belief of purchasers of their debt that the government is unlikely to let a GSE fail. Such federal government guarantees--implicit or explicit--are one way, along with government outlays and mandates on the private sector, that the federal government makes claims on the real resources of the private sector.

As for what steps Congress might consider, implicit interest rate subsidies such as those that arise from ambiguity in investors' beliefs, by their nature, are created with few limitations on the debt issuer and are not controlled by the congressional appropriations process. Since these subsidies have important consequences for the structure and efficiency of the financial markets and the productive allocation of real resources, it is appropriate for Congress periodically to consider and evaluate these implicit subsidies.

Q.2. The U.S. trade deficit continues to increase, and it is significantly higher than in past years. What does this mean for the U.S. in the long run and is there anything specific that we should be doing to address this?

A.2. As I stated in my testimony, domestic demand growth, influenced importantly by the wealth effect on consumer spending, has been running 1-1/2 to 2 percentage points at an annual rate in excess of even the higher, productivity-driven growth in potential

supply since late 1997. That gap has been filled in part by a marked rise in imports as a percent of GDP, resulting in significantly higher U.S. trade and current account deficits.

The technological advances that have boosted productivity have also engendered a sharp rise in potential rates of return on new American investments. This sharp rise in potential rates of return attracts foreign capital inflows as investors seek these higher returns; foreigners expand their claims on U.S. residents, and in the process finance our external deficits. There has to be a limit as to how much of the world's savings our residents can borrow at close to prevailing interest and exchange rates. Moreover, a narrowing of disparities among global growth rates over time may well induce a narrowing of rates of return in the United States relative to those abroad, and result in a decline in the attractiveness to foreigners of investment in the United States.

There are at least two specific things that we should be doing to address the expansion of the current account deficit. First, the growth of domestic demand and that of potential supply must be brought into balance. Second, the rate of U.S. national saving must be brought more closely in line with the rate of domestic investment. Since the economy requires investment in order to replenish the capital stock and maintain or increase the trend rate of the growth of output, economic policies aimed at reducing the current account deficit should target increases in saving rather than reductions in investment. The large budget surpluses that have developed recently have substantially augmented national saving. The Congress and the Administration should avoid steps that would materially reduce these budget surpluses and with them, U.S. national saving.

Q.3. With technology reshaping the delivery of financial services, do we need a new legal framework for banking and consumer protection that is relevant in an electronic world which does not easily recognize geographic borders? Do laws, federal or state, need to be changed to facilitate electronic commerce and still assure consumer protection?

A.3. Rapid advances in technology and electronic commerce have had a significant effect in changing the scope, utility, and delivery of financial services. Business practices across various credit markets are also evolving to reflect these changes.

As a general matter, the adoption of an entirely new legal framework to address these changes may not be necessary, but some laws enacted to regulate the traditional structure for delivering financial services--including the consumer financial services laws--may need to be revised. Government should review federal and state laws and regulations and, where necessary, change them to facilitate electronic commerce while continuing to maintain consumer protection. Such efforts are taking place. For example, section 729 of the Gramm-Leach-Bliley Act requires the federal banking agencies to conduct a study of

banking regulations regarding the delivery of financial services and report their recommendations on adapting those existing requirements to online banking and lending.

To keep pace with the changes in the financial services industry, the Board periodically reviews the regulations that it administers to update them. In 1996, the Board began considering amendments to its consumer regulations to permit financial institutions and others to provide in electronic form disclosures required to be given to consumers in writing. The goal of the amendments was two-fold, to facilitate electronic commerce and, consistent with the intent of consumer protection laws, to ensure that consumers accepting the electronic delivery of financial services continue to receive cost and other disclosures designed to aid them in making informed financial decisions.

Consistent with this goal, in June of this year, the Electronic Signatures in Global and National Commerce Act, P.L. 106-229 (the E-SIGN Act), became law. Similar to the Board's proposals and interim rules, the act provides that consumer disclosures provided electronically satisfy requirements for written disclosures. The Board is in the process of evaluating the impact of the E-SIGN Act on the Board's proposals and interim rules permitting electronic disclosures.

Q.4. In the last session of the 106th Congress, we passed H.R. 10, which became S. 900 and is now known as the Gramm-Leach-Bliley Act. I have heard from several constituents who contend that this new law essentially benefits financial institutions which in the past have been deemed to be "too-big-to-fail," insurance companies and securities firms. Several years ago, Congress also passed H.R. 1151 which became law and which benefits the credit unions. My question to you now is what about community banks? Do you have any suggestions or recommendations for Congress in terms of changes to existing laws or regulations that could help community banks compete? I am hearing more and more from community banks on how difficult it is for them to compete with the large brokerage firms, the credit unions and the very large banks, and I would like to have some concrete suggestions on what Congress can do to help level the playing field.

A.4. The Gramm-Leach-Bliley (GLB) Act contains a number of provisions attractive to community banks. As of early July, almost three out of four domestic Financial Holding Companies (FHCs)--the entities authorized by GLB to engage in wider activities--were organized by banks with less than $500 million of assets. Many of these used the new authority to operate the more flexible insurance agencies authorized by GLB. In addition, GLB permitted banks to underwrite municipal bonds and a small number of other securities transactions in the bank, rather than in an affiliate, provisions particularly attractive to smaller banks. The provisions in GLB on bank borrowing from the Federal Home Loan Banks (FHLB) were particularly helpful to community banks. Not only did it authorize banks with less than $500 million of assets to use small business and agriculture

loans as collateral, it exempted these banks from the requirement that they meet minimum mortgage loan holdings in order to borrow from the FHLB.

Beyond the benefits of GLB, our analysis of the data suggests that community banks have been quite successful competitors. Our staff recently reviewed the experience of 7,700 small banks--i.e., all those beyond the 1,000th largest bank--with average assets of $88 million, the largest of which was $328 million. We found their assets, core deposits, large time deposits, and that portion of all their deposits that was uninsured had grown faster than those at large- and medium-sized banks in the 1990s. The smallest sub group--the 3,300 banks with assets less than $50 million--had the fastest growth rate. Small banks did pay more than large banks to attract interest-bearing deposits in the last half of the 1990s, but this does not seem to affect their high profit margins or their stable return on equity.

These are averages, to be sure, and, by definition, some banks are below average. There might also be pockets with special regional difficulties, and we are looking into that possibility. We would appreciate hearing of any evidence of more generalized difficulties.

At this time, we have not been able to determine the need for any specific Congressional action for the benefit of this critical and important segment of our banking system. As in the past, they have continued to be very successful competitors.

Q.5. There is a segment of the American population that has never had credit before and/or that has a blemished credit record for one reason or another. What are your views on the value added to or simply the value to our economy and to our constituents of the extension of credit card opportunities to what some call the "gateway market," those with blemished credit and/or new to the credit market? Do these credit card companies and "gateway" markets provide a service to our economy?

A.5. Credit cards may provide several benefits to consumers. In addition to being a flexible source of credit, they are commonly used as payment instruments. And, in certain cases, credit cards may be essential to obtain services, or for identification, such as for renting cars or making hotel or airline reservations.

For consumers with blemished credit history, or no credit history, the cost of opening and maintaining a credit card account may be high. But initially obtaining a secured credit card or a high cost card account can allow consumers to demonstrate that they are good credit risks, and ultimately to obtain an unsecured or lower rate credit card.

In some cases, consumers who are not financially sophisticated may become overextended in their use of credit cards. And in some cases, they may be less inclined to comparison shop for favorable terms, and therefore may be more likely to use credit cards with high costs. But it is important that consumers have access to credit. If that access is not available to consumers through credit cards, consumers with blemished or no credit histories may seek credit alternatives that may be more costly than credit cards (such as high cost short-term personal or mortgage loans).

Chairman Greenspan subsequently submitted the following in response to written questions from Congressman Frank Mascara received after the monetary policy hearing of July 25, 2000, before the Committee on Banking and Financial Services:

Q.1. Chairman Greenspan, in your testimony you referred to the gap between domestic demand growth and the weaker growth in supply as contributing to increased immigration and the employment of unutilized labor resources. Can you explain what these unutilized labor resources are--and would you agree that increased investment in worker training programs might alleviate the need to import immigrant labor?

A.1. In my statement, I said "domestic demand growth influenced importantly by the wealth effect on consumer spending, has been running 1-1/2 to 2 percentage points at an annual rate in excess of even the higher, productivity-driven, growth in potential supply since late 1997. That gap has been filled both by a marked rise in imports as a percent of GDP and by a marked increase in domestic production resulting both from significant immigration and from the employment of previously unutilized labor resources."

Arithmetically, the growth of gross domestic purchases (that is, GDP plus net imports) equals the sum of the growth of productivity, population, the labor force participation rate, and one minus the unemployment rate, plus the contribution of net imports. During the four quarters ending in 2000:Q2, gross domestic purchases rose 6.9 percent, of which about 1-1/2 percentage points was met by falling unemployment and rising labor force participation--that is, a shrinking pool of available workers--as well as the widening trade deficit. That 1-1/2 percentage points reflects an excess of aggregate demand growth over the growth of aggregate supply. There are two ways to satisfy above trend growth of domestic demand: we can make the goods here, or foreigners can make them for us. If we make them here, we can do it by drawing more people into the workforce or increasing productivity. But the pool of available workers, what I called "unutilized labor resources" in my statement, cannot be drawn down forever; likewise, the trade deficit cannot widen forever. As I went on to say in my statement, "the excess of the growth of domestic demand over potential supply must be closed before the resulting strains and imbalances undermine the economic expansion."

Certainly, efforts to provide workers with the skills that are demanded in today's labor market have a beneficial effect. Such programs, when successful, improve the productivity of the workforce. That is one reason many employers have established on the job training programs and "corporate universities" that allow employees to upgrade and enhance their skills. Indeed, the most successful programs tend to be those initiated by employers, who have detailed knowledge of the skill requirements of their businesses. Efforts by firms to reach out and provide training to those who are unemployed or out of

the labor force can expand the pool of workers available to help satisfy the production needs associated with rapid growth of domestic demand.

Q.2. Chairman Greenspan, you noted in your testimony that the increase in oil prices have amounted to $75 billion in added energy costs for consumers, yet you also suggest that the effects of these costs to slow consumption may only be temporary.

Do you arrive at this conclusion because you anticipate oil prices to fall, or because high oil prices do not contribute to inflation?

Would you be inclined to interpret future decreases in oil prices as reducing inflationary pressures?

A.2. In my statement, I noted that "the past year's rise in the price of oil has amounted to an annual $75 billion levy by foreign producers on domestic consumers of imported oil, the equivalent of a tax of roughly 1 percent of disposable income. This burden is another likely source of the slowed growth in real consumption outlays in recent months, though one that may prove to be largely transitory." I suggested that the imported "oil tax" might be transitory because, at the time of my statement, crude oil prices were beginning to fall from their peaks. In particular, the spot price for West Texas Intermediate (WTI) crude peaked at almost $35 per barrel on June 23 and had dropped to about $28 per barrel on July 24. Since then, WTI prices have moved back to around the $32 per barrel level.

In the short run, movements in oil prices have an effect on the broad indexes on consumer prices, such as the price index for personal consumption expenditures or the CPI. More fundamentally, however, energy price changes represent a one-time shift in a set of important prices, but by themselves generally cannot drive an ongoing inflation process. The key to whether such a process could get under way is inflation expectations. To date, it appears that households and investors do not view the recent energy price surge as affecting longer-term inflation. But any deterioration in such expectations, which could be ignited and inflamed by unsound monetary policy, would pose a risk to the economic outlook. Of course, a reversal of the runup in oil prices would, undoubtedly, lower the headline inflation figure for a time.

Board of Governors of the Federal Reserve System

Monetary Policy Report to the Congress

July 20, 2000

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., July 20, 2000

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

The Board of Governors is pleased to forward its Monetary Policy Report to the Congress.

Sincerely,

Alan Greenspan, Chairman

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MONETARY POLICY AND THE ECONOMIC OUTLOOK

The impressive performance of the U.S. economy persisted in the first half of 2000 with economic activity expanding at a rapid pace. Overall rates of inflation were noticeably higher, largely as a result of steep increases in energy prices. The remarkable wave of new technologies and the associated surge in capital investment have continued to boost potential supply and to help contain price pressures at high levels of labor resource use. At the same time, rising productivity growth—working through its effects on wealth and consumption, as well as on investment spending—has been one of the important factors contributing to rapid increases in aggregate demand that have exceeded even the stepped-up increases in potential supply. Under such circumstances, and with the pool of available labor already at an unusually low level, the continued expansion of aggregate demand in excess of the growth in potential supply increasingly threatened to set off greater price pressures. Because price stability is essential to achieving maximum sustainable economic growth, heading off these pressures has been critical to extending the extraordinary performance of the U.S. economy.

To promote balance between aggregate demand and potential supply and to contain inflation pressures, the Federal Open Market Committee (FOMC) took additional firming actions this year, raising the benchmark federal funds rate 1 percentage point between February and May. The tighter stance of monetary policy, along with the ongoing strength of credit demands, has led to less accommodative financial conditions: On balance, since the beginning of the year, real interest rates have increased, equity prices have changed little after a sizable run-up in 1999, and lenders have become more cautious about extending credit, especially to marginal borrowers. Still, households and businesses have continued to borrow at a rapid pace, and the growth of M2 remained relatively robust, despite the rise in market interest rates. The favorable outlook for the U.S. economy has contributed to a further strengthening of the dollar, despite tighter monetary policy and rising interest rates in most other industrial countries.

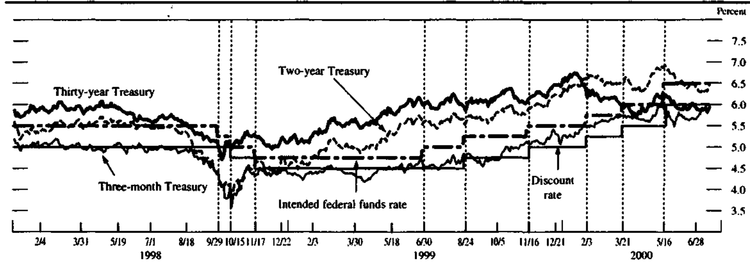
Perhaps partly reflecting firmer financial conditions, the incoming economic data since May have suggested some moderation in the growth of aggregate demand. Nonetheless, labor markets remained tight at the time of the FOMC meeting in June, and it was unclear whether the slowdown represented a decisive shift to more sustainable growth or just a pause. The Committee left the stance of policy unchanged but saw the balance of risks to the economic outlook as still weighted toward rising inflation.

Monetary Policy, Financial Markets, and the Economy over the First Half of 2000

When the FOMC convened for its first two meetings of the year, in February and March, economic conditions in the United States were pointing toward an increasingly taut labor market as a consequence of a persistent imbalance between the growth rates of aggregate demand and potential aggregate supply. Reflecting the underlying strength in spending and expectations of tighter monetary policy, market interest rates were rising, especially after the century date change passed without incident. But, at the same time, equity prices were still posting appreciable gains on net. Knowing that the two safety valves that had been keeping underlying inflation from picking up until then—the economy's ability to draw on the pool of available workers and to expand its trade deficit on reasonable terms—could not be counted on indefinitely, the FOMC voted for a further tightening in monetary policy at both its February and its March meetings, raising the target for the overnight federal funds rate 25 basis points on each occasion. In related actions, the Board of Governors also approved quarter-point increases in the discount rate in both February and March.

The FOMC considered larger policy moves at its first two meetings of 2000 but concluded that significant uncertainty about the outlook for the expansion of aggregate demand in relation to that of aggregate supply, including the timing and strength of the economy's response to earlier monetary policy tight-

Selected interest rates



NOTE. The data are daily. Vertical lines indicate the days on which the Federal Reserve announced a change in the intended funds rate. The dates on the horizontal axis are those on which either the FOMC held a scheduled meeting or a policy action was announced. Last observations are for July 17, 2000.

enings, warranted a more limited policy action. Still, noting that there had been few signs that the rise in interest rates over recent quarters had begun to bring demand in line with potential supply, the Committee decided in both instances that the balance of risks going forward was weighted mainly in the direction of rising inflation pressures. In particular, it was becoming increasingly clear that the Committee would need to move more aggressively at a later meeting if imbalances continued to build and inflation and inflation expectations, which had remained relatively subdued until then, began to pick up.[1]

Some readings between the March and May meetings of the FOMC on labor costs and prices suggested a possible increase of inflation pressures. Moreover, aggregate demand had continued to grow at a fast clip, and markets for labor and other resources were showing signs of further tightening. Financial market conditions had firmed in response to these developments; the substantial rise in private borrowing rates between March and May had been influenced by the buildup in expectations of more policy tightening as market participants recognized the need for higher short-term interest rates. Given all these circumstances, the FOMC decided in May to raise the target for the overnight federal funds rate 50 basis points, to 6½ percent. The Committee saw little risk in the more forceful action given the strong momentum of the economic expansion and widespread market expectations of such an action. Even after taking into account its latest action, however, the FOMC saw the strength in spending and pressures in labor markets as indicating that the balance of risks remained tilted toward rising inflation.

By the June FOMC meeting, the incoming data were suggesting that the expansion of aggregate demand might be moderating toward a more sustainable pace: Consumers had increased their outlays for goods modestly during the spring; home purchases and starts appeared to have softened; and readings on the labor market suggested that the pace of hiring might be cooling off. Moreover, much of the effects on demand of previous policy firmings, including the 50 basis point tightening in May, had not yet been fully realized. Financial market participants interpreted signs of economic slowing as suggesting that the Federal Reserve probably would be able to hold inflation in check without much additional policy firming. However, whether aggregate demand had moved decisively onto a more moderate expansion track was not yet clear, and labor resource utilization remained unusually elevated. Thus, although the FOMC decided to defer any policy action in June, it indicated that the balance of risks was still on the side of rising inflation in the foreseeable future.[2]

1. At its March and May meetings, the FOMC took a number of actions that were aimed at adjusting the implementation of monetary policy to actual and prospective reductions in the stock of Treasury debt securities. These actions are described in the discussion of U.S. financial markets.

2. At its June meeting, the FOMC did not establish ranges for growth of money and debt in 2000 and 2001. The legal requirement to establish and to announce such ranges had expired, and owing to uncertainties about the behavior of the velocities of debt and money, these ranges for many years have not provided useful benchmarks for the conduct of monetary policy. Nevertheless, the FOMC believes that the behavior of money and credit will continue to have value for gauging economic and financial conditions, and this report discusses recent developments in money and credit in some detail.

Economic Projections for 2000 and 2001

The members of the Board of Governors and the Federal Reserve Bank presidents expect the current economic expansion to continue through next year, but at a more moderate pace than the average over recent quarters. For 2000 as a whole, the central tendency of their forecasts for the rate of increase in real gross domestic product (GDP) is 4 percent to 4½ percent, measured as the change between the fourth quarter of 1999 and the fourth quarter of 2000. Over the four quarters of 2001, the central tendency forecasts of real GDP are in the 3¼ percent to 3¾ percent range. With this pace of expansion, the civilian unemployment rate should remain near its recent level of 4 percent. Even with the moderation in the pace of economic activity, the Committee members and nonvoting Bank presidents expect that inflation may be higher in 2001 than in 1999, and the Committee will need to be alert to the possibility that financial conditions may need to be adjusted further to balance aggregate demand and potential supply and to keep inflation low.

Considerable uncertainties attend estimates of potential supply—both the rate of growth and the level of the economy's ability to produce on a sustained non-inflationary basis. Business investment in new equipment and software has been exceptionally high, and given the rapid pace of technological change, firms will continue to exploit opportunities to implement more-efficient processes and to speed the flow of information across markets. In such an environment, a further pickup in productivity growth is a distinct possibility. However, a portion of the very rapid rise in measured productivity in recent quarters may be a result of the cyclical characteristics of this expansion rather than an indication of structural rates of increase consistent with holding the level of resource utilization unchanged. Current levels of labor resource utilization are already unusually high. To date, this has not led to escalating unit labor costs, but whether such a favorable performance in the labor market can be sustained is one of the important uncertainties in the outlook.

1. Economic projections for 2000 and 2001

Percent

Indicator	Federal Reserve governors and Reserve Bank presidents		Administration
	Range	Central tendency	
	2000		
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	6–7¼	6¼–6¾	6.0
Real GDP[2]	3¾–5	4–4½	3.9
PCE prices	2–2¾	2½–2¾	3.2[3]
Average level, fourth quarter			
Civilian unemployment rate	4–4¼	About 4	4.1
	2001		
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	5–6¼	5½–6	5.3
Real GDP[2]	2½–4	3¼–3¾	3.2
PCE prices	1¾–3	2–2½	2.5[3]
Average level, fourth quarter			
Civilian unemployment rate	4–4½	4–4¼	4.2

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.
2. Chain-weighted.
3. Projection for the consumer price index.

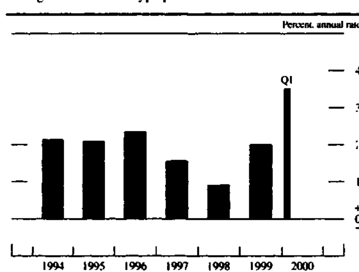
On the demand side, the adjustments in financial markets that have accompanied expected and actual tighter monetary conditions may be beginning to moderate the rise in domestic demand. As that process evolves, the substantial impetus that household spending has received in recent years from rapid gains in equity wealth should subside. The higher cost of business borrowing and more-restrictive credit supply conditions probably will not exert substantial restraint on investment decisions, particularly as long as the costs and potential productivity payoffs of new equipment and software remain attractive. The slowing in domestic spending will not be fully reflected in a more moderate expansion of domestic production. Some of the slowing will be absorbed in smaller increases in imports of goods and services, and given continued recovery in economic activity abroad, domestic firms are expected to continue seeing a boost to demand and to production from rising exports.

Regarding inflation, FOMC participants believe that the rise in consumer prices will be noticeably larger this year than in 1999 and that inflation will then drop back somewhat in 2001. The central tendency of their forecasts for the increase in the chain-type index for personal consumption expenditures is 2½ percent to 2¾ percent over the four quarters of 2000 and 2 percent to 2½ percent during 2001. Shaping the contour of this inflation forecast is the expectation that the direct and indirect effects of the boost to domestic inflation this year from the rise in the price of world crude oil will be partly reversed next year if, as futures markets suggest, crude oil prices retrace this year's run-up by next year. Nonetheless, these forecasts show consumer price inflation in 2001 to have moved above the rates that prevailed over the 1997–98 period. Such a trend, were it not to show signs of quickly stabilizing or reversing, would

pose a considerable risk to the continuation of the extraordinary economic performance of recent years.

The economic forecasts of the FOMC are similar to those recently released by the Administration in its Mid-Session Review of the Budget. Compared with the forecasts available in February, the Administration raised its projections for the increase in real GDP in 2000 and 2001 to rates that lie at the low end of the current range of central tendencies of Federal Reserve policymakers. The Administration also expects that the unemployment rate will remain close to 4 percent. Like the FOMC, the Administration sees consumer price inflation rising this year and falling back in 2001. After accounting for the differences in the construction of the alternative measures of consumer prices, the Administration's projections of increases in the consumer price index (CPI) of 3.2 percent in 2000 and 2.5 percent in 2001 are broadly consistent with the Committee's expectations for the chain-type price index for personal consumption expenditures.

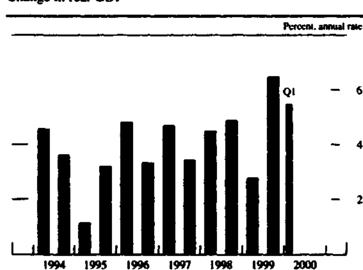
Change in PCE chain-type price index



ECONOMIC AND FINANCIAL DEVELOPMENTS IN 2000

The expansion of U.S. economic activity maintained considerable momentum through the early months of 2000 despite the firming in credit markets that has occurred over the past year. Only recently has the pace of real activity shown signs of having moderated from the extremely rapid rate of increase that prevailed during the second half of 1999 and the first quarter of 2000. Real GDP increased at an annual rate of 5½ percent in the first quarter of 2000. Private domestic final sales, which had accelerated in the second half of 1999, were particularly robust, rising at an annual rate of almost 10 percent in the first quarter. Underlying that surge in domestic spending were many of the same factors that had contributed to the considerable strength of outlays in the second half of 1999. The ongoing influence of substantial increases in real income and wealth continued to fuel consumer spending, and business investment, which continues to be undergirded by the desire to take advantage of new, cost-saving technologies, was further buoyed by an acceleration in sales and profits late last year. Export demand posted a solid gain during the first quarter while imports rose even more rapidly to meet booming domestic demand. The available data, on balance, point to another solid increase in real GDP in the second quarter, although they suggest that private household and business fixed investment spending likely slowed noticeably from the extraordinary first-quarter pace. Through June, the expansion remained brisk enough to keep labor utilization near the very high levels reached at the end of 1999 and to raise the factory utilization rate to close to its long-run average by early spring.

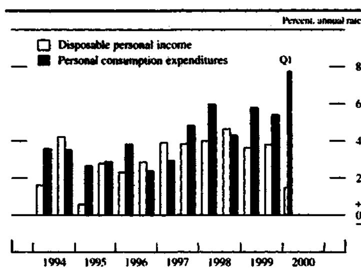
Change in real GDP



NOTE. In this chart and in subsequent charts that show the components of real GDP, changes are measured to the final quarter of the period indicated, from the final quarter of the previous period.

Inflation rates over the first half of 2000 were elevated by an additional increase in the price of imported crude oil, which led to sharp hikes in retail energy prices early in the year and again around midyear. Apart from energy, consumer price inflation so far this year has been somewhat higher than during 1999, and some of that acceleration may be attributable to the indirect effects of higher energy costs on the prices of core goods and services. Sustained strong gains in worker productivity have kept increases in unit labor costs minimal despite the persistence of a historically low rate of unemployment.

Change in real income and consumption



The Household Sector

Consumer Spending

Consumer spending was exceptionally vigorous during the first quarter of 2000. Real personal consumption expenditures rose at an annual rate of 7¾ percent, the sharpest increase since early 1983. At that time, the economy was rebounding from a deep recession during which households had deferred discretionary purchases. In contrast, the first-quarter surge in consumption came on the heels of two years of very robust spending during which real outlays increased at an annual rate of more than 5 percent, and the personal saving rate dropped sharply.

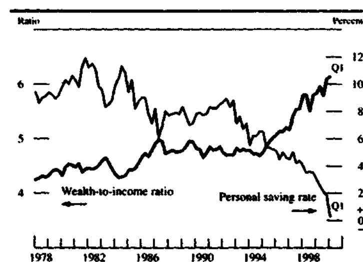
Outlays for durable goods, which rose at a very fast pace in 1998 and 1999, accelerated during the first quarter to an annual rate of more than 24 percent. Most notably, spending on motor vehicles, which had climbed to a new high in 1999, jumped even further in the first quarter of 2000 as unit sales of light motor vehicles soared to a record rate of 18.1 million units. In addition, households' spending on computing equipment and software rebounded after the turn of the year; some consumers apparently had postponed their purchases of these goods in late 1999 before the century date change. Outlays for nondurable goods posted a solid increase of 5¾ percent in the first quarter, marked by a sharp upturn in spending on clothing and shoes. Spending for consumer services also picked up in the first quarter, rising at an annual rate of 5½ percent. Spending was quite brisk for a number of non-energy consumer services, ranging from recreation and telephone use to brokerage fees. Also contributing to the acceleration was a rebound in outlays for energy services, which had declined in late 1999, when weather was unseasonably warm.

In recent months, the rise in consumer spending has moderated considerably from the phenomenal pace of the first quarter, with much of the slowdown in outlays for goods. At an annual rate of 17¼ million units in the second quarter, light motor vehicles sold at a rate well below their first-quarter pace. Nonetheless, that level of sales is still historically high, and with prices remaining damped and automakers continuing to use incentives, consumers' assessments of the motor vehicle market continue to be positive. The information on retail sales for the April-to-June period indicate that consumer expenditures for other goods rose markedly slower in the second quarter than in the first quarter, at a pace well below the average rate of increase during the preceding two years. In contrast, personal consumption expenditures for consumer services continued to rise relatively briskly in April and May.

Real disposable personal income increased at an annual rate of about 3 percent between December and May—slightly below the 1999 pace of 3¾ percent. However, the impetus to spending from the rapid rise in household net worth was still considerable, labor markets remained tight, and confidence was still high. As a result, households continued to allow their spending to outpace their flow of current income, and the personal saving rate, as measured in the national income and product accounts, dropped further, averaging less than 1 percent during the first five months of the year.

After having boosted the ratio of household net worth to disposable income to a record high in the first quarter, stock prices have fallen back, suggesting less impetus to consumer spending going forward. In addition, smaller employment gains and the pickup in

Wealth and saving



NOTE. The wealth-to-income ratio is the ratio of net worth of households to disposable personal income.

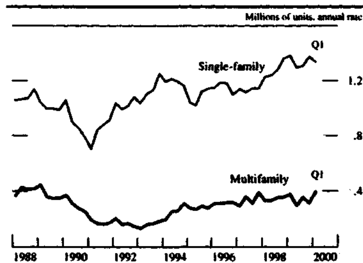
energy prices have moderated the rise in real income of late. Although these developments left some imprint on consumer attitudes in June, households remained relatively upbeat about their prospective financial situation, according to the results of the University of Michigan Survey Research Center (SRC) survey. However, they became a bit less positive about the outlook for business conditions and saw a somewhat greater likelihood of a rise in unemployment over the coming year.

Residential Investment

Housing activity stayed at a high level during the first half of this year. Homebuilders began the year with a considerable backlog of projects that had developed as the exceptionally strong demand of the previous year strained capacity. As a result, they maintained starts of new single-family homes at an annual rate of 1.33 million units, on average, through April—matching 1999's robust pace. Households' demand for single-family homes was supported early in the year by ongoing gains in jobs and income and the earlier run-up in wealth; those forces apparently were sufficient to offset the effects that higher mortgage interest rates had on the affordability of new homes. Sales of new homes were particularly robust, setting a new record by March; but sales of existing units slipped below their 1999 high. As a result of the continued strength in sales, the home-ownership rate reached a new high in the first quarter.

By the spring, higher mortgage interest rates were leaving a clearer mark on the attitudes of both consumers and builders. The Michigan SRC survey reported that households' assessments of homebuying conditions dropped between April and June to the lowest level in more than nine years. Survey respondents noted that, besides higher financing costs, higher prices of homes were becoming a factor in their less positive assessment of market conditions. Purchases of existing homes were little changed, on balance, in April and May from the first-quarter average; however, because these sales are recorded at the time of closing, they tend to be a lagging indicator of demand. Sales of new homes—a more current indicator—fell back in April and May, and homebuilders reported that sales dropped further in June. Perhaps a sign that softer demand has begun to affect construction, starts of new single-family homes slipped to a rate of 1¼ million units in May. That level of new homebuilding, although noticeably slower than the robust pace that characterized the fall and winter period, is only a bit below the elevated level that prevailed throughout much of 1998, when single-family starts reached their highest level in twenty years. Starts of multifamily housing units, which also had stepped up sharply in the first quarter of the year, to an annual rate of 390,000 units, settled back to a 340,000 unit rate in April and May.

Private housing starts



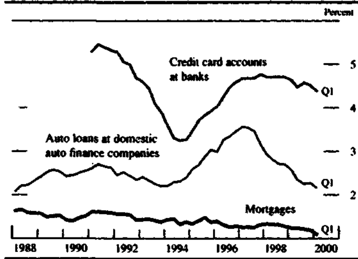
Household Finance

Fueled by robust spending, especially early in the year, the expansion of household debt remained brisk during the first half of 2000, although below the very strong 1999 growth rate. Apparently, a favorable outlook for income and employment, along with rising wealth, made households feel confident enough to continue to spend and take on debt. Despite rising mortgage and consumer loan rates, household debt increased at an annual rate of nearly 8 percent in the first quarter, and preliminary data point to a similar increase in the second quarter.

Mortgage debt expanded at an annual rate of 7 percent in the first quarter, boosted by the high level of housing activity. Household debt not secured by real estate—including credit card balances and auto loans—posted an impressive 10 percent gain in the first quarter to help finance a large expansion in outlays for consumer durables, especially motor vehicles. The moderation in the growth of household debt this year has been driven primarily by its mortgage component: Preliminary data for the second quarter suggest that, although consumer credit likely decelerated from the first quarter, it still grew faster than in 1999.

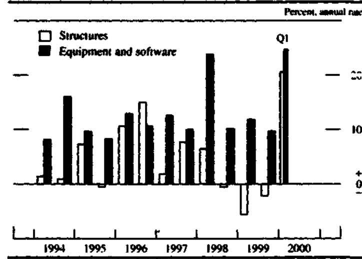
Debt in margin accounts, which is largely a household liability and is not included in reported measures of credit market debt, has declined, on net, in recent

Delinquency rates on household loans



NOTE. Data on credit card delinquencies are from bank Call Reports; data on auto loan delinquencies are from the Big Three automakers; data on mortgage delinquencies are from the Mortgage Bankers Association.

Change in real business fixed investment



months, following a surge from late in the third quarter of 1999 through the end of March 2000. There has been no evidence that recent downdrafts in share prices this year caused serious repayment problems at the aggregate level that might pose broader systemic concerns.

The combination of rapid debt growth and rising interest rates has pushed the household debt-service burden to levels not reached since the late 1980s. Nonetheless, with household income and net worth both having grown rapidly, and employment prospects favorable, very few signs of worsening credit problems in the household sector have emerged, and commercial banks have reported in recent Federal Reserve surveys that they remain favorably disposed to make consumer installment and mortgage loans. Indeed, financial indicators of the household sector have remained mostly positive: The rate of personal bankruptcy filings fell in the first quarter to its lowest level since 1996; delinquency rates on home mortgages and auto loans remained low; and the delinquency rate on credit cards edged down further, although it remained in the higher range that has prevailed since the mid-1990s. However, delinquency rates may be held down, to some extent, by the surge in new loan originations in recent quarters because newly originated loans are less likely to be delinquent than seasoned ones.

The Business Sector

Fixed Investment

The boom in capital spending extended into the first half of 2000 with few indications that businesses' desire to take advantage of more-efficient technologies is diminishing. Real business fixed investment surged at an annual rate of almost 24 percent in the first quarter of the year, rebounding sharply from its lull at the end of 1999, when firms apparently postponed some projects because of the century date change. In recent months, the trends in new orders and shipments of nondefense capital goods suggest that demand has remained solid.

Sustained high rates of investment spending have been a key feature shaping the current economic expansion. Business spending on new equipment and software has been propelled importantly by ongoing advances in computer and information technologies that can be applied to a widening range of business processes. The ability of firms to take advantage of these emerging developments has been supported by the strength of domestic demand and by generally favorable conditions in credit and equity markets. In addition, because these high-technology goods can be produced increasingly efficiently, their prices have continued to decline steeply, providing additional incentive for rapid investment. The result has been a significant rise in the stock of capital in use by businesses and an acceleration in the flow of services from that capital as more-advanced vintages of equipment replace older ones. The payoff from the prolonged period during which firms have upgraded their plant and equipment has increasingly shown through in the economy's improved productivity performance.

Real outlays for business equipment and software shot up at an annual rate of nearly 25 percent in the first quarter of this year. That jump followed a modest increase in the final quarter of 1999 and put spending for business equipment and software back on the double-digit uptrend that has prevailed

throughout the current economic recovery. Concerns about potential problems with the century date change had the most noticeable effect on the patterns of spending for computers and peripherals and for communications equipment in the fourth and first quarters; expenditures for software were also affected, although less so. For these categories of goods overall, the impressive resurgence in business purchases early this year left little doubt that the underlying strength in demand for high-tech capital goods had been only temporarily interrupted by the century date change. Indeed, nominal shipments of office and computing equipment and of communication devices registered sizable increases over the April-May period.

In the first quarter, business spending on computers and peripheral equipment was up almost 40 percent from a year earlier—a pace in line with the trend of the current expansion. Outlays for communications equipment, however, accelerated; the first-quarter surge brought the year-over-year increase in spending to 35 percent, twice the pace that prevailed a year earlier. Expanding Internet usage has been driving the need for new network architectures. In addition, cable companies have been investing heavily in preparation for their planned entry into the markets for residential and commercial telephony and broadband Internet services.

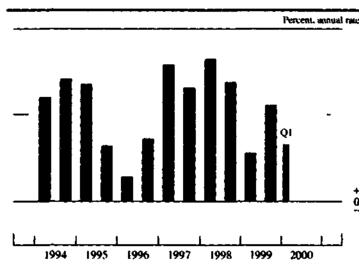
Demand for business equipment outside of the high-tech area was also strong at the beginning of the year. In the first quarter, outlays for industrial equipment rose at a brisk pace for a third consecutive quarter as the recovery of the manufacturing sector from the effects of the Asian crisis gained momentum. In addition, investment in farm and construction machinery, which had fallen steadily during most of 1999, turned up, and shipments of civilian aircraft to domestic customers increased. More recent data show a further rise in the backlog of unfilled orders placed with domestic firms for equipment and machinery (other than high-tech items and transportation equipment), suggesting that demand for these items has been well maintained. However, business purchases of motor vehicles are likely to drop back in the second quarter from the very high level recorded at the beginning of the year. In particular, demand for heavy trucks appears to have been adversely affected by higher costs of fuel and shortages of drivers.

Real investment in private nonresidential structures jumped at an annual rate of more than 20 percent in the first quarter of the year after having declined in 1999. Both last year's weakness and this year's sudden and widespread revival are difficult to explain fully. Nonetheless, the higher levels of spending on office buildings, other commercial facilities, and industrial buildings recorded early this year would seem to accord well with the overall strength in aggregate demand. However, the fundamentals in this sector of the economy are mixed. Available information suggests that property values for offices, retail space, and warehouses have been rising more slowly than they were several years ago. However, office vacancy rates have come down, which suggests that, at least at an aggregate level, the office sector is not overbuilt. The vacancy rate for industrial buildings has also fallen, but in only a few industries, such as semiconductors and other electronic components, are capacity pressures sufficiently intense to induce significant expansion of production facilities.

Inventory Investment

The ratio of inventories to sales in many nonfarm industries moved lower early this year. Those firms that had accumulated some additional stocks toward the end of 1999 as a precaution against disruptions related to the century date change seemed to have little difficulty working off those inventories after the smooth transition to the new year. Moreover, the first-quarter surge in final demand may have, to some extent, exceeded businesses' expectations. In current-cost terms, non-auto manufacturing and trade establishments built inventories in April and May at a somewhat faster rate than in the first quarter but still roughly in line with the rise in their sales. As a result, the ratio of inventories to sales, at current cost, for these businesses was roughly unchanged from the first quarter. Overall, the ongoing downtrend in the ratios of inventories to sales during the past several years suggests that businesses increasingly are taking

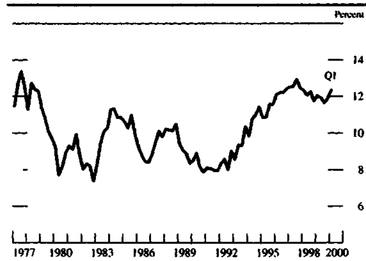
Change in real nonfarm business inventories



advantage of new technologies and software to implement better inventory management.

The swing in inventory investment in the motor vehicle industry has been more pronounced recently. Dealer stocks of new cars and light trucks were drawn down during the first quarter as sales climbed to record levels. Accordingly, auto and truck makers kept assemblies at a high level through June in order to maintain ready supplies of popular models. Even though demand appears to have softened and inventories of a few models have backed up, scheduled assemblies for the third quarter are above the elevated level of the first half.

Before-tax profits of nonfinancial corporations as a share of GDP



NOTE. Profits from domestic operations, with inventory valuation and capital consumption adjustments, divided by gross domestic product of nonfinancial corporate sector.

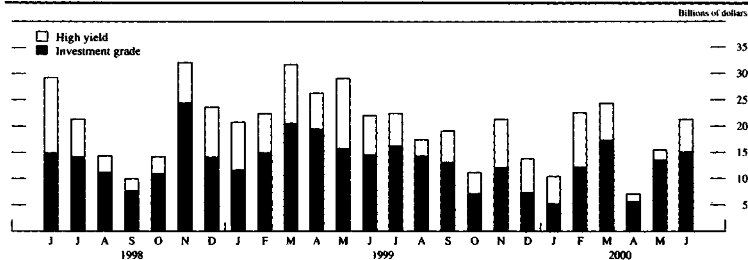
Business Finance

The economic profits of nonfinancial U.S. corporations posted another solid increase in the first quarter. The profits that nonfinancial corporations earned on their domestic operations were 10 percent above the level of a year earlier; the rise lifted the share of profits in this sector's nominal output close to its 1997 peak. Nonetheless, with investment expanding rapidly, businesses' external financing requirements, measured as the difference between capital expenditures and internally generated funds, stayed at a high level in the first half of this year. Businesses' credit demands were also supported by cash-financed merger and acquisition activity. Total debt of nonfinancial businesses increased at a 10½ percent clip in the first quarter, close to the brisk pace of 1999, and available information suggests that borrowing remained strong into the second quarter.

On balance, businesses have altered the composition of their funding this year to rely more on shorter-term sources of credit and less on the bond market, although the funding mix has fluctuated widely in response to changing market conditions. After the passing of year-end, corporate borrowers returned to the bond market in volume in February and March, but subsequent volatility in the capital market in April and May prompted a pullback. In addition, corporate bond investors have been less receptive to smaller, less liquid offerings, as has been true for some time.

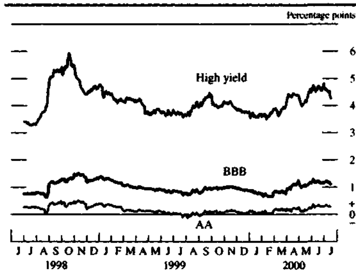
In the investment-grade market, bond issuers have responded to investors' concerns about the interest rate and credit outlook by shortening the maturities of their offerings and by issuing more floating-rate securities. In the below-investment-grade market, many of the borrowers who did tap the bond market in

Gross corporate bond issuance



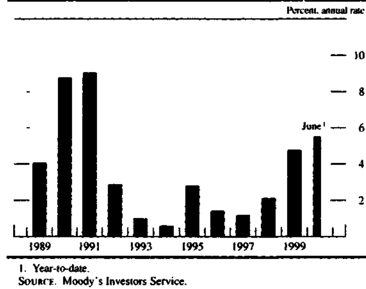
NOTE. Excludes unrated issues and issues sold abroad.

Spreads of corporate bond yields over the ten-year swap rate



NOTE. The data are daily. The spreads compare the yields on the Merrill Lynch AA, BBB, and 175 indexes with the ten-year swap rate from Bloomberg. Last observations are for July 17, 2000.

Default rates on outstanding junk bonds

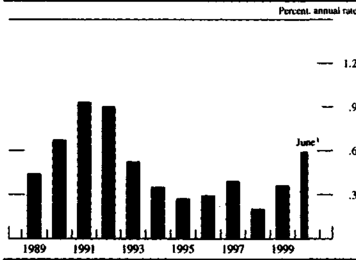


1. Year-to-date.
SOURCE. Moody's Investors Service.

February and March did so by issuing convertible bonds and other equity-related debt instruments. Subsequently, amid increased equity market volatility and growing investor uncertainty about the outlook for prospective borrowers, credit spreads in the corporate bond market widened, and issuance in the below-investment-grade market dropped sharply in April and May. Conditions in the corporate bond market calmed in late May and June, and issuance recovered to close to its first-quarter pace.

As the bond market became less hospitable in the spring, many businesses evidently turned to banks and to the commercial paper market for financing. Partly as a result, commercial and industrial loans at banks have expanded briskly, even as a larger percentage of banks have reported in Federal Reserve surveys that they have been tightening standards and terms on such loans.

Ratio of liabilities of failed nonfinancial firms to liabilities of all nonfinancial firms



1. Year-to-date.
SOURCE. Dun & Bradstreet.

Underscoring lenders' concerns about the creditworthiness of borrowers, the ratio of liabilities of failed businesses to total liabilities has increased further so far this year, and the default rate on outstanding junk bonds has risen further from the relatively elevated level reached in 1999. Through midyear, Moody's Investors Service has downgraded, on net, more debt in the nonfinancial business sector than it has upgraded, although it has placed more debt on watch for future upgrades than downgrades.

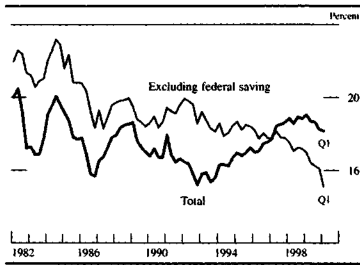
Commercial mortgage borrowing has also expanded at a robust pace over the first half of 2000, as investment in office and other commercial building strengthened. Extending last year's trend, borrowers have tapped banks and life insurance companies as the financing sources of choice. Banks, in particular, have reported stronger demand for commercial real estate loans this year even as they have tightened standards a bit for approving such loans. In the market for commercial mortgage-backed securities, yields have edged higher since the beginning of the year.

The Government Sector

Federal Government

The incoming information regarding the federal budget suggests that the surplus in the current fiscal year will surpass last year's by a considerable amount. Over the first eight months of fiscal year 2000—the

National saving as a share of nominal GNP

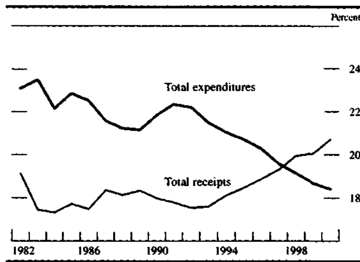


NOTE. National saving comprises the gross saving of households, businesses, and governments.

period from October to May—the unified budget recorded a surplus of about $120 billion, compared with $41 billion during the comparable period of fiscal 1999. The Office of Management and Budget and the Congressional Budget Office are now forecasting that, when the fiscal year closes, the unified surplus will be around $225 billion to $230 billion, $100 billion higher than in the preceding year. That outcome would likely place the surplus at more than 2¼ percent of GDP, which would exceed the most recent high of 1.9 percent, which occurred in 1951.

The swing in the federal budget from deficit to surplus has been an important factor in maintaining national saving. The rise in federal saving as a percentage of gross national product from −3.5 percent in 1992 to 3.1 percent in the first quarter of this year has been sufficient to offset the drop in personal saving that occurred over the same period. As a result, gross saving by households, businesses, and governments has stayed above 18 percent of GNP since 1997, compared with 16½ percent over the preceding seven years. The deeper pool of national saving, along with the continued willingness of foreign investors to finance our current account deficit, remains an important factor in containing increases in the cost of capital and sustaining the rapid expansion of domestic investment. With longer-run projections showing a rising federal government surplus over the next decade, this source of national saving could continue to expand.

Federal receipts and expenditures as a share of nominal GDP



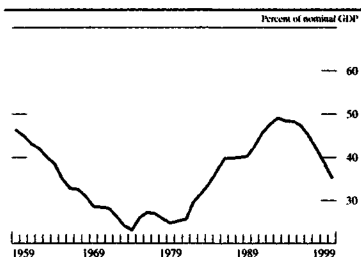
NOTE. Data on receipts and expenditures are from the unified budget. Values for 2000 are current services estimates from the Mid-Session Review of the Budget by the Office of Management and Budget.

The recent good news on the federal budget has been primarily on the receipts side of the ledger. Nonwithheld tax receipts were very robust this spring. Both final payments on personal income tax liabilities for 1999 and final corporate tax payments for 1999 were up substantially. So far this year, the withheld tax and social insurance contributions on this year's earnings of individuals have also been strong. As a result, federal receipts during the first eight months of the fiscal year were almost 12 percent higher than they were during the year-earlier period.

While receipts have accelerated, federal expenditures have been rising only a little faster than during fiscal 1999 and continue to decline as a share of nominal GDP. Nominal outlays for the first eight months of the current fiscal year were 5¼ percent above the year-earlier period. Increases in discretionary spending have picked up a bit so far this year. In particular, defense spending has been running higher in the wake of the increase in budget authority enacted last year. The Congress has also boosted agricultural subsidies in response to the weakness in farm income. While nondiscretionary spending continues to be held down by declines in net interest payments, categories such as Medicaid and other health programs have been rising more rapidly of late.

As measured by the national income and product accounts, real federal expenditures for consumption and gross investment dropped sharply early this year after having surged in the fourth quarter of 1999. These wide quarter-to-quarter swings in federal spending appear to have occurred because the Department of Defense speeded up its payments to vendors before the century date change; actual deliveries of defense goods and services were likely smoother. On average, real defense spending in the fourth and first quarters was up moderately from the average level in fiscal 1999. Real nondefense outlays continued to rise slowly.

Federal government debt held by the public



NOTE. The data are annual and extend through 2000. Federal debt held by private investors is gross federal debt less debt held by federal government accounts and the Federal Reserve System. The value for 2000 is an estimate based on the Administration's June 26 Mid-Session Review of the Budget.

With current budget surpluses coming in above expectations and large surpluses projected to continue for the foreseeable future, the federal government has taken additional steps aimed at preserving a high level of liquidity in the market for its securities. Expanding on efforts to concentrate its declining debt issuance in fewer highly liquid securities, the Treasury announced in February its intention to issue only two new five- and ten-year notes and only one new thirty-year bond each year. The auctions of five- and ten-year notes will remain quarterly, alternating between new issues and smaller reopenings, and the bond auctions will be semiannual, also alternating between new and smaller reopened offerings. The Treasury also announced that it was reducing the frequency of its one-year bill auctions from monthly to quarterly and cutting the size of the monthly two-year note auctions. In addition, the Treasury eliminated the April auction of the thirty-year inflation-indexed bond and indicated that the size of the ten-year inflation-indexed note offerings would be modestly reduced. Meanwhile, anticipation of even larger surpluses in the wake of the surprising strength of incoming tax receipts so far in 2000 led the Treasury to announce, in May, that it was again cutting the size of the monthly two-year note auctions. The Treasury also noted that it is considering additional changes in its auction schedule, including the possible elimination of the one-year bill auctions and a reduction in the frequency of its two-year note auctions.

Early in the year, the Treasury unveiled the details of its previously announced reverse-auction, or debt buyback, program, whereby it intends to retire seasoned, less liquid, debt securities with surplus cash, enabling it to issue more "on-the-run" securities. The Treasury noted that it would buy back as much as $30 billion this year. The first operation took place in March, and in May the Treasury announced a schedule of two operations per month through the end of July of this year. Through midyear, the Treasury has conducted eight buyback operations, redeeming a total of $15 billion. Because an important goal of the buyback program is to help forestall further increases in the average maturity of the Treasury's publicly held debt, the entire amount redeemed so far has corresponded to securities with remaining maturities at the long end of the yield curve (at least fifteen years).

State and Local Governments

In the state and local sector, real consumption and investment expenditures registered another strong quarter at the beginning of this year. In part, the unseasonably good weather appears to have accommodated more construction spending than usually occurs over the winter. However, some of the recent rise is an extension of the step-up in spending that emerged last year, when real outlays rose 5 percent after having averaged around 3 percent for the preceding three years. Higher federal grants for highway construction have contributed to the pickup in spending. In addition, many of these jurisdictions have experienced solid improvements in their fiscal conditions, which may be allowing them to undertake new spending initiatives.

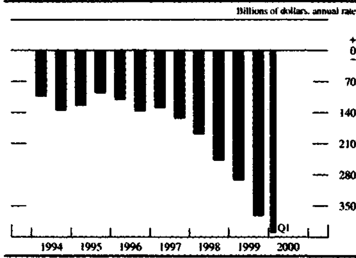
The improving fiscal outlook for state and local governments has affected both the issuance and the quality of state and local debt. Borrowing by states and municipalities expanded sluggishly in the first half of this year. In addition to the favorable budgetary picture, rising interest rates have reduced the demand for new capital financing and substantially limited refunding issuance. Credit upgrades have outnumbered downgrades by a substantial margin in the state and local sector.

The External Sector

Trade and Current Account

The deficits in U.S. external balances have continued to get even larger this year. The current account deficit reached an annual rate of $409 billion in the first quarter of 2000, or 4¼ percent of GDP, com-

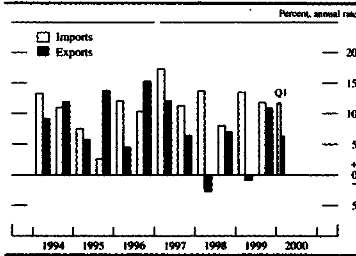
U.S. current account



pared with $372 billion and 4 percent in the second half of 1999. Net payments of investment income were a bit less in the first quarter than in the second half of last year owing to a sizable increase in income receipts from direct investment abroad. Most of the expansion in the current account deficit occurred in trade in goods and services. In the first quarter, the deficit in trade in goods and services widened to an annual rate of $345 billion, a considerable expansion from the deficit of $298 billion recorded in the second half of 1999. Trade data for April suggest that the deficit may have increased further in the second quarter.

U.S. exports of real goods and services rose at an annual rate of 6¼ percent in the first quarter, following a strong increase in exports in the second half of last year. The pickup in economic activity abroad that began in 1999 continued to support export demand and partly offset negative effects on price competitiveness of U.S. products from the dollar's past appreciation. By market destination, U.S. exports to Canada, Mexico, and Europe increased the most. By product group, export expansion was concentrated in capital equipment, industrial supplies, and consumer goods. Preliminary data for April suggest that growth of real exports remained strong.

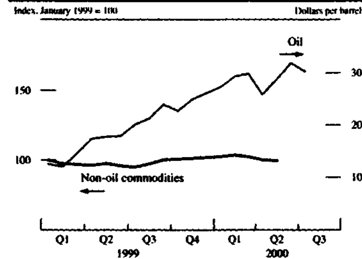
Change in real imports and exports of goods and services



The quantity of imported goods and services continued to expand rapidly in the first quarter. The increase in imports, at an annual rate of 11¾ percent, was the same in the first quarter as in the second half of 1999 and reflected both the continuing strength of U.S. domestic demand and the effects of past dollar appreciation on price competitiveness. Imports of consumer goods, automotive products, semiconductors, telecommunications equipment, and other machinery were particularly robust. Data for April suggest that the second quarter got off to a strong start. The price of non-oil goods imports rose at an annual rate of 1¾ percent in the first quarter, the second consecutive quarter of sizable price increases following four years of price declines; non-oil import prices in the second quarter posted only moderate increases.

A number of developments affecting world oil demand and supply led to a further step-up in the spot price of West Texas intermediate (WTI) crude this year, along with considerable volatility. In the wake of the plunge of world oil prices during 1998, the Organization of Petroleum Exporting Countries (OPEC) agreed in early 1999 to production restraints that, by late in the year, restored prices to their 1997 level of about $20 per barrel. Subsequently, continued recovery of world demand, combined with some

Prices for oil and other commodities



NOTE. The oil price is the spot price of West Texas intermediate crude oil. The price for non-oil commodities is a weighted average of thirty-nine non-fuel primary-commodity prices from the International Monetary Fund. The data are monthly. The last observation for non-oil commodities is May; for oil, July average through July 12, 2000.

supply disruptions, caused the WTI spot price to spike above $34 per barrel during March of this year, the highest level since the Gulf War more than nine years earlier. Oil prices dropped back temporarily in April, but in May and June the price of crude oil moved back up again, as demand was boosted further by strong global economic activity and by rebuilding of oil stocks. In late June, despite an announcement by OPEC that it would boost production, the WTI spot price reached a new high of almost $35 per barrel, but by early July the price had settled back to about $30 per barrel.

Financial Account

Capital flows in the first quarter of 2000 continued to reflect the relatively strong performance of the U.S. economy and transactions associated with global corporate mergers. Foreign private purchases of U.S. securities remained brisk—well above the record pace set last year. In addition, the mix of U.S. securities purchased by foreigners in the first quarter showed a continuation of last year's trend toward smaller holdings of U.S. Treasury securities and larger holdings of U.S. agency and corporate securities. Private-sector foreigners sold more than $9 billion in Treasury securities in the first quarter while purchasing more than $26 billion in agency bonds. Despite a mixed performance of U.S. stock prices, foreign portfolio purchases of U.S. equities exceeded $60 billion in the first quarter, more than half of the record annual total set last year. U.S. purchases of foreign securities remained strong in the first quarter of 2000.

Foreign direct investment flows into the United States were robust in the first quarter of this year as well. As in the past two years, direct investment inflows have been elevated by the extraordinary level of cross-border merger and acquisition activity. Portfolio flows have also been affected by this activity. For example, in recent years, many of the largest acquisitions have been financed by swaps of equity in the foreign acquiring firm for equity in the U.S. firm being acquired. The Bureau of Economic Analysis estimates that U.S. residents acquired $123 billion of foreign equities in this way last year. Separate data on market transactions indicate that U.S. residents made net purchases of Japanese equities but sold European equities. The latter sales likely reflect a rebalancing of portfolios after stock swaps. U.S. direct investment in foreign economies has also remained strong, exceeding $30 billion in the first quarter of 2000. Again, a significant portion of this investment was associated with cross-border merger activity.

Capital inflows from foreign official sources in the first quarter of this year were sizable—$20 billion, compared with $43 billion for all of 1999. As was the case last year, the increase in foreign official reserves in the United States in the first quarter was concentrated in a relatively few countries. Partial data for the second quarter of 2000 show a small official outflow.

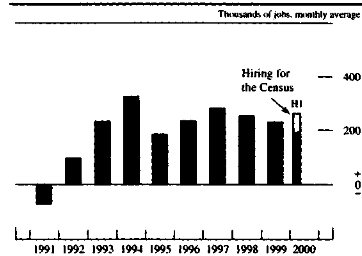
The Labor Market

Employment and Labor Supply

The labor market in early 2000 continued to be characterized by substantial job creation, a historically low level of unemployment, and sizable advances in productivity that have held labor costs in check. The rise in overall nonfarm payroll employment, which totaled more than 1½ million over the first half of the year, was swelled by the federal government's hiring of intermittent workers to conduct the decennial census. Apart from that temporary boost, which accounted for about one-fourth of the net gain in jobs between December and June, nonfarm payroll employment increased an average of 190,000 per month, somewhat below the robust pace of the preceding four years.

Monthly changes in private payrolls were uneven at times during the first half the year, but, on balance, the pace of hiring, while still solid, appears to have moderated between the first and second quarters. In some industries, such as construction, the pattern appears to have been exaggerated by unseasonably high levels of activity during the winter that acceler-

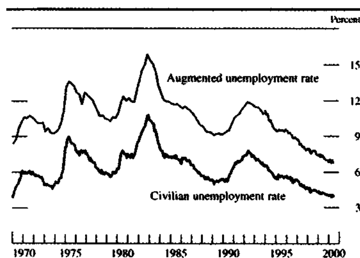
Net change in total nonfarm payroll employment



ated hiring that typically would have occurred in the spring. After a robust first quarter, construction employment declined between April and June; on average, hiring in this industry over the first half of the year was only a bit slower than the rapid pace that prevailed from 1996 to 1999. However, employment gains in the services industry, particularly in business and health services, were smaller in the second quarter than in the first while job cutbacks occurred in finance, insurance, and real estate after four and one-half years of steady expansion. Nonetheless, strong domestic demand for consumer durables and business equipment, along with support for exports from the pickup in economic activity abroad, led to a leveling off in manufacturing employment over the first half of 2000 after almost two years of decline. And, with consumer spending brisk, employment at retail establishments, although fluctuating widely from month to month, remained generally on a solid uptrend over the first half.

The supply of labor increased slowly in recent years relative to the demand for workers. The labor force participation rate was unchanged, on average, at 67.1 percent from 1997 to 1999; that level was just 0.6 percentage point higher than at the beginning of the expansion in 1990. The stability of the participation rate over the 1997–99 period was somewhat surprising because the incentives to enter the workforce seemed powerful: Hiring was strong, real wages were rising more rapidly than earlier in the expansion, and individuals perceived that jobs were plentiful. However, the robust demand for new workers instead led to a substantial decline in unemployment, and the civilian jobless rate fell from 5¼ percent at the beginning of 1997 to just over 4 percent at the end of 1999.

Measures of labor utilization



NOTE. The augmented unemployment rate is the number of unemployed plus those who are not in the labor force and want a job, divided by the civilian labor force plus those who are not in the labor force and want a job. The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with those of earlier periods.

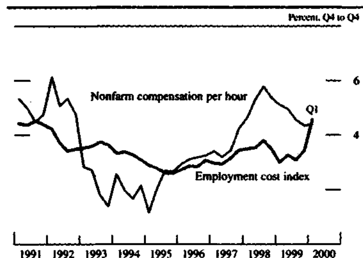
This year, the labor force participation rate ratcheted up sharply over the first four months of the year before dropping back in recent months as employment slowed. The spike in participation early this year may have been a response to ready availability of job opportunities, but Census hiring may also have temporarily attracted some individuals into the workforce. On net, growth of labor demand and supply have been more balanced so far this year, and the unemployment rate has held near its thirty-year low of 4 percent. At midyear, very few signs of a significant easing in labor market pressures have surfaced. Employers responding to various private surveys of business conditions report that they have been unable to hire as many workers as they would like because skilled workers are in short supply and competition from other firms is keen. Those concerns about hiring have persisted even as new claims for unemployment insurance have drifted up from very low levels in the past several months, suggesting that some employers may be making workforce adjustments in response to slower economic activity.

Labor Costs and Productivity

Reports by businesses that workers are in short supply and that they are under pressure to increase compensation to be competitive in hiring and retaining employees became more intense early this year. However, the available statistical indicators are providing somewhat mixed and inconsistent signals of whether a broad acceleration in wage and benefit costs is emerging. Hourly compensation, as measured by the employment cost index (ECI) for private nonfarm businesses, increased sharply during the first quarter to a level more than 4½ percent above a year earlier. Before that jump, year-over-year changes in the ECI compensation series had remained close to 3½ percent for three years. However, an alternative measure of compensation per hour, calculated as part of the productivity and cost series, which has shown higher rates of increase than the ECI in recent years, slowed in the first quarter of this year. For the nonfarm business sector, compensation per hour in the first quarter was 4¼ percent higher than a year earlier; in the first quarter of 1999, the four-quarter change was 5¼ percent.[3]

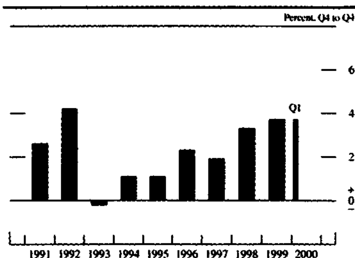
3. The figures for compensation per hour in the nonfinancial corporate sector are similar: an increase of about 4 percent for the year ending in the first quarter of this year compared with almost 5½ percent for the year ending in the first quarter of 1999.

Measures of the change in hourly compensation



NOTE. The ECI is for private industry excluding farm and household workers. Nonfarm compensation per hour is for the nonfarm business sector.

Change in output per hour for the nonfarm business sector



NOTE. The value for 2000:Q1 is the percent change from a year earlier.

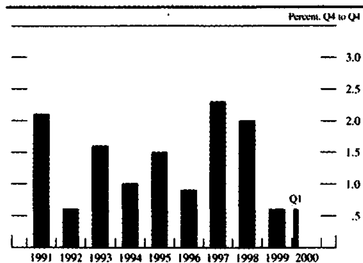
Part of the acceleration in the ECI in the first quarter was the result of a sharp step-up in the wage and salary component of compensation change. While higher rates of straight-time pay were widespread across industry and occupational groups, the most striking increase occurred in the finance, insurance, and real estate industry where the year-over-year change in wages and salaries jumped from about 4 percent for the period ending in December 1999 to almost 8½ percent for the period ending in March of this year. The sudden spike in wages in that sector could be related to commissions that are tied directly to activity levels in the industry and, thus, would not represent a lasting influence on wage inflation. For other industries, wages and salaries accelerated moderately, which might appear plausible in light of reports that employers are experiencing shortages of some types of skilled workers. However, the uptrend in wage inflation that surfaced in the first-quarter ECI has not been so readily apparent in the monthly data on average hourly earnings of production or nonsupervisory workers, which are available through June. Although average hourly earnings increased at an annual rate of 4 percent between December and June, the June level of hourly wages stood 3¾ percent higher than a year earlier, the same as the increase between June 1998 and June 1999.

While employers in many industries appear to have kept wage increases moderate, they may be facing greater pressures from rising costs of employee benefits. The ECI measure of benefit costs rose close to 3½ percent during 1999, a percentage point faster than during 1998; these costs accelerated sharply further in the first quarter of this year to a level 5½ percent above a year earlier. Much of last year's pickup in benefit costs was associated with faster rates of increase in employer contributions to health insurance, and the first-quarter ECI figures indicated another step-up in this component of costs. Private survey information and available measures of prices in the health care industry suggest that the upturn in the employer costs of health care benefits is associated with both higher costs of health care and employers' willingness to offer attractive benefit packages in order to compete for workers in a tight labor market. Indeed, employers have been reporting that they are enhancing compensation packages with a variety of benefits in order to hire and retain employees. Some of these offerings are included in the ECI; for instance, the ECI report for the first quarter noted a pickup in supplemental forms of pay, such as overtime and nonproduction bonuses, and in paid leave. However, other benefits cited by employers, including stock options, hiring and retention bonuses, and discounts on store purchases, are not measured in the ECI.[4] The productivity and costs measure of hourly compensation may capture more of the non-wage costs that employers incur, but even for that series, the best estimates of employer compensation costs are available only after business reports for unemployment insurance and tax records are tabulated and folded into the annual revisions of the national income and product accounts.

Because businesses have realized sizable gains in worker productivity, compensation increases have

4. Beginning with publication of the ECI for June 2000, the Bureau of Labor Statistics plans to expand the definition of nonproduction bonuses in the ECI to include hiring and retention bonuses. These payments are already included in the wage and salary measure underlying the data on compensation per hour calculated for the productivity and cost series.

Change in unit labor costs for the nonfarm business sector



NOTE. The value for 2000:Q1 is the percent change from a year earlier.

not generated significant pressure on overall costs of production. Output per hour in the nonfarm business sector posted another solid advance in the first quarter, rising to a level 3¾ percent above a year earlier and offsetting much of the rise in hourly compensation over the period. For nonfinancial corporations, the subset of the nonfarm business sector that excludes types of businesses for which output is measured less directly, the 4 percent year-over-year increase in productivity held unit labor costs unchanged.

With the further robust increases in labor productivity recently, the average rise in output per hour in the nonfarm business sector since early 1997 has stepped up further to 3 percent from the 2 percent pace of the 1995–97 period. What has been particularly impressive is that the acceleration of productivity in the past several years has exceeded the pickup in output growth over the period and, thus, does not appear to be simply a cyclical response to more rapidly rising demand. Rather, businesses are likely realizing substantial and lasting payoffs from their investment in equipment and processes that embody the technological advances of the past several years.

Prices

Rates of increase in the broader measures of prices moved up further in early 2000. After having accelerated from 1 percent during 1998 to 1½ percent last year, the chain-type price index for GDP—prices of goods and services that are *produced* domestically—increased at an annual rate of 3 percent in the first quarter of this year. The upswing in inflation for goods and services *purchased* by consumers, businesses, and governments has been somewhat greater: The chain-type price index for gross domestic purchases rose at an annual rate of 3½ percent in the first quarter after having increased about 2 percent during 1999 and just ¾ percent during 1998.

2. Alternative measures of price change

Percent, annual rate

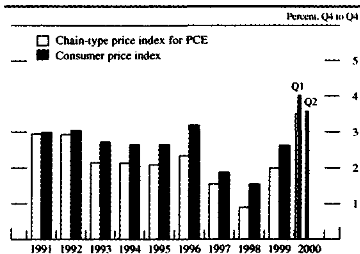
Price measure	1997:Q4 to 1998:Q4	1998:Q4 to 1999:Q4	1999:Q4 to 2000:Q1
Chain-type			
Gross domestic product	1.0	1.6	3.0
Gross domestic purchases	.7	1.9	3.5
Personal consumption expenditures	.9	2.0	3.5
Excluding food and energy	1.3	1.5	2.2
Fixed-weight			
Consumer price index	1.5	2.6	4.0
Excluding food and energy	2.4	2.1	2.3

NOTE. A fixed-weight index uses quantity weights from the base year to aggregate prices from each distinct item category. A chain-type index is the geometric average of two fixed-weight indexes and allows the weights to change each year. Changes are based on quarterly averages.

The pass-through of the steep rise in the cost of imported crude oil that began in early 1999 and continued into the first half of this year has been the principal factor in the acceleration of the prices of goods and services purchased. The effect of higher energy costs on domestic prices has been most apparent in indexes of prices paid by consumers. After having risen 12 percent during 1999, the chain-type price index for energy items in the price index for personal consumer expenditures (PCE) jumped at an annual rate of 35 percent in the first quarter of 2000; the first-quarter rise in the energy component of the CPI was similar.

Swings in energy prices continued to have a noticeable effect on overall measures of consumer prices

Change in consumer prices



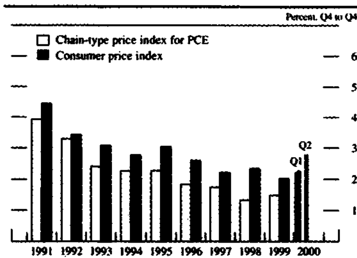
NOTE. Consumer price index for all urban consumers. Values for 2000:Q1 and Q2 are percent changes from the previous quarter at an annual rate.

in the second quarter. After world oil prices dropped back temporarily in the spring, the domestic price of motor fuel dropped in April and May, and consumer prices for energy, as measured by the CPI, retraced some of the first-quarter increase. As a result, the overall CPI was little changed over the two months. However, with prices of crude oil having climbed again, the bounceback in prices of motor fuel led to a sharp increase in the CPI for energy in June. In addition, with strong demand pressing against available supplies, consumer prices of natural gas continued to rise rapidly in the second quarter. In contrast to the steep rise in energy prices, the CPI for food has risen slightly less than other non-energy prices so far this year.

Higher petroleum costs also fed through into higher producer costs for a number of intermediate materials. Rising prices for inputs such as chemicals and paints contributed importantly to the acceleration in the producer price index for intermediate materials excluding food and energy from about 1¾ percent during 1999 to an annual rate of 3½ percent over the first half of this year. Upward pressure on input prices was also apparent for construction materials, although these have eased more recently. Prices of imported industrial supplies also picked up early this year owing to higher costs of petroleum inputs.

Core consumer price inflation has also been running a little higher so far this year. The chain-type price index for personal consumption expenditures other than food and energy increased at an annual rate of 2¼ percent in the first quarter compared with an increase of 1½ percent during 1999. Based on the monthly estimates of PCE prices in April and May, core PCE price inflation looks to have been just a

Change in consumer prices excluding food and energy



NOTE. Consumer price index for all urban consumers. Values for 2000:Q1 and Q2 are percent changes from the previous quarter at an annual rate.

little below its first-quarter rate. After having risen just over 2 percent between the fourth quarter of 1998 and the fourth quarter of 1999, the CPI excluding food and energy increased at an annual rate of 2¼ percent in the first quarter of 2000 and at a 2¾ percent rate in the second quarter. In part, the rise in core inflation likely reflects the indirect effects of higher energy costs on the prices of a variety of goods and services, although these effects are difficult to quantify with precision. Moreover, prices of non-oil imported goods, which had been declining from late 1995 through the middle of last year, continued to trend up early this year.

The pickup in core inflation, as measured by the CPI, has occurred for both consumer goods and services. Although price increases for nondurable goods excluding food and energy moderated, prices of consumer durables, which had fallen between 1996 and 1999, were little changed, on balance, over the first half of this year. The CPI continued to register steep declines for household electronic goods and computers, but prices of other types of consumer durables have increased, on net, so far this year. The rate of increase in the prices of non-energy consumer services has also been somewhat faster; the CPI for these items increased at an annual rate of 3½ percent during the first two quarters of this year compared with a rise of 2¾ percent in 1999. Larger increases in the CPI measures of rent and of medical services have contributed importantly to this acceleration. Another factor has been a steeper rise in airfares, which have been boosted in part to cover the higher cost of fuel.

In addition to slightly higher core consumer price inflation, the national income and product accounts measure of prices for private fixed investment goods shows that the downtrend in prices for business fixed investment items has been interrupted. Most notably, declines in the prices of computing equipment became much smaller in the final quarter of last year and the first quarter of this year. A series of disruptions to the supply of component inputs to computing equipment has combined with exceptionally strong demand to cut the rate of price decline for computers, as measured by the chain-type price index, to an annual rate of 12 percent late last year and early this year—half the pace of the preceding three and one-half years. At the same time, prices of other types of equipment and software continued to be little changed, and the chain-type index for nonresidential structures investment remained on a moderate uptrend. In contrast, the further upward pressure on construction costs at the beginning of the year continued to push the price index for residential

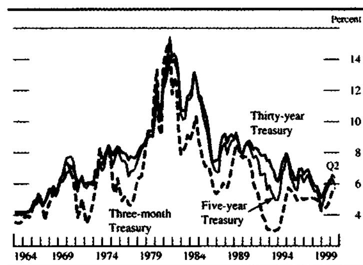
construction higher; after having accelerated from 3 percent to 3½ percent between 1998 and 1999, this index increased at an annual rate of 4¼ percent in the first quarter of 2000.

Although actual inflation moved a bit higher over the first half of 2000, inflation expectations have been little changed. Households responding to the Michigan SRC survey in June were sensitive to the adverse effect of higher energy prices on their real income but seemed to believe that the inflationary shock would be short-lived. The median of their expected change in CPI inflation over the coming twelve months was 2.9 percent. Moreover, they remained optimistic that inflation would remain at about that rate over the longer run, reporting a 2.8 percent median of expected inflation during the next five to ten years. In both instances, their expectations are essentially the same as at the end of 1999, although the year-ahead expectations are above the lower levels that had prevailed in 1997 and early 1998.

U.S. Financial Markets

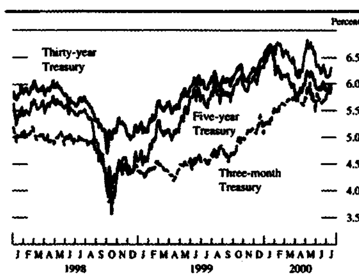
Conditions in markets for private credit firmed on balance since the end of 1999. Against a backdrop of continued economic vitality in the United States and a tighter monetary policy stance, private borrowing rates are higher, on net, particularly those charged to riskier borrowers. In addition, banks have tightened terms and standards on most types of loans. Higher real interest rates—as measured based on inflation expectations derived from surveys and from yields on the Treasury's inflation-indexed securities—account for the bulk of the increase in interest rates this year, with short-term real rates having increased the most. Rising market interest rates and heightened uncertainties about corporate prospects, especially with regard to the high-tech sector, have occasionally dampened flows in the corporate bond market and have weighed on the equity market, which has, at times, experienced considerable volatility. Through mid-July, the broad-based Wilshire 5000 equity index was up approximately 3 percent for the year.

Selected Treasury rates, quarterly data



NOTE. The twenty-year Treasury bond rate is shown until the first issuance of the thirty-year Treasury bond in February 1977. Last observations are for 2000:Q2.

Selected Treasury rates, daily data

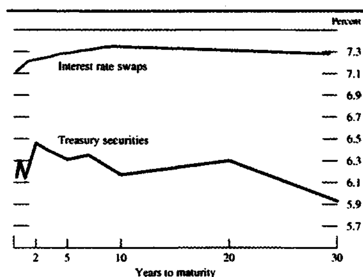


NOTE. Last observations are for July 17, 2000.

Interest Rates

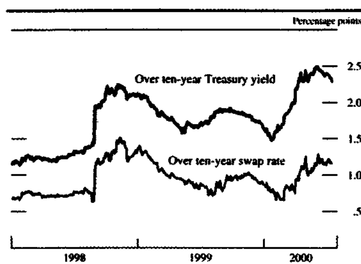
As the year began, with worries related to the century date change out of the way, participants in the fixed-income market turned their attention to the signs of continued strength in domestic labor and product markets, and they quickly priced in the possibility of a more aggressive tightening of monetary policy. Both private and Treasury yields rose considerably. In the latter part of January, however, Treasury yields plummeted, especially those on longer-dated securities, as the announced details of the Treasury's debt buyback program and upwardly revised forecasts of federal budget surpluses led investors to focus increasingly on the prospects for a diminishing supply of Treasury securities. A rise in both nominal and inflation-indexed Treasury yields in response to strong economic data and tighter monetary policy in April and May was partly offset by supply factors and by occasional safe haven flows from the volatile equity market. Since late May, market interest rates have declined as market participants have interpreted the incoming economic data as evidence that mone-

Selected yield curves, July 17, 2000



SOURCE. Swap rates are from the International Swaps and Derivatives Association, as reported by Reuters.

Spread of BBB corporate yields



NOTE. Last observations are for July 17, 2000. The data are daily.

tary policy might not have to be tightened as much as had been previously expected. On balance, while Treasury bill rates and yields on shorter-dated notes have risen 15 to 80 basis points since the beginning of the year, intermediate- and long-term Treasury yields have declined 5 to 55 basis points. In the corporate debt market, by contrast, bond yields have risen 10 to 70 basis points so far this year.

Forecasts of steep declines in the supply of longer-dated Treasuries have combined with tighter monetary policy conditions to produce an inverted Treasury yield curve, starting with the two-year maturity. In contrast, yield curves elsewhere in the U.S. fixed-income market generally have not inverted. In the interest rate swap market, for instance, the yield curve has remained flat to upward sloping for maturities as long as ten years, and the same has been true for yield curves for the most actively traded corporate bonds.[5] Nonetheless, private yield curves are flatter than usual, suggesting that, although supply considerations have played a potentially important role in the inversion of the Treasury yield curve this year, investors' forecasts of future economic conditions have also been a contributing factor. In particular, private yield curves are consistent with forecasts of a moderation in economic growth and expectations that the economy will be on a sustainable, non-inflationary track, with little further monetary policy tightening.

The disconnect between longer-term Treasury and private yields as a consequence of supply factors in the Treasury market is distorting readings from yield spreads. For instance, taken at face value, the spread of BBB corporate yields over the yield on the ten-year Treasury note would suggest that conditions in the corporate bond market so far in 2000 are worse than those during the financial market turmoil of 1998. In contrast, the spread of the BBB yield over the ten-year swap rate paints a very different picture, with spreads up this year but below their peaks in 1998. Although the swap market is still not as liquid as the Treasury securities market, and swap rates are occasionally subject to supply-driven distortions, such distortions have been less pronounced and more short-lived than those affecting the Treasury securities market of late, making swap rates a better benchmark for judging the behavior of other corporate yields.

Aware that distortions to Treasury yields are likely to become more pronounced as more federal debt is paid down, market participants have had to look for alternatives to the pricing and hedging roles traditionally played by Treasuries in U.S. financial markets. In addition to interest rate swaps, which have featured prominently in the list of alternatives to Treasuries, debt securities issued by the three government-sponsored housing agencies—Fannie Mae, Freddie Mac, and the Federal Home Loan Banks—have been used in both pricing and hedging. The three housing agencies have continued to issue a substantial volume of debt this year in an attempt to capture benchmark status, and the introduction in March of futures and

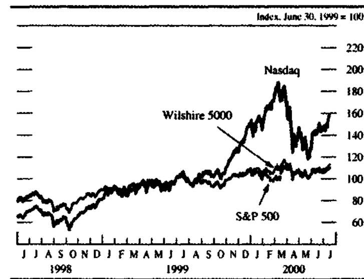
5. A typical interest rate swap is an agreement between two parties to exchange fixed and variable interest rate payments on a notional principal amount over a predetermined period ranging from one to thirty years. The notional amount itself is never exchanged. Typically, the variable interest rate is the London Interbank Offered Rate (LIBOR), and the fixed interest rate—called the swap rate—is determined in the swap market. The overall credit quality of market participants is high, typically A or above; those entities with credit ratings of BBB or lower are generally either rejected or required to adopt credit-enhancing mechanisms, typically by posting collateral.

options contracts based on five- and ten-year notes issued by Fannie Mae and Freddie Mac may help enhance the liquidity of the agency securities market. Nonetheless, the market for agency debt has been affected by some uncertainty this year regarding the agencies' special relationship with the government. Both the Treasury and the Federal Reserve have suggested that it would be appropriate for the Congress to consider whether the special standing of these institutions continues to promote the public interest, and pending legislation would, among other things, restructure the oversight of these agencies and reexamine their lines of credit with the U.S. Treasury.

The implementation of monetary policy, too, has had to adapt to the anticipated paydowns of marketable federal debt. Recognizing that there may be limitations on its ability to rely as much as previously on transactions in Treasury securities to meet the reserve needs of depositories and to expand the supply of currency, the FOMC decided at its March 2000 meeting to facilitate until its first meeting in 2001 the Trading Desk's ability to continue to accept a broader range of collateral in its repurchase transactions. The initial approvals to help expand the collateral pool were granted in August 1999 as part of the Federal Reserve's efforts to better manage possible disruptions to financial markets related to the century date change.

At the March 2000 meeting, the Committee also initiated a study to consider alternative asset classes and selection criteria that could be appropriate for the System Open Market Account (SOMA) should the size of the Treasury securities market continue to decline. For the period before the completion and review of such a study, the Committee discussed, at its May meeting, some changes in the management of the System's portfolio of Treasury securities in an environment of decreasing Treasury debt. The changes aim to prevent the System from coming to hold high and rising proportions of new Treasury debt issues. They will also help the SOMA to limit any further lengthening of the average maturity of its portfolio while continuing to meet long-run reserve needs to the greatest extent possible through outright purchases of Treasury securities.[6] The SOMA will cap the rollover of its existing holdings at Treasury auctions and will engage in secondary market purchases according to a schedule that effectively will

Major stock price indexes



NOTE. The data are daily. Last observations are for July 17, 2000.

result in a greater percentage of holdings of shorter-term security issues than of longer-dated ones. The schedule ranges from 35 percent of an individual issue for Treasury bills to 15 percent for longer-term bonds. These changes were announced to the public on July 5, replacing a procedure in which all maturing holdings were rolled over and in which coupon purchases were spread evenly across the yield curve.

Equity Prices

Major equity indexes have posted small gains so far this year amid considerable volatility. Fluctuations in technology stocks have been particularly pronounced: After having reached a record high in March—24 percent above its 1999 year-end value—the Nasdaq composite index, which is heavily weighted toward technology shares, swung widely and by mid-July was up 5 percent for the year. Given its surge in the second half of 1999, the mid-July level of the Nasdaq was about 60 percent above its mid-1999 reading. The broader S&P 500 and Wilshire 5000 indexes have risen close to 3 percent since the beginning of the year and are up about 10 percent and 13 percent, respectively, from mid-1999.

Corporate earnings reports have, for the most part, exceeded expectations, and projections of future earnings continue to be revised higher. However, the increase in interest rates since the beginning of the year likely has restrained the rise in equity prices. In addition, growing unease about the lofty valuations reached by technology shares and rising default rates in the corporate sector may have given some investors a better appreciation of the risks of holding

6. The FOMC prefers a portfolio with a short average maturity because the higher turnover rate of such a portfolio gives it greater flexibility to redeem securities in times of financial market stress, which may require substantial decreases in the securities portfolio over a relatively short period, such as during an acute banking crisis that involves heavy lending through the discount window.

stocks in general. Reflecting the uncertainty about the future course of the equity market, expected and actual volatilities of stock returns rose substantially in the spring. At that time, volatility implied by options on the Nasdaq 100 index surpassed even the elevated levels reached during the financial market turmoil of 1998.

Higher volatility and greater investor caution had a marked effect on public equity offerings. The pace of initial public offerings has fallen off considerably in recent months from its brisk first-quarter rate, with some offerings being canceled or postponed and others being priced well short of earlier expectations. On the other hand, households' enthusiasm for equity mutual funds, especially those funds that invest in the technology and international sectors, remains relatively high, although it appears to have faded some after the run-up in stock market volatility in the spring. Following a first-quarter surge, net inflows to stock funds moderated substantially in the second quarter but still were above last year's average pace.

Debt and the Monetary Aggregates

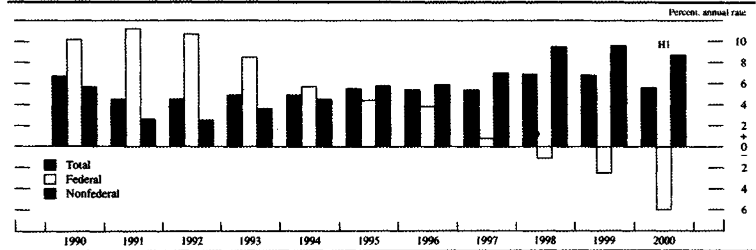
Debt and Depository Intermediation

The total debt of the U.S. household, government, and nonfinancial business sectors is estimated to have increased at close to a 5½ percent annual rate in the first half of 2000. Outside the federal government sector, debt expanded at an annual rate of roughly 9½ percent, buoyed by strength in household and business borrowing. Continued declines in federal debt have helped to ease the pressure on available savings and have facilitated the rapid expansion of nonfederal debt outstanding: The federal government paid down $218 billion of debt over the first half of 2000, compared with paydowns of $56 billion and $101 billion in the first six months of calendar years 1998 and 1999 respectively.

Depository institutions have continued to play an important role in meeting the strong demands for credit by businesses and households. Adjusted for mark-to-market accounting rules, credit extended by commercial banks rose 11½ percent in the first half of 2000. This advance was paced by a brisk expansion of loans, which grew at an annual rate of nearly 13 percent over this period. Bank credit increased in part because some businesses sought bank loans as an alternative to a less receptive corporate bond market. In addition, the underlying strength of household spending helped boost the demand for consumer and mortgage loans. Banks' holdings of consumer and mortgage loans were also supported by a slower pace of securitizations this year. In the housing sector, for instance, the rising interest rate environment has kept the demand for adjustable-rate mortgages relatively elevated, and banks tend to hold these securities on their books rather than securitize them.

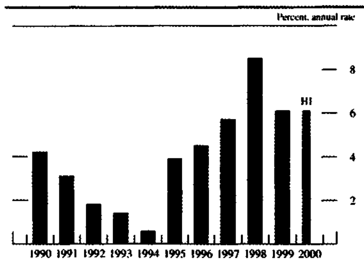
Banks have tightened terms and standards on loans further this year, especially in the business sector, where some lenders have expressed concerns about a more uncertain corporate outlook. Bank regulators have noted that depository institutions need to take particular care in evaluating lending risks to account for possible changes in the overall macroeconomic environment and in conditions in securities markets.

Growth of domestic nonfinancial debt



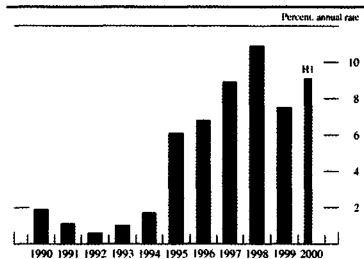
NOTE. Total debt consists of the outstanding credit market debt of the U.S. government, state and local governments, households and nonprofit organizations, nonfinancial businesses, and farms. Annual growth rates are computed from average for fourth quarter of preceding year to average for fourth quarter of year indicated. Growth in the first half of 2000 is computed from average for fourth quarter of 1999 to average for the second quarter of 2000 and expressed at an annual rate. The growth rate for 2000:H1 is currently based on partially estimated data.

M2 growth rate



NOTE. M2 consists of currency, travelers checks, demand deposits, other checkable deposits, savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds. See footnote under the domestic nonfinancial debt chart for details on the computation of growth rates.

M3 growth rate

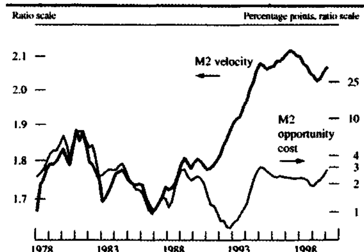


NOTE. M3 consists of M2 plus large-denomination time deposits, balances on institutional money market funds, RP liabilities (overnight and term), and eurodollars (overnight and term). See footnote under the domestic nonfinancial debt chart for details on the computation of growth rates.

The Monetary Aggregates

Growth of the monetary aggregates over the first half of 2000 has been buffeted by several special factors. The unwinding of the buildups in liquidity that occurred in late 1999 before the century date change depressed growth in the aggregates early this year. Subsequently, M2 rebounded sharply in anticipation of outsized tax payments in the spring and then ran off as those payments cleared. On net, despite the cumulative firming of monetary policy since June 1999, M2 expanded at a relatively robust, 6 percent, annual rate during the first half of 2000—the same pace as in 1999—supported by the rapid expansion of nominal spending and income.

M2 velocity and the opportunity cost of holding M2



NOTE. The data are quarterly and are through 2000:Q1. The velocity of M2 is the ratio of nominal gross domestic product to the stock of M2. The opportunity cost of M2 is a two-quarter moving average of the difference between the three-month Treasury bill rate and the weighted average return on assets included in M2.

M2 velocity—the ratio of nominal income to M2—has increased over the first half of this year, consistent with its historical relationship with the interest forgone ("opportunity cost") from holding M2. As usual, rates offered on many of the components of M2 have not tracked the upward movement in market interest rates, and the opportunity cost of holding M2 has risen. In response, investors have reallocated some of their funds within M2 toward those components whose rates adjust more quickly—such as small time deposits—and have restrained flows into M2 in favor of longer-term mutual funds and direct holdings of market instruments.

M3 expanded at an annual rate of 9 percent in the first half of 2000, up from 7½ percent for all of 1999. The robust expansion of bank credit underlies much of the acceleration in M3 this year. Depository institutions have issued large time deposits and other managed liabilities in volume to help fund the expansion of their loan and securities portfolios. In contrast, flows to institutional money funds slowed from the rapid pace of late 1999 after the heightened preference for liquid assets ahead of the century date change ebbed.

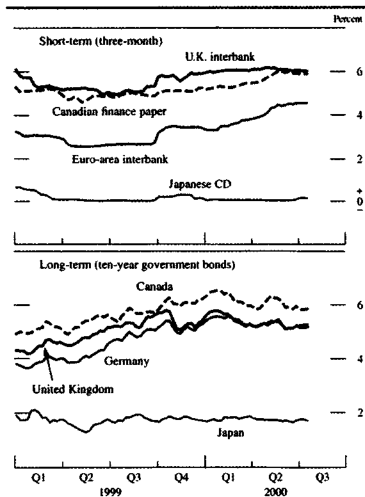
As has been the case since 1994, depository institutions have continued to implement new retail sweep programs over the first half of 2000 in order to avoid having to hold non-interest-bearing reserve balances with the Federal Reserve System. As a result, required reserve balances are still declining gradually, adding to concerns that, under current procedures, low balances might adversely affect the imple-

mentation of monetary policy by eventually leading to increased volatility in the federal funds market. The pending legislation that would allow the Federal Reserve to pay interest on balances held at Reserve Banks would likely lead to a partial unwinding over time of the ongoing trend in retail sweep programs.

International Developments

In the first half of 2000, economic activity in foreign economies continued the strong overall performance that was registered last year. With a few exceptions, most emerging-market countries continued to show signs of solid recoveries from earlier recessions, supported by favorable financial market conditions. Average real GDP in the foreign industrial countries accelerated noticeably in the first half of this year after a mild slowdown in late 1999. The pickup reflected in large part better performance of Japanese domestic demand (although its sustainability has been questioned) and further robust increases in Europe and Canada. In many countries, economic slack diminished, heightening concern about inflation risks.

Foreign interest rates



NOTE. The data are weekly. Last observations are for the week ending July 12, 2000.

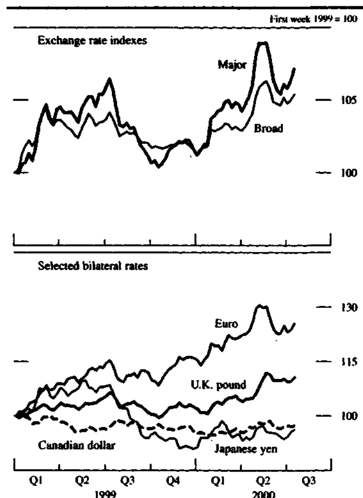
Higher oil prices bumped up broad measures of inflation almost everywhere, but measures of core inflation edged up only modestly, if at all.

Monetary conditions generally were tightened in foreign industrial countries, as authorities removed stimulus by raising official rates. Yield curves in several key industrial countries tended to flatten, as interest rates on foreign long-term government securities declined on balance after January, reversing an upward trend seen since the second quarter of 1999. Yields on Japanese government long-term bonds edged upward slightly, but at midyear still were only about 1¾ percent.

Concerns in financial markets at the end of last year about potential disruptions during the century date change dissipated quickly, and global markets in the early months of this year returned to the comparatively placid conditions seen during most of 1999. Starting in mid-March, however, global financial markets were jolted by several episodes of increased volatility set off typically by sudden downdrafts in U.S. Nasdaq prices. At that time, measures of market risk for some emerging-market countries widened, but they later retraced most of these increases. The performances of broad stock market indexes in the industrial countries were mixed, but they generally tended to reflect their respective cyclical positions. Stocks in Canada, France, and Italy, for example, continued to make good gains, German stocks did less well, and U.K. stocks slipped. Japanese shares also were down substantially, even though the domestic economy showed some signs of firmer activity. In general, price volatility of foreign high-tech stocks or stock indexes weighted toward technology-intensive sectors was quite high and exceeded that of corresponding broader indexes.

The dollar continued to strengthen during most of the first half of the year. It appeared to be supported mainly by continuing positive news on the performance of the U.S. economy, higher U.S. short-term interest rates, and for much of the first half, expectations of further tightening of monetary policy. Early in the year, the attraction of high rates of return on U.S. equities may have been an additional supporting factor, but the dollar maintained its upward trend even after U.S. stock prices leveled off near the end of the first quarter and then declined for a while. In June, the dollar eased back a bit against the currencies of some industrial countries amid signs that U.S. growth was slowing. Nevertheless, for the year so far, the dollar is up on balance about 5¾ percent against the major currencies; against a broader index of trading-partner currencies, the dollar has appreciated about 3¾ percent on balance.

Nominal U.S. dollar exchange rates



NOTE. The data are weekly. Indexes in the upper panel are trade-weighted averages of the exchange value of the dollar against major currencies and against the currencies of a broad group of important U.S. trading partners. Last observations are for the week ending July 12, 2000.

The dollar has experienced a particularly large swing against the euro. The euro started this year already down more than 13 percent from its value against the dollar at the time when the new European currency was introduced in January 1999, and it continued to depreciate during most of the first half of 2000, reaching a record low in May. During this period, the euro seemed to be especially sensitive to news and public commentary by officials about the strength of the expansion in the euro area, the pace of economic reform, and the appropriate macroeconomic policy mix. Despite a modest recovery in recent weeks, the euro still is down against the dollar almost 7 percent on balance for the year so far and about 3¾ percent on a trade-weighted basis.

The euro's persistent weakness posed a challenge for authorities at the European Central Bank as they sought to implement a policy stance consistent with their official inflation objective (2 percent or less for harmonized consumer prices) without threatening the euro area's economic expansion. Supported in part by euro depreciation, economic growth in the euro area in the first half of 2000 was somewhat stronger than the brisk 3 percent pace recorded last year. Investment was robust, and indexes of both business and consumer sentiment registered record highs. The average unemployment rate in the area continued to move down to nearly 9 percent, almost a full percentage point lower than a year earlier. At the end of the first half, the euro-area broad measure of inflation, partly affected by higher oil prices, was above 2 percent, while core inflation had edged up to 1¼ percent. Variations in the pace of economic expansion and the intensity of inflation pressures across the region added to the complexity of the situation confronting ECB policymakers even though Germany and Italy, two countries that had lagged the euro-area average expansion of activity in recent years, showed signs that they were beginning to move ahead more rapidly. After having raised its refinancing rate 50 basis points in November 1999, the ECB followed with three 25-point increases in the first quarter and another 50-point increase in June. The ECB pointed to price pressures and rapid expansion of monetary aggregates as important considerations behind the moves.

Compared with its fluctuations against the euro, the dollar's value was more stable against the Japanese yen during the first half of 2000. In late 1999, private domestic demand in Japan slumped badly, even though the Bank of Japan continued to hold its key policy rate at essentially zero. Several times during the first half of this year, the yen experienced strong upward pressure, often associated with market perceptions that activity was reviving and with speculation that the Bank of Japan soon might abandon its zero-interest-rate policy. This upward pressure was resisted vigorously by Japanese authorities on several occasions with sales of yen in foreign exchange markets. The Bank of Japan continued to hold overnight interest rates near zero through the first half of 2000.

The Japanese economy, in fact, did show signs of stronger performance in the first half. GDP rose at an annual rate of 10 percent in the first quarter, with particular strength in private consumption and investment. Industrial production, which had made solid gains last year, continued to expand at a healthy pace, and surveys indicated that business confidence had picked up. Demand from the household sector was less robust, however, as consumer confidence was held back by historically high unemployment. A large and growing outstanding stock of public debt (estimated at more than 110 percent of GDP) cast increasing doubt about the extent to which authorities might be willing to use additional fiscal stimulus to boost demand. Even though some additional government

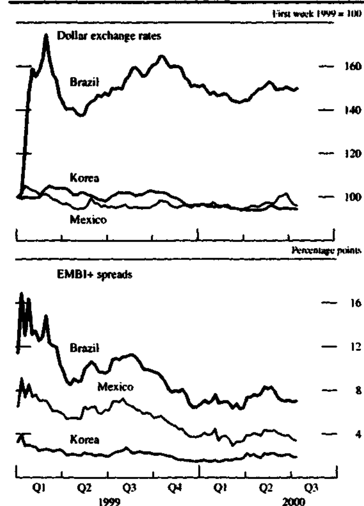
expenditure for coming quarters was approved in late 1999, government spending did not supply stimulus in the first quarter. With core consumer prices moving down at an annual rate that reached almost 1 percent at midyear, deflation also remained a concern.

Economic activity in Canada so far this year slowed a bit from its very strong performance in the second half of 1999, but it still was quite robust, generating strong gains in employment and reducing the remaining slack in the economy. The expansion was supported by both domestic demand and spillovers from the U.S. economy. Higher energy prices pushed headline inflation to near the top of the Bank of Canada's 1 percent to 3 percent target range; core inflation remained just below 1½ percent. The Canadian dollar weakened somewhat against the U.S. dollar in the first half of the year even though the Bank of Canada raised policy interest rates 100 basis points, matching increases in U.S. rates. In the United Kingdom, the Bank of England continued a round of tightening that started in mid-1999 by raising official rates 25 basis points twice in the first quarter. After March, indications that the economy was slowing and that inflationary pressures might be ebbing under the effect of the tighter monetary stance and strength of sterling—especially against the euro—allowed the Bank to hold rates constant. In recent months, sterling has depreciated on balance as official interest rates have been raised in other major industrial countries.

In developing countries, the strong recovery of economic activity last year in both developing Asia and Latin America generally continued into the first half of 2000. However, after a fairly placid period that extended into the first few months of this year, financial market conditions in some developing countries became more unsettled in the April–May period. In some countries, exchange rates and equity prices weakened and risk spreads widened, as increased political uncertainty interacted with heightened financial market volatility and rising interest rates in the industrial countries. In general, financial markets now appear to be identifying and distinguishing those emerging-market countries with problems more effectively than they did several years ago.

In emerging Asia, the strong bounceback of activity last year from the crisis-related declines of 1998 continued into the first half of this year. Korea, which recorded the strongest recovery in the region last year with real GDP rising at double-digit rates in every quarter, has seen some moderation so far in 2000. However, with inventories still being rebuilt, unemployment declining rapidly, and inflation showing no signs of accelerating, macroeconomic conditions

Emerging markets



NOTE. The data are weekly. EMBI+ (J.P. Morgan emerging market bond index) spreads are stripped Brady-bond yield spreads over U.S. Treasuries. Last observations are for the week ending July 12, 2000.

remained generally favorable, and the won came under upward pressure periodically in the first half of this year. Nonetheless, the acute financial difficulties of Hyundai, Korea's largest industrial conglomerate, highlighted the lingering effect on the corporate and financial sectors of the earlier crisis and the need for further restructuring. Economic activity in other Asian developing countries that experienced difficulties in 1997 and 1998 (Thailand, Indonesia, Malaysia, Singapore, and the Philippines) also continued to firm this year, but at varying rates. Nonetheless, financial market conditions have deteriorated in recent months for some countries in the region. In Indonesia and the Philippines, declines in equity prices and weakness in exchange rates appear to have stemmed from heightened market concerns over political instability and prospects for economic reform. Output in China increased at near double-digit annual rates in the second half of last year and remained strong in the first half of this year, boosted mainly by surging exports. In Hong Kong, real GDP rose at an annual rate of more than 20 percent in the

first quarter of this year after a strong second half in 1999. Higher consumer confidence appears to have boosted private consumption, and trade flows through Hong Kong, especially to and from China, have increased.

The general recovery seen last year in Latin America from effects of the emerging-market financial crisis extended into the first part of this year. In Brazil, inflation was remarkably well contained, and interest rates were lowered, but unemployment has remained high. An improved financial situation allowed the Brazilian government to repay most of the funds obtained under its December 1998 international support package. However, Brazilian financial markets showed continued volatility this year, especially at times of heightened market concerns over the status of fiscal reforms, and risk premiums widened in the first half of 2000 on balance. In Mexico, activity has been strong so far this year. In the first quarter, real GDP surged at an annual rate of 11 percent, boosted by strong exports to the United States, soaring private investment, and increased consumer spending. Mexican equity prices and the peso encountered some downward pressure in the approach of the July 2 national election, but once the election was perceived to be fair and the transition of power was under way, both recovered substantially. In Argentina, the pace of recovery appears to have slackened in the early part of this year, as the government's fiscal position and, in particular, its ability to meet the targets of its International Monetary Fund program remained a focus of market concern. Heightened political uncertainty in Venezuela, Peru, Colombia, and Ecuador sparked financial market pressures in recent months in those countries, too. In January, authorities in Ecuador announced a program of "dollarization," in which the domestic currency would be entirely replaced by U.S. dollars. The program, now in the process of implementation, appears to have helped stabilize financial conditions there.