Prices and Monetary Policy in Times of Rising Energy Prices

Monetary Policy Facing Treacherous Seas Risks Mount

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Although the consumer price index (ex-perishables) has turned up, domestic prices continue to erode amid sharply falling wage costs. Considering relative purchasing power between Japan and the United States, there is considerable risk of a stronger yen as the interest rate gap between the two countries narrows. From a slowing US economy and accelerating inflation in China to fears of declining housing prices in Europe, economic risks are mounting, and management of monetary policy is becoming ever more difficult.

The Bank of Japan abandoned its quantitative easing policy in March and its zero interest rate policy in July of 2006. Then in February of 2007, the Bank shifted to a policy of guiding the unsecured overnight call rate to about 0.5%. In our financial report for March of last year, however, we noted that the trend of the GDP deflator and the estimated GDP gap give scant basis to judge whether the nation's economy has completely escaped from deflationary pressure, and we cautioned against any premature move by the BoJ toward tighter interest rates.

Lax supply-demand balance weighs on prices

With rising prices on primary goods such as crude oil and imported foods, the Japanese core consumer price index (ex-perishables) has turned up, giving the first gradual indications of the repercussions on domestic prices. Nevertheless, the "core-core" CPI, which excludes foods and energy, continues to slide, while the GDP deflator, which reflects value added (Figure 1), continues negative. How is it that domestic prices remain stable and the GDP deflator continues to erode despite skyrocketing prices on imported goods such as crude oil?

The nation's trend growth rate as estimated from the macroeconomic production function gradually fell from about 1.3% around 2003 to about 1.0% by the latter half of 2007 owing to the decline in the working age population brought about by falling child numbers and the graying of the population. And although the participation rate of women in the labor force has risen, average working hours per person have been on the decline, such that rising female participation has not helped lift the nation's trend.
growth rate overall. If we compute the Phillips curve (GDP deflator basis) and use the regression results to estimate the GDP gap, we find the gap presently remains in the vicinity of zero, neither hastening or slowing the inflation rate (Figure 2). Thus even if a growth rate of about 1% is achieved, supply demand conditions in the Japanese economy will fail to tighten and the GDP deflator may be expected to continue eroding.

Note 1. The rate of change in the GDP deflator excludes the impact of the consumption tax and is shown as a three-quarter moving average of the annualized monthly change.

Note 2. Shaded areas indicate recessions.

Note 3. Period covered is Jan-Mar quarter 1991 through Jul-Sep quarter 2007

Source: Cabinet Office, Kokumin keizai keisan nenpo (“Annual Report on National Accounts”), etc.

Figure 1. Price Index
(Annualized monthly change, three-quarter moving average)

Figure 2. GDP Gap and Deflator
Let us compare the recent rise in crude oil prices to that of the early 1970s during the first oil shock. Using an input-output table to estimate the theoretical value of corporate goods prices for 1975, we find they advanced by an estimated 45% (53% in actual terms) over 1970. The rise in crude oil prices contributed 4.5 percentage points to the advance in domestic prices while import prices overall contributed 9 percentage points. Of the remaining 36 points, wage costs contributed 33 points while capital costs, including profit, contributed 4 points to the rise in prices (Figure 3).

In the 2000s, however, changes in prices have been quite subdued compared to the 1970s, with the price of corporate goods in 2006 falling an estimated 0.5% (rising 0.7% in actual terms) compared to 2000, or remaining essentially flat. The rise in crude oil prices contributed 1.0 point to the change, with imported prices overall contributing 2.2 points. Underlying these results was the fact that, although capital costs contributed 3.7 points on the recovery of corporate earnings, wage costs made a negative contribution of over 6.4 points to the change in prices.
It is hard to imagine this price structure changing in a short time. Moreover, it seems very unlikely that domestic factors will encourage inflation. When the GDP deflator falls despite a rise in the general price level on higher import prices, it means that the unit prices of value added such as employee compensation and operating surpluses are falling, which has a negative impact on the economy. The BoJ's semiannual Report on Currency and Monetary Control for June, 2007 documents that, when raising interest rates in February of that year, Policy Board members were agreed with regard to consumer prices that, over the long run, the macroeconomic supply-demand gap would move in the direction of a demand surplus and then continue on a positive track. This view, however, appears to have been overly optimistic.

**Worsening Subprime Impact**

With the exception of the factor of rising import prices, deflation in domestic prices has been stubborn, and if the economy has continued strong so far, it is due in large part to the fact that the yen has been as subdued as it has been for the past twenty years and that overseas economies have been robust. But the supporting influence of these factors is likely to wane.

The impact of problems associated with subprime loans (mortgage loans to individuals with poor credit) on the US economy is severe indeed. Over the past several years, housing prices have risen to dizzying heights in major US cities such as Los Angeles, Miami and New York, and there is concern over what impact price declines in these areas will have in the future. US monoline insurance companies made broad guarantees of interest and principal of securitized products in particular. Their capital base is small, and if losses arise on subprime-related products, the monolines could face major downgradings by rating agencies or even the risk of bankruptcy. And since this would mean risk of further declines in the prices of these securities, caution is in order.

For Europe as well, the subprime debacle is having a negative impact on both the financial sector and the economy itself. In particular, the British government, abandoning hopes of relying on the private sector to reorganize the British bank Northern Rock, has put the bank under temporary government control, which only served to underline the degree of concern over the direction of housing prices. In EU area too, the rise in housing prices has been substantial. From a base of 100 for the year 2000, the housing price index had risen to 157 in the Euro zone as a whole and to 228 in the UK by the first half of 2007. The index rose to 235 in Spain, 209 in France and to 95 for Germany. Fears are that housing prices will now deteriorate and economies will slow.

Fears are that such a contraction in the economies of the West could lead to a relative appreciation of the yen in real terms. According to our estimates, the interest rate gap between Japan and the US has been closing rapidly over the past year owing to
interest rate hike in Japan and successive rate cuts in the US, which have resulted in a relative appreciation in the yen of about 4%.

The yen is currently undervalued when gauged by relative purchasing power parity, and chances are high that the Japanese unit will continue to strengthen against the dollar going forward (Figure 4). In fact, the dollar could very well fall under 100 yen. Slowing economies in Europe will also work to weaken the euro.

**Figure 4. Relative Purchasing Power Parity Versus Nominal Yen per Dollar**

Note: Relative Purchasing Power Parity = (nominal yen-per-dollar rate x Japanese price index) / US prices index. Both data series (RPPP formula values and actual nominal currency rate) have been adjusted on the graph so that the divergence between the two series balance over the entire range of the period covered.

**Rising Capital Costs and Retreating Foreign Investors**

Prices have continued to rise in China since 2007, with January 2008 consumer prices advancing 7.1% over the year before. Chances are strong that Chinese government figures for consumer prices underestimate the reality, and some observers fear that inflation is higher than such figures would imply.

High prices for stocks and real estate are also a concern. If the rate of inflation advances, chances are strong that social stability would worsen as the value of savings held by low income earners fell accordingly. It may very well be necessary for the People's Bank of China to further tighten credit or for the government to take drastic action to restrict aggregate demand.

Deeper inflation in China would effectively devalue the yen against the Chinese
yuan, thereby increasing the competitiveness of Japanese exports to China. Even so, the impact from the risk of falling into recession in reaction to measures to tighten credit would be considerable. It is not only the economies of Japan but those of the US and Europe which have depended on strong growth of the Chinese economy. This means that the fate of the Chinese economy could have a large impact in tipping the global business cycle into recession.

Since a slowdown in overseas economies will weaken net exports, the economy can expect little support from overseas demand in the future. Business firms also remain unable to pass on high import costs to sales prices and are therefore pressed to make cuts in compensation to employees and operating income. As a result, the decline in prices as gauged by the GDP deflator is likely to persist. Added to this is the risk of further yen appreciation as the interest rate gap with other nations narrows, which implies considerable risk of a deterioration in the economy.

As a structural problem for financial markets, we would also like to highlight the possibility that the cost of capital for Japanese corporations may be rising of late. Disappointed with foot-dragging on structural reforms, foreign investors have already begun pulling back on investments in the Japanese stock market. Aside from its ruling to allow the poison pill tactic, the Japanese court considering the case of the attempted takeover of Bull-Dog Sauce Company by a foreign investment fund might be regarded, given the tone of its written decision, as negating the very existence of the stock market, which has shocked foreign investors.

When the Ministry of Economy, Trade and Industry withheld judgment on the attempt by a Hong Kong based investment fund to increase its share ownership in J-Power, and when a senior official of the Ministry criticized speculation in stocks generally, they expressed the disfavor with which the Japanese government regards corporate takeovers, and this disfavor may be another reason why some foreign investors are pulling out of the Japanese stock market. In this context, recent price-earnings ratios have fallen very low by historical standards at 17.8 times earnings, while the dividend yield at 1.70% remains above the 1.40% yield on Japanese 10-year government bonds, indicating that corporate capital costs are high.

Late this March, BoJ Governor Toshihiko Fukui will retire, and a new governor will take over. However, the Bank has few cards it can play and will be faced with great challenges in formulating monetary policy.

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