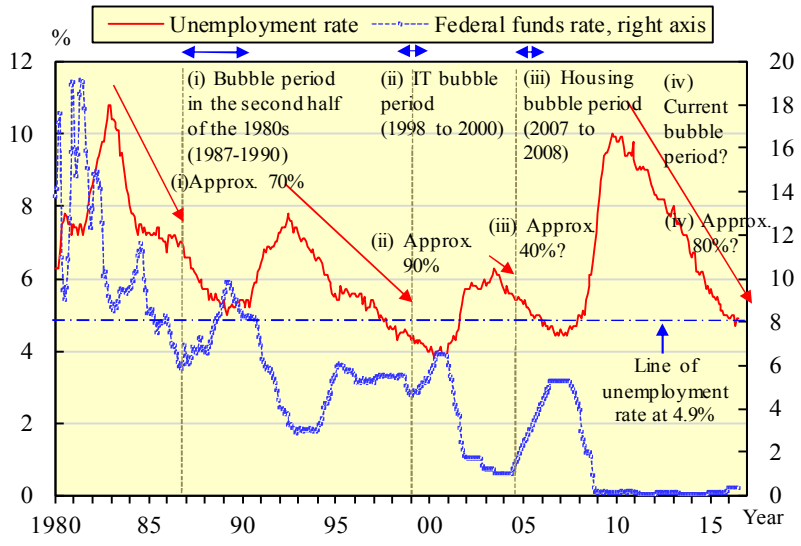
Problems of the U.S. Monetary Policy

The Federal Reserve Board (FRB), the U.S. central bank, raised the short-term market interest rate that is its policy interest rate in December 2015 for the first time in seven years. However, since then, the FRB has remained reluctant to implement an interest rate hike due to such factors as concerns over the slowdown of China's economic growth as well as the slowdown in the increase in the number of employed people and the continued inflation rate of less than 2% in the United States. But the unemployment rate has fallen to a level similar to the one seen during the housing bubble period that would later lead to the subprime loan problem, while housing and stock prices have continued to hit new peaks. This situation has raised concern that the FRB's cautious stance concerning interest rate hikes could escalate bubbles as was the case in the past.

Unemployment Rate Almost as Low as During Past Bubble Periods

First, the unemployment rate, a key indicator of the labor market, in the April-June quarter fell below 5% to 4.9%. As shown in Figure 1, since the 1980s, the U.S. unemployment rate had dropped below 5% only during two periods of economic bubbles. In (i) the bubble period in the second half of the 1980s, although the unemployment rate fell to 5.2% in the first half of 1990, it later turned up. On the other hand, during (ii) the IT bubble period, the unemployment rate stayed below 5% for four years and two months from July 1997 (the bottom rate was 3.8%). In the (iii) housing bubble period, the unemployment rate stayed below 5% for two years from December 2005 (the bottom rate was 4.4%).

Figure 1 Unemployment rate and short-term market interest rate in the United States



Source: FRB, BLS (U.S. Bureau of Labor Statistics)

Figure 1 also shows the short-term market interest rate (federal funds rate; equivalent to the call market rate in Japan) that is its policy target. Although a simple comparison is difficult because the

interest rate varies depending on the price level and economic growth rate, it is meaningful to make comparison from the viewpoint of how low the unemployment rate fell when the FRB raised the short-term market interest rate.

What is clear from the analysis is as follows: although the FRB raised the interest rate relatively early in (i) the bubble period in the second half of the 1980s, the bubble grew large; and in (ii) the IT bubble period and (iii) the housing bubble period, the FRB was late in raising the interest rate.

As the issue now is when the interest rate will be raised for the second time, let us compare the unemployment rates at the time of the second interest rate hikes implemented in the past bubble periods.

In (i) the bubble period in the second half of the 1980s, when the bubble did not grow very large, the unemployment rate fell 5.8 percentage points from the peak in December 1982 (10.8%) to the bottom in March 1989 (5.0%). In December 1986, when the second interest rate hike was implemented, the unemployment rate stood at 6.6%, 4.2 percentage points below the peak. In other words, the second hike came when the unemployment rate was down from the peak by a margin equivalent to around 70% (≒4.2 percentage points÷5.8 percentage points) of the peak-to-bottom decline.

In (ii) the IT bubble period, the unemployment rate dropped 4.0 percentage points from the peak in June 1992 (7.8%) to the bottom in April 2000 (3.8%). The unemployment rate in March 1999, when the second interest rate hike was implemented, stood at 4.2%, 3.6 percentage points below the peak. In other words, the second hike came when the unemployment rate was down from the peak by a margin equivalent to around 90% (≒3.6 percentage points÷4.0 percentage points) of the peak-to-bottom decline. This means that in (ii), the second interest hike came around 20% later than in (i), and this delay may have expanded the scale of the bubble.

In (iii) the housing bubble period, the unemployment rate fell 1.9 percentage points from the peak in June 2003 (6.3%) to the bottom in December 2006 (4.4%). The unemployment rate in July 2004, when the second interest rate hike was implemented, was 5.5%. In other words, the second hike came when the unemployment rate was down from the peak by a margin equivalent to around 40% (≒0.8 percentage points÷1.9 percentage points) of the peak-to-bottom decline.

Meanwhile, in (iv) the current period, the results depend on how low the unemployment rate will drop. However, if we assume that the unemployment rate will fall

to the lowest-ever level, 3.8% (April 2000), the current margin of decline from the peak is already around 80% of the margin of decline to the assumed bottom rate. If the unemployment rate drops to 3.8%, the margin of decline from the peak of 10.0% (in October 2009) in the present economic cycle will be 6.2 percentage points, compared with the present margin of decline, 5.1 percentage points, which is 82% (=5.1 percentage points÷6.2 percentage points).

If we assume that the unemployment rate will drop to 4.4%, the same as the bottom rate in (iii), the current margin of decline is 90% (=5.6 percentage points÷6.2 percentage points) of the margin at the assumed bottom rate.

As shown above, the margin of decline in the unemployment rate from the peak at the time of the second interest rate hike is around 70% in (i), 90% in (ii) and 40% in (iii) and an estimated 80-90% in (iv). This means that the present unemployment rate is sufficiently low.

In any case, it is noteworthy that the margin of decline was around 40% in (iii) the housing bubble period. That is because this figure suggests that the timing of the second interest rate hike was not wrong.

However, given that the housing bubble caused what was described as a "once-in-a-century recession," there must be some other factor that was overlooked at that time. The housing price is the overlooked factor.

The interest rate hike in (iii) was not late from the viewpoint of the unemployment rate. However, if we consider its timing in relation to the housing price, it is possible that the hike came too late, thus leading to a huge housing bubble.

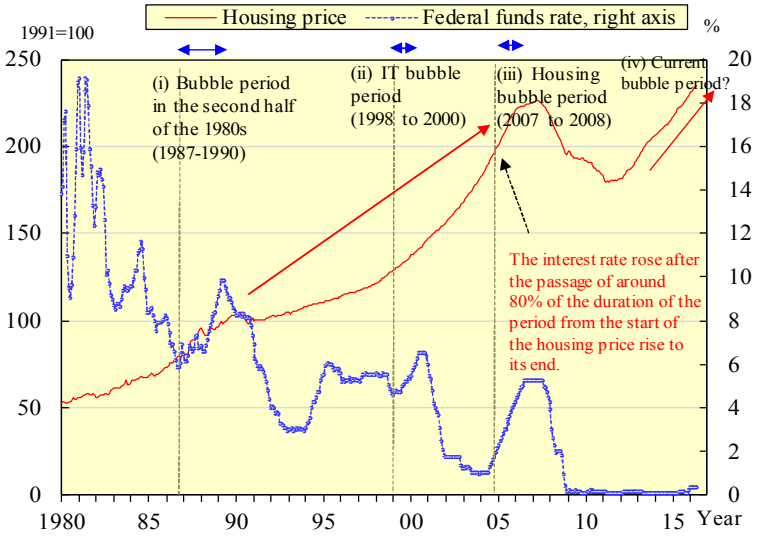
Housing Price Continuing to Rewrite Record Highs

Figure 2 shows the relationship between the housing price and the short-term market interest rate. In the United States, the housing price, rather than the land price, is used as the main indicator of the property market. This figure shows new housing prices announced by the U.S. Department of Commerce for the period until 1990 and prices announced by the Federal Housing Finance Agency (FHFA) for the period from 1991 onwards.

From 1991 onwards, the U.S. housing price almost consistently continued to rise and the rise gained momentum around the time when the IT bubble collapsed. That was because of such factors as steep tax reductions implemented by the government in 2001

and later, growth in defense expenditures following the multiple terrorist attacks in the United States (September 11, 2001), and an increase in housing demand due to an influx of immigrants, on top of which came a significant decline in housing loan interest rates due to a sharp reduction of the short-term market interest rate (from 6.5% at the end of 2001 to 1.0% at the end of 2003). Consequently, the effects of the collapse of the IT bubble were overcome in a relatively short period of time, and the housing price continued to rise for around 15 years (183 months) until March 2007. Moreover, the rate of rise in the housing price increased with the passage of time.

Figure 2 Short-term market interest rate and housing price in the United States



Note: Housing prices for the period until 1990 are those announced by the U.S. Department of Commerce and prices for the period from 1991 are those announced by the FHFA. As the new housing price is prone to large fluctuations, the weighted moving average is used (weight: 1 for the previous month, 2 for the current month and 1 for the following month)

Source: FRB, BEA (U.S. Department of Commerce), FHFA (Federal Housing Finance Agency)

However, the short-term market rate was raised only in June 2004. The duration of the period from the start of the housing price rise in 1991 to the start of the monetary tightening is around 12 years (150 months). This means that the interest rate hike was implemented only after the passage of time equivalent to around 80% (≒150 months÷183 months) of the period from the start of the housing price rise to its eventual end. This indicates that although the interest rate hike came when the unemployment rate was down from the peak by a margin equivalent to around 40% of the top-to-bottom decline, its timing, after the passage of 80% of the duration of the period of the housing price rise, was too late, leading to the huge housing bubble.

Despite this bitter experience, the FRB does not appear to be paying much attention to the housing price now. Rather, a paper published by the FRB offered the assessment that the housing price rise is producing a positive impact on consumption as it improves the household balance of income and expenditure.

Stock Price Also at Record High Levels

The stock price has also been at record high levels recently. Generally speaking, the stock price rises in line with an increase in corporate earnings and falls in line with a decrease in earnings.

Figure 3 shows the results of the calculation of the difference, or deviation, between the actual stock price and the estimated one (=actual stock price－estimated stock price) that was obtained through the regression formula that explains the stock price in relation to corporate earnings. This figure indicates the following three interesting facts.

Figure 3 U.S. stock price, estimated stock price calculated based on corporate earnings, and deviation

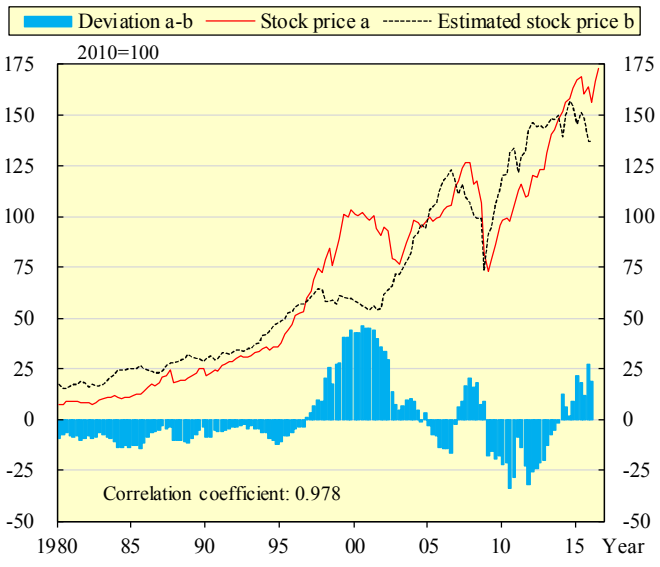
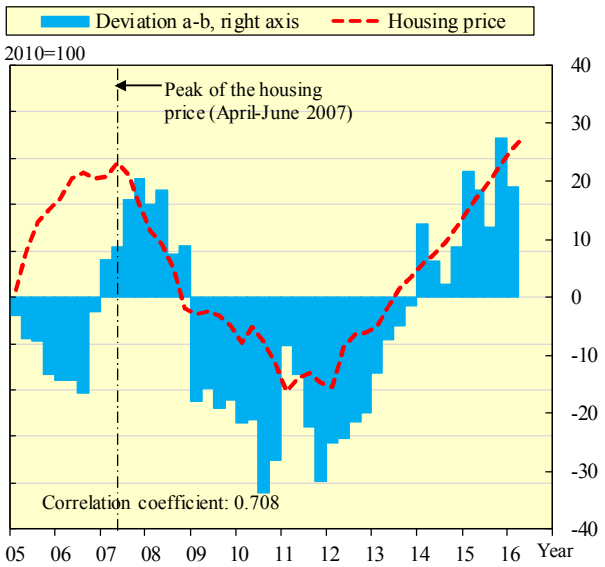


Figure 4 Relationship between the deviation in Figure 3 and housing price



Source: New York Stock Exchange, U.S. Department of Commerce, FHFA (Federal Housing Finance Agency)

First, although the stock price and corporate earnings have a high degree of correlation with each other in principle, the stock price rose beyond a level presumed from corporate earnings in the IT and housing bubble periods, with the result that the stock price deviation took positive values. Meanwhile, during the process of the collapse of bubbles, the stock price fell below a level presumed from corporate earnings, causing the stock price deviation to take negative values.

Second, the size of the stock price deviation varies from period to period. In the October-December period of 1996, before the IT bubble period, the stock price deviation turned positive and reached its peak in the July-September period of 2000, before turning negative in the July-September period of 2004. During the housing bubble period, the stock price deviation turned positive in the January-March period of 2007 and peaked in

the October-December period of the same year, before turning negative in the January-March period of 2009. While the IT bubble was longer in duration than the housing bubble, the scale of the bubble in terms of stock price was also larger in the IT bubble period.

Third, the stock price deviation has remained positive since the January-March period of 2014, and it has been widening with the passage of time. This means that the upward momentum of the stock price has been stronger than is presumed from corporate earnings. Even though corporate earnings peaked out in 2015, the stock price has been at record high levels.

The stock price deviation has stayed positive or negative for a long period of time because factors other than corporate earnings also affect the stock price. As can be seen in Figure 4, a comparison between the trends in the stock price deviation and the housing price shows that the two have moved mostly in the same way since 2007. This is partly related to the fact that American people frequently sell and buy houses during their lifetime compared with Japanese people. Workers, who may have to change residence each time their employer or location of work changes, have gained profits when they sold houses when the housing price was rising and allocated parts of those gains to consumption and stock investment. A rise in the housing price has had the effect of boosting the stock price and stimulating consumption. However, such positive correlation between the housing price and the stock price deviation was not observed between 2002 and 2005. That is because at that time, there remained a strong sense that the economy was slowing down as the negative impact of the collapse of the IT bubble lingered.

The problem is that the positive stock price deviation has been widening as a trend since 2013. Not only is the stock price at record high levels, but the housing price is also higher than the peak reached during the housing bubble period. In short, these three indicators suggest that the United States is heading for a bubble.

Current Status of the Number of Employed People

Finally, we will examine the number of employed people, on which the FRB places emphasis.

Until recently, the number of employed people has been increasing at a pace of around 200,000 people per month. However, in May, the increase in the number of employed people slowed down significantly, partly due to special circumstances, and this became a factor that led the FRB to refrain from an interest rate hike. But the number of employed

people is an indicator prone to large fluctuations in the first place. While the increase in May was only 14,000 people, the number increased steeply in June and July, by 292,000 and 255,000, respectively.

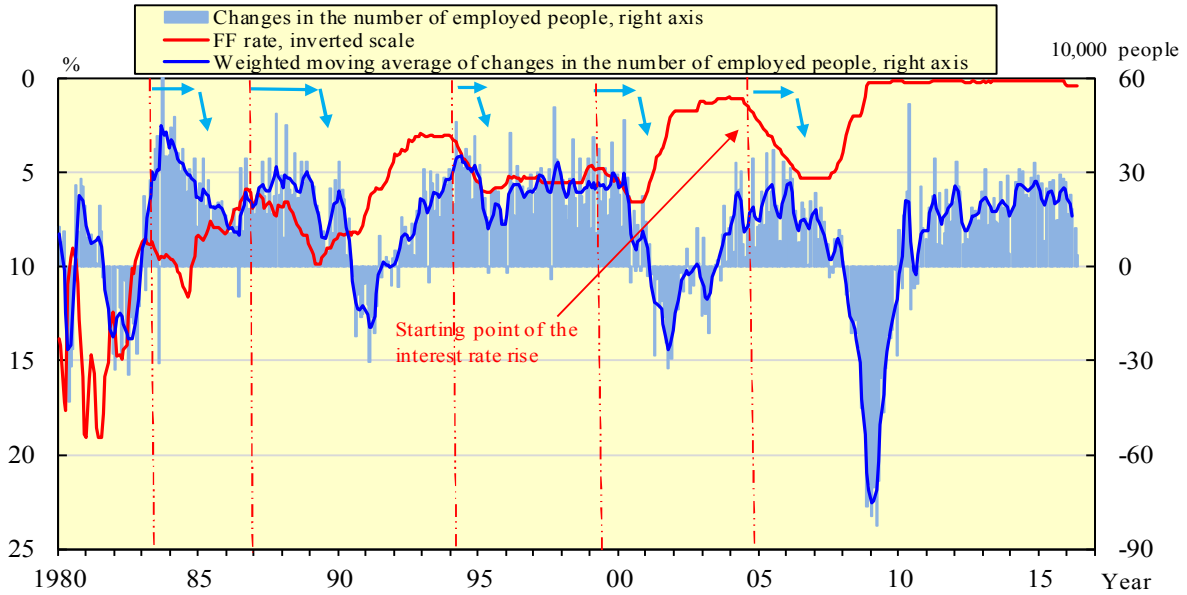
What's important in the case of the U.S. economy is that the number of employed people increases when production activity grows vigorous and decreases (or the margin of increase narrows) when the activity becomes stagnant. Production activity in the manufacturing industry has slumped due to a curb on production of shale oil caused by a steep drop in the crude oil price. However, activity in the nonmanufacturing industry has been growing in a stable manner as a drop in the gasoline price stimulated consumption. As a result, real GDP has been growing at an annual rate of around 2% on average.

The FRB's focus of attention on the number of employed people would be understandable at the time of high unemployment, such as between 2008 and 2010.

However, now that more than five years have passed since then and the unemployment rate has declined significantly, it is hard to understand why the FRB is fussing over changes in the number of employed people, an indicator prone to large fluctuations.

Moreover, Figure 5, which compares the number of employed people with the short-term market interest rate on the inverted scale, shows that a change in the interest rate precedes a change in the number of employed people. In addition, there is a time lag of

Figure 5 Relationship between the number of employed people and short-term market interest rate in the United States



Note: Regarding changes in the number of employed people, the weighted moving average is used (weight: 1 for two months before, 2 for the previous month, 3 for the current month, 2 for the following months and 1 for two months later) for the purpose of evening-out.

Source: FRB, BLS (U.S. Bureau of Labor Statistics)

more than a year between a rise in the interest rate and a narrowing of the margin of increase in the number of employed people.

That is because the real economy deteriorates a while after an interest rate hike, resulting in a decrease in the number of employed people for the immediate moment.

In Japan, the relationship between the economic condition and the number of employed people is not so clear as in the United States because the Japanese-style of business management has traditionally sought to minimize the impact of economic deterioration on the number of employed people by reducing wages. In contrast, in the United States, changes in production activity have directly affected the number of employed people.

The FRB has experienced the collapse of a serious bubble twice since 2000. The reason for that is that the FRB was late in raising the interest rate. Despite such experience, the FRB is obsessed with the number of employed people, which is a lagging indicator, without paying sufficient attention to the current housing and stock prices.

That the U.S. economy is performing strongly in the process of a bubble formation benefits the Japanese economy as well by causing an increase in Japanese exports. However, the bubble is sure to collapse sooner or later, inflicting serious damage. We hope that the FRB will make wise decisions based on an accurate assessment of the reality.

Haruhiko Murayama
General Manager, Tokyo Economic Research Division
Kyoto Research Institute, Inc.

FINANCIAL FORUM 2016. Autumn No. 114