Does the rise in stock prices reflect a true recovery in the Japanese economy?

Rebounding stock prices

The stock market is a focus of intense observation when considering the future of business conditions or the potential comeback of the Japanese economy. After falling to their lowest post-bubble level in April, Nikkei stock prices rebounded and due to events such as measures applied to the Risona Bank problem and mostly positive first quarter corporate reports, the market surged higher from around June. This positive corporate sentiment was reinforced in the Bank of Japan's Tankan survey released in July.

Opinions among economists are divided as to how we should interpret the meaning of this market rally. Some believe it occurred because the combination of inventories which were already at low levels and corporate investment in facilities from the later part of the year led many to conclude that real economic recovery was on the way. Other economists, however, point out that companies also experienced increased profits in the recovery of 1999 due to the IT boom in the United States. Also, at that time, the Obuchi administration in Japan was enacting extensive economic reforms. Because the economic recovery in the U.S. is much weaker this time and the domestic policy measures are of a much smaller scale, these economists caution that these factors could derail any economic recovery in the near future.

There is insufficient evidence to predict which of these views will prove to be correct. However, one point which this market rally clearly seems to show is that without a recovery in corporate profits, a recovery in the business situation or a comeback in the overall economy will not be possible. This point is central in any discussion of Japanese economic recovery. Until now, debate on the economic recovery has focused on macroeconomic forces such as strengthening of the real economy through structural reforms or fiscal and monetary policies. Looking at the expectations fostered by the recent run-up of stock prices, however, it seems appropriate to place more emphasis on corporate profits or profit ratios. Of course, if this economic recovery turns out to be for real, it will help provide benefits which have been a longstanding target of reforms such as an easing of the monetary policy or disposal of bad loans to stabilize the financial system. This report, however, will focus on corporate profits (and profit ratios) to examine the stagnation and recovery of the Japanese economy instead of the factors which are usually debated.

Factor Price Frontier
The relationship between profit ratios and the stagnation of Japanese economy is almost never discussed. Perhaps one of the few economists who have mentioned it is Yutaka Kosai, Chief Director in Economic and Social Research Institute, in responding to Ricardo's arguments by mentioning reform of profit ratios. (Yutaka Kosai, Technical Innovation and Restructuring as a Path to Profit Ratio Recovery. 2001) This report will use another work which offers essentially the same arguments as Mr. Kasai, the work of Bruno and Sachs (Economics of Worldwide Stagflation, Harvard University Press) which was the subject of much debate in the 1980s, to discuss profitability. To briefly state a complex issue, assuming corporations make appropriate use of manufacturing resources, if the ratio of capital to labor cost is high, then capital is in relative surplus and profitability is low while wages are accordingly high. In contrast, if manpower is relatively abundant, wages will be lower and profit margins relatively high. This inverse relationship between profitability and wages can be illustrated the Factor Price Frontier (FPF) as shown in figure 1. Naturally, through certain technological innovations, along with an overall increase in productivity, a rise in both wages and profitability can follow. As Mr. Kosai has pointed out, profitability can increase either as a result of a reduction of cost (wages) or of technological innovations.

In contrast, if technological innovation is low, an internal shift of FPF occurs. If both profitability and wages are flexible, both tend to decrease. (shift from point A to B in figure 1) However, if real wages are rigid, profitability tends to decrease as a result (shift from point A to C in figure 1) Bruno and Sachs (1985) interpret the economic downturn of the United States in the early 1980s as a result of a combination of the stagnation in technological innovation due to the oil crisis and this rigidity of real wages.

Continued low profitability

So, can Japanese economy in the 1980s and 90s be explained using the FPF? Figure 2 shows a graph of changes in profitability and wages in Japan. The profitability data is taken from the business profit ratios listed in the Ministry of Finance's "Corporate Statistics Information." (calculated with respect to fixed assets excluding land) The data for wages are real wage figures taken from the Ministry of Health, Labor and Welfare's "Monthly Labor Statistics."

Looking at this, we can see that from 1970 to the recent past, profitability experienced a remarkable decline from 8% to 2%, causing overcapitalization. Looking at the relationship with wages, inasmuch as the trend of wages is an increase and this connected with a decline in profitability, we can say that the FPF exists.

Around 1975, due mostly to the oil crisis, an internal shift in the Factor Price Frontier occurred and profitability experienced a dramatic decrease. Also, after 1990, due to such technological innovations as the IT revolution, Japanese traditional technological level became relatively inferior while real wages remained steady, reinforcing this trend.
Direction of Economic Recovery

In the debate over economic recovery, some stress the need for more aggressive monetary policies with respect to wage rigidity as a means to stimulate the recovery. In these arguments, wage rigidity itself is seen as the problem (for example Yutaka Harada “The Day Japan’s Stagnation Ends” Nihon Hyoron Press, 2003) This argument uses the traditional AD/AS analysis to state that since rigidity in wages causes an expansion in the GDP gap, monetary policies, which are used to stimulate aggregate demand, can be employed to solve this problem. However, even if real wages decrease through inflation, it does not guarantee recovery of profit ratio. Therefore, the essence of the issue is the decrease in profitability. In this case, structural measures such as policies to promote technological innovations or restructuring can be measures to spur recovery. Even when looking at the same phenomena, the economic recovery policies vary greatly depending on through which theory the data is filtered.

In the end, we can only rely on actual analysis, but according to the VAR model with no preconditions employed by the author using the 4 variables of money supply, real wages, real profitability and GDP, the influence on GDP of profitability since 1990 has been far greater than that of money supply.

Some argue that the recent improvement in corporate profits is simply due to restructuring but, if an increase in profitability is accepted as a vital component to economic recovery in the mid to long term, restructuring is simply an unavoidable result. The issue is not the use of restructuring to increase profits, but that the job market and the level of new industry development are not at a sufficient level to ensure that workers can find a new job without a long wait. Instead of welcoming the recent superficial trend of improved profits, a resolution to the repetitive problems plaguing Japanese economy for the past 10 years is clearly more important for real economic recovery.
Figure 1. Factor Price Frontier diagram

Figure 2. Changes in profitability and real wages