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The Outlook for the Economy¹

Hello and thank you for coming. The topic of my talk tonight is the outlook for the economy. I will try to keep my comments reasonably brief out of consideration for those of you who need to rush home and finish your taxes! I should mention that my comments reflect my own views, and not necessarily those of my Federal Reserve colleagues.

Lately we've been getting some pretty encouraging news on the economy. It's been a long time coming and is very welcome indeed. I am especially pleased to see a return to growth in the job market. Nonfarm payrolls grew by 162,000 in March, the best performance in three years. To be sure, some of this reflected hiring of census workers. But the private sector has been expanding employment as well, and job gains were quite broad based. Indeed, private payrolls have risen for three straight months. The number of temporary jobs is growing and the length of the workweek has been edging up. These developments show that employers are experiencing a need for additional labor, which typically precedes improvement in permanent hiring. I don't have to remind you how important this turnaround in the labor market is. Through February, the economy had shed some 8.4 million jobs over two years. That's the worst plunge in employment since the Great Depression. Now we appear to finally be on our way to a slow but steady rebound of jobs, which is essential if economic growth is to be sustained.

¹ I would like to thank John Williams and Sam Zuckerman for assistance in preparing these remarks.

It's fair to say that my own thinking has recently turned a corner and I am becoming more and more confident that the economy is on the right track. For some time, we were confronted with about the grimmest economic landscape we had ever seen. But about the middle of last year, the economy stabilized and then returned to growth. The latest indicators show a broadening and deepening of the recovery, and point to solid, if not spectacular, expansion in the first half of this year. We won't get an official reading of the nation's first-quarter gross domestic product until the end of this month. But based on the information we have in hand, it looks like inflation-adjusted GDP grew somewhere around 3 percent during the first three months of 2010. Assuming that holds up, we've now got three straight quarters of growth under our belts. I expect the pace of recovery to gain momentum over the course of this year and next as households and businesses regain confidence, overall financial conditions continue to improve, and lenders increase the supply of credit. For the full year, my forecast calls for output to rise about 3½ percent, picking up to about 4½ percent in 2011. Those are decent numbers, but nowhere as strong as some past V-shaped recoveries, for reasons I'll go into in a few minutes.

Even as we applaud the economic turnaround, it's important not to lose sight of just how fragile this recovery is and how far we yet have to go before things return to normal. The nation's unemployment rate has been stuck at 9.7 percent for three months in a row. That's down from the recession peak of 10.1 percent posted late last year, but it's terribly high by historic standards. What's more, an unusually large proportion of the nation's jobless have been without work for extended periods. Of those officially counted as unemployed, 44 percent have been jobless for at least six months, a far bigger share than in any previous postwar recession. When we consider a broader measure of underemployment—one that counts those who want jobs but have stopped looking because they are discouraged and those who are working part-time

for economic reasons—the unemployment rate jumps to 16.9 percent. That’s simply staggering and it represents a real tragedy for our society. Behind these numbers is flesh and blood—millions of people who struggle every day to make ends meet. We simply can’t be complacent when one of every six workers is without a job or is working a schedule that’s been cut short.

I’ve already noted the turnaround in the job market. Unfortunately, I expect the pace of job creation to be muted, which is likely to leave unemployment stubbornly high for the next few years. My business contacts say that the overhead reductions and productivity improvements put in place during the recession have become permanent fixtures, which could be a factor restraining employment. My forecast calls for the unemployment rate to edge down to about 9¼ percent by the end of 2010 and still be about 8 percent by the end of 2011, a very disappointing outlook. This is a case in which I would be delighted to be proven wrong. I see inflation remaining subdued, a subject I’ll return to later.

As we contemplate the prospect of moderate growth and slowly falling unemployment, it’s important to keep in mind how remarkably things have improved over the past year and a half. In the dark days following the September 2008 collapse of the investment bank Lehman Brothers, the global financial system was teetering on the brink of collapse and our economy was in free fall. The picture was the same in many other parts of the world. Many well-informed people feared a second Great Depression. We were able to avoid such a catastrophe in large measure because policymakers across the globe reacted swiftly and aggressively. The Federal Reserve and the U.S. government, in concert with other central banks and governments, took novel and dramatic steps to prevent financial and economic collapse. The Fed pushed its traditional interest rate lever—the federal funds rate which banks charge each other for overnight loans—close to zero. And our response didn’t stop there. In order to further stimulate growth,

we put in place an array of unconventional programs to ease the flow of credit to households and businesses. These Fed policies and the response of the federal government helped avert a disaster and set the stage for the economic recovery that is now taking hold. Overall financial conditions have improved substantially.

As we look ahead, people often ask where growth is going to come from, given that consumers and businesses were battered and shell-shocked by the recession. Can we really expect them to bounce back and boost their spending in ways that would support a sustained recovery? I think the answer in both cases is a qualified yes.

Let's start with consumers, whose spending makes up a little over two-thirds of GDP. For the past few months, retail sales have been growing at a solid rate. Adjusted for inflation, it's likely that March will mark the sixth straight month in which personal consumption expenditures have risen. Shoppers, after hunkering down during the recession, are clearly in a better mood. Over the past few years, they had cut back sharply on outlays for such durable goods as cars and appliances. Now that fear and uncertainty have abated, households are beginning to act on their pent-up demand for these products. And the rebound in the stock market and the stabilization of house prices means that household wealth is growing again, which should give a boost to spending. In a few cases, consumer demand is even feverish, as we see with the new Apple iPad.

I don't mean to imply that the harsh lessons of the past few years have been entirely lost on Americans. Before the onset of the recession, households went on a spending spree, buoyed by easy credit and fast-rising home equity. It was easy to get a loan to buy a car or remodel a home. When the party was over, reveling consumers woke up to a massive hangover in the form of high debt levels, a horrible economy, tight credit, and plummeting home equity. Now,

perhaps belatedly, chastened households have rediscovered the value of thrift. They are increasing their saving and reducing their debt loads, and they seem unlikely to revert to their spendthrift ways any time soon. This suggests that consumer spending will increase at a moderate rate—not too hot, not too cold.

We're witnessing a similar story with business spending on equipment and software, which shot up at an inflation-adjusted 19 percent annual rate in the final three months of 2009. The recent data on capital goods orders point to solid, if less spectacular, gains in the first quarter of this year. During the recession, businesspeople focused on keeping their companies alive by slashing costs. Extraordinary uncertainty about business prospects combined with falling sales and difficulty in obtaining credit caused them to put off new projects and defer all but essential spending. As the economy has righted itself, businesspeople have gradually been shedding this "batten-down-the-hatches" mentality. The tone of business has taken a turn for the better, credit availability has improved, and the great fear of the unknown has dissipated. Although businesses remain cautious, many have pushed the restart button on projects they had postponed, such as replacing old equipment.

One particular area that's benefiting is information technology. An impetus for this growth is that businesses need to replace obsolete servers and other IT equipment that they held off procuring during the crisis. On an inflation-adjusted basis, business IT spending soared at a more-than-27-percent rate in the fourth quarter, the fastest growth since the go-go years of the tech boom of the late 1990s. Indeed, the high-tech sector appears to be on a tear. Our Tech Pulse Index at the San Francisco Fed, which measures activity in the sector, grew at a robust 28 percent annual rate in the first three months of the year.

What's the outlook for business spending? As credit conditions ease further and the economy gains momentum, I expect business investment in the broad category of equipment and software to continue to improve. Like the case of consumer spending, I think this will be gradual. My business contacts tell me that they see conditions improving, but that they remain wary and cost conscious. I suspect that the scars from the past few years will take some time to heal.

One area that still looks bleak is commercial real estate, which is measured for GDP purposes as business investment in structures. The commercial property market has gone through a boom-and-bust cycle that has much in common with that traced by residential real estate. Indeed, commercial real estate market conditions remain quite weak. Office and commercial building vacancy rates are at very high levels, and indicators of future commercial building activity are in negative territory. Spending on nonresidential construction has fallen sharply since the middle of 2008. Recent data don't show any let-up in this trend. Given the low utilization rates for commercial property, it's likely to be quite a while before we see growth in this area again.

The outlook for housing is somewhat better, but the incipient market recovery we saw last fall has since then charted an on-again, off-again course. Home prices stabilized in the middle of 2009 after years of double-digit declines. But sales volume has not been able to get traction, even after prices tumbled 20, 30, 40 percent or more in some markets. We saw a spike in home sales late last fall in response to the homeowner tax credit, and we may be getting another as the credit expires. But, following the worst housing collapse in decades, potential buyers are, not surprisingly, leery of investing in a home, and we have yet to see any sustained

upward trend. In addition, housing construction won't return to normal levels until demand outstrips the supply of homes that was bloated by building during the boom years.

The continued high rate of foreclosures also creates risks to the recovery of residential real estate. More than three years after the onset of the housing bust, we've seen no let-up in mortgage delinquencies and foreclosures. This is due to several factors, including high unemployment and the plunge in house prices, which leaves many borrowers owing more than their homes are worth. Based on the latest data, I expect the percentage of loans that are seriously delinquent will continue to move higher. I am also concerned that we got a temporary reprieve from new foreclosures from the federal government's trial loan modification program. But some of these modifications will unravel, in which case the borrowers could face foreclosure again.

The federal government's stimulus program has been an important source of growth over the past year, but its effects will wane later this year and next year. At the same time, state and local governments are in desperate straits as they wrestle with severe budget shortfalls. Public officials will have to impose painful spending cuts and tax increases to bring these budgets back into a semblance of balance, and the ripple effects of this austerity will slow economic growth.

I'd now like to discuss current conditions in financial markets in some detail. I would note that financial conditions are important for two reasons. First, they are key determinants of economic activity. It is in this sense that I pointed out earlier that continued improvement in "overall financial conditions" would likely contribute to a gradual acceleration in economic activity over this year and next. The second sense in which financial conditions are important is that they may harbor imbalances that pose a threat to market stability. Of course, it was just

these sorts of financial market imbalances that were the proximate cause of the recent crisis and recession.

Let me start with the relationship between financial conditions and the economy. My reference to “overall financial conditions” as opposed to, say, a more specific focus on interest rates, was intentional. While the term “financial conditions” is vague, I was including, along with borrowing rates, a broad set of factors encompassing everything from the prices of stocks, houses, and foreign currencies to terms and conditions on loans, availability of capital, and the relative ease or difficulty of raising cash. These factors, along with yields, are important influences on spending decisions. A logical question then is how “overall financial conditions” can be assessed and whether any simple metric can be developed that would encapsulate them.

The quest for such a financial conditions index, or FCI, capable of summarizing broad financial conditions is hardly new. Indeed, market analysts routinely compile a number of such indexes. But, in the aftermath of the recent crisis, further development of financial conditions indexes has attracted renewed interest among economic researchers. The holy grail of this endeavor is to formulate a single number that measures the combined influence on the economy of a broad array of financial variables.

So, what are the financial conditions indexes currently in use telling us? Right now, every FCI I am aware of shows that conditions have improved dramatically since the low point of the crisis. Indeed, most such indexes now suggest that overall financial conditions have returned to a “normal” or “neutral” stance. Importantly, though, these conditions are not as strong as one would expect, given the current exceptionally low level of the federal funds rate.²

² See Hatzius et al. (2010) for a history of financial conditions indexes and a recent attempt at developing one.

Overall, this evidence supports my conclusion that improving financial conditions are bolstering growth, but not fueling a rapid V-shaped recovery.

Let me next turn to the second issue raised by “overall financial conditions,” that of financial market imbalances. The question here is whether there is currently any sign of emerging developments that might pose a threat to financial stability in the years ahead. One of the key lessons of the crisis is that policymakers need to assiduously monitor financial markets to identify such imbalances. As we’ve seen, excesses in the financial system can engender a period of abnormally fast growth followed by a crash.

I should point out that there is no single metric we can use to assess threats to financial stability and the economy. This is a case in which one size does not fit all. The fact is that episodes of financial excess or stress tend to be unique, both in terms of which market segments are affected and the way these excesses play out. For example, the credit crunch of the early 1980s was primarily characterized by restrictions in the availability of loans. The stock market crash of the early 2000s did not infect other segments of the financial system. By contrast, the recent financial crisis was initially centered in the provision of credit in certain money and capital markets, such as repurchase agreements, securitizations, and commercial paper, and then spread throughout the financial system. The idiosyncratic nature of these episodes means that the Fed needs to be vigilant in looking for excesses and stresses in a wide variety of markets and institutions. To paraphrase Tolstoy, every distressed financial system is distressed in its own way.

In this regard, researchers are investigating how to design early warning systems that can signal when segments of the financial system are under particular stress or are creating broader risk to the financial system and the economy. Since the start of the crisis, when numerous

segments of the financial system were under strain, Fed economists have been closely monitoring indicators of market functioning. The metrics vary from market to market, and include asset prices, interest rate spreads, financial firm balance sheets, and credit volumes.

Currently, simple financial market indicators provide no real sign that significant excesses or imbalances have developed in the United States. Let's start with stocks. Based on trailing earnings, the current price-to-earnings ratio for the Standard & Poor's Composite index is about 20, a little below its average of 25 since 1988. Other valuation measures also indicate that the stock market is currently a bit below, but not terribly out of alignment with, its past norms. For real estate, we can look at price-to-rent ratios. Both residential and commercial real estate price-to-rent ratios reached unheard-of heights earlier in the decade, clearly signaling that these markets were out of balance. It's not surprising then that they eventually fell back to earth, inflicting huge damage on the economy. Current price-to-rent ratios are about 10 to 15 percent above their long-run averages. Thus we find that stocks are a bit below and real estate a bit above their long-term averages. But neither case shows signs of large imbalances relative to fundamentals.

When it comes to loans and fixed-income securities, we can look at spreads relative to risk-free assets of comparable maturities. During the crisis, many such spreads—including those on interbank loans, commercial paper, and low-grade corporate bonds—rose to extraordinary highs. These have since come down dramatically and are currently at or near normal levels.

Some other financial market conditions are not so easy to measure, in part because reliable benchmarks may be lacking. Among the most important of these are the availability of credit and liquidity. For bank lending, we have the Federal Reserve's Senior Loan Officer Opinion Survey, which provides quarterly information on terms and standards for various types

of loans. For other market segments, growth rates of credit, leverage, debt, and measures of risk provide rough proxies for liquidity and credit conditions. Very rapid growth in liquidity, credit, or leverage among financial institutions may signal increasing risk in the system.³ Currently, there is little evidence that financial institutions are significantly expanding the provision of credit and liquidity. Quite the contrary, even with very low interest rates, credit flows remain extremely weak.

We at the Fed are closely monitoring these and many other indicators of financial conditions to better understand the implications for the economy as well as risks to the financial system itself. This is a challenge because one can never be sure why financial conditions are tightening or loosening. Do such changes stem from economic fundamentals? Do they reflect shifts in levels of optimism and pessimism unrelated to fundamentals? Are changes in financial conditions linked to changes in the risk-management practices of financial institutions? These are tough questions to answer, but they are of vital importance in preventing the next financial crisis.

I'd like to turn now to the outlook for inflation. I'm one who believes that persistently high unemployment tends to depress inflation. When so many people are without jobs, wages and incomes generally rise slowly, and producers and retailers have a hard time making price increases stick. We see this today. Inflation pressures are already very low and they seem to be diminishing further. The headline price index for personal consumption expenditures rose 1.8 percent over the 12 months through February. The core PCE inflation rate, which excludes the prices of volatile food and energy products, increased a scant 1.3 percent over the same period. This figure is down from its recent peak of 2.7 percent in July 2008, before the recession shifted into high gear. The downward trend appears to be becoming more pronounced. Core prices

³ Adrian and Shin (2010).

were essentially flat in the first two months of the year, and indications are that this likely continued in March.

Of course, any inflation index is a construct made up of the prices of many different goods and services, each of which is assigned its own weight. In the real world, prices of goods and services are changing all the time at different rates. In gauging the underlying inflation trend, economists try to distinguish between price movements that are likely to persist over time and those that are transitory. This is why core inflation measures exclude energy and food prices. As anybody who buys groceries or fills the gas tank knows, these tend to be quite volatile. As a result, an inflation index that includes food and energy tends to be less persistent, and therefore provides a less reliable signal of underlying inflation trends, than an index that excludes those categories.

The question of food and energy prices is a familiar one. Lately though another component of inflation indexes has received a lot of attention. I'm referring to housing prices. In particular, some analysts have argued that the recent decline in consumer price inflation is narrowly based because it is primarily due to weakness in the housing market. The implication, of course, is that housing is distorting inflation indexes and that, once housing stabilizes, the downward pressure on inflation will disappear. This concern that movements in housing prices might disguise underlying inflation trends has some history. Back in 2003, there was a sizable decline in core inflation. Many of you may remember that we experienced a deflation scare then—that is, a fear that falling core inflation might cross into negative territory and turn into deflation. In fact, back then, the decline in core inflation was driven primarily by only two categories—housing and autos—which were being influenced by special factors.⁴ Of course, we

⁴ See Bauer, Haltom, and Peterman (2004).

never actually experienced deflation and price indexes started a steady rise. This episode should prompt us to examine inflation trends with a critical eye.

So what of the claim that housing is once again distorting our reading of inflation trends? I don't think this is a major factor. Of course, I wouldn't dispute that the bust has sent house prices tumbling. But house prices are not directly included in inflation indexes. In figuring what it costs to live in a home, official measures of consumer prices estimate the amount of rent that a homeowner would have to pay to be in the home they own. This is done by looking at actual rents paid for comparable homes. The result is an inflation index category called "owners' equivalent rent."⁵ The overall price of housing used in inflation indexes combines rents actually paid by renters and owners' equivalent rent for those who own their homes.

Now, it's true that the housing crash and the corresponding rise in vacancies of rental properties have put substantial downward pressure on rents. But this can only explain a portion of the drop in PCE price inflation over the past year and a half. The 12-month inflation rate for the cost of housing has slowed from 2.9 percent in mid-2008, when core inflation was peaking, to 0.3 percent in February of this year. Housing makes up about 15 percent of personal consumption expenditures and 18 percent of core expenditures, excluding food and energy. If you do the math, the deceleration in housing prices accounts for only about half a percentage point of the roughly 1½ percentage point decline in core inflation. That equals one-third of the overall decline. Put differently, if we exclude housing prices, the resulting measure of core inflation has declined by 1 percentage point, from 2.6 percent in mid-2008 to 1.6 percent in February.

More generally, Fed researchers have found that, unlike the slowdown in inflation in 2003, the fall in inflation over the past year and a half has been widespread across a broad set of

⁵ See McCarthy and Peach (2010) for a description of the methodology.

goods and services.⁶ In other words, the recent deceleration in housing prices has been matched by similar decreases in inflation in many other categories. Interestingly, one category where inflation is bucking the trend is new and used motor vehicles, which was one of the culprits behind the unusual decline in inflation in 2003. The rate of auto price inflation increased last year, which in part reflected the cash-for-clunkers program. Now that the program has expired, motor vehicle price increases may return to normal levels.

No matter how you slice the data, housing prices explain only part of the downward inflation trend. Given my expectation of persistent and sizable slack in the economy, I expect both core and headline inflation rates to edge down further, falling to about 1 percent later this year and in 2011. This is below the 2 percent rate that I and most of my fellow Fed policymakers consider an appropriate long-term price stability objective.

I'd like to close with a few words about monetary policy. As I noted earlier, we have pushed the federal funds rate down to zero for all practical purposes. Such an accommodative policy is appropriate because the economy is operating well below its potential, inflation is subdued, and such conditions are likely to continue for a while. Consistent with that view, the Fed's main policymaking body, the Federal Open Market Committee, last month repeated its statement that it expects low interest rates to continue for an extended period. I agree with this assessment. At some point though, as the economy continues to expand, the Fed will have to pull back some of this extraordinary stimulus.

As many of you know, the Fed recently completed its program of buying Fannie Mae and Freddie Mac securities, an initiative designed to stimulate the economy by keeping mortgage interest rates low. These purchases caused the Fed's balance sheet to mushroom to \$2.3 trillion. But, we won't have to shrink our balance sheet when the time comes to push up short-term

⁶ Hobijn, Eusepi, and Tambalotti (2010).

interest rates. We have another tool available, which is to raise the interest rate we pay to banks on the reserves they hold at the Fed. A hike in the rate we pay on these reserves will cause other short-term money market rates to rise for the obvious reason that no bank is going to lend in the open market at a rate below what it can earn by parking its money in a secure Fed account.

It's logical to expect the Fed's balance sheet to eventually shrink toward more normal levels and for the bulk of our holdings to be Treasury securities, as they were prior to the crisis. I expect this to be a gradual process executed in a careful and deliberate fashion.⁷

I want to leave you with a sense of the tremendous progress we've made in putting our economy back on track, even though we still have a long to-do list before we can say that we've fully returned to health. We've emerged from the worst financial and economic crisis most of us have ever seen. That should give us confidence that we can move forward, put more Americans to work, keep inflation in check, and return to the economic vibrancy that our nation is known for. Thank you very much.

⁷ See Bernanke (2010).

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