

Economic Outlook for FY2007 and FY2008

November 2007

The Mizuho Research Institute Ltd. (MHRI) has revised its economic outlook for FY2007 and FY2008 subsequent to the release of Japan's GDP data for the Jul-Sep quarter of 2007. The key points of the outlook are as follows.

<The US Economy>

The housing market correction and subprime crisis will spread to consumer spending and serve as a drag upon growth

2007 1.9% (previous outlook) → 2.1% (current outlook)

2008 2.4% (previous outlook) → 2.4 % (current outlook)

(* 4Q2008 rate of real GDP growth over a year ago:

2.6% (previous outlook) → 2.2% (current outlook)

<The Japanese Economy>

FY2007 Even though growth is driven by external demand and capital investment, the weakness of the household sector is serving as a drag

Real GDP: 1.9% (previous outlook) 1.5% (current outlook)

Nominal GDP: 1.7% (previous outlook) 1.0% (current outlook)

FY2008 Growth will continue to be driven by external demand. The household sector will pick up in the second half of the fiscal year

Real GDP: 2.0% (previous outlook) → 2.0% (current outlook)

Nominal GDP: 2.5% (previous outlook) → 2.2% (current outlook)

This English-language translation is based upon the outlook in Japanese released on November 15, 2007. This publication is compiled solely for the purpose of providing readers with information and is in no way meant to encourage readers to buy or sell financial instruments. Although this publication is compiled on the basis of sources which MHRI believes to be reliable and correct, MHRI does not warrant its accuracy and certainty. Readers are requested to exercise their own judgment in the use of this publication. Please also note that the contents of this publication may be subject to change without prior notice.

I. The current state of the US economy

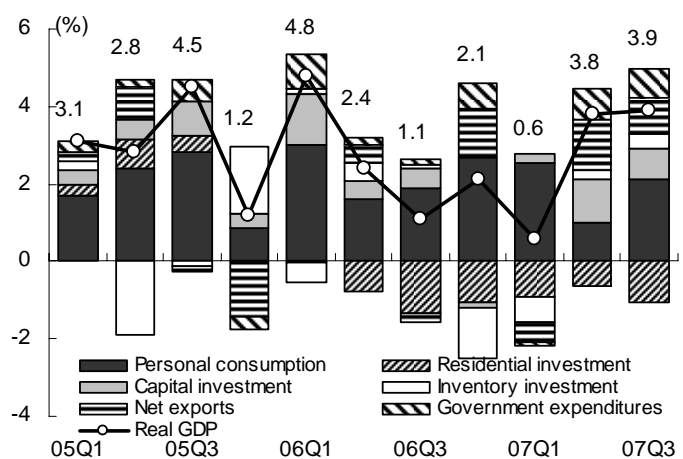
The US economy grew strongly in the Jul-Sep quarter of 2007 despite the fall of residential investment

US gross domestic product (GDP) in real terms grew a stronger-than-expected 3.9% q-o-q p.a. in the Jul-Sep quarter of 2007 ("advance" estimates as of October 31, 2007), paralleling growth in the previous quarter (3.8% q-o-q p.a.) (**Chart 1**). Despite the slowdown of residential investment (-20.1% q-o-q p.a.), personal consumption (3.0% q-o-q p.a.) and capital investment (7.9% q-o-q p.a.) - the twin pillars of domestic demand - grew strongly. In addition, the rise of exports (16.2% q-o-q p.a.) reflecting the expansion of overseas economies and government expenditures (3.7% q-o-q p.a.) pushed up by defense outlays served as tailwinds. That said, as highlighted by the fact that domestic final demand only grew 2.5% q-o-q p.a., it goes beyond doubt that the US economy is slowing down.

Despite the upbeat economic data thus far, the US economy appears to be headed for a slowdown. Amid the housing market correction, the financial market turmoil in the summer of 2007 is turning for the worse again, prompting views that the overall US economy will be subject to more intense downward pressures.

Judging from subsequent data releases for the Jul-Sep quarter since the advance estimates, net exports and inventory investment would be revised upward, leading to prospects that US real GDP will grow 5.0% q-o-q p.a. (US preliminary real GDP estimates to be released on November 29th, to be reflected in our forecast in December).

[Chart 1: US real GDP growth]



Note: Q-o-q % change, p.a. The bars represent the contribution to the line.
Source: US Department of Commerce.

| Q-o-q % ch, p.a. | 2007.Q3 | Contribution | 2007.Q2 |
|-------------------------|---------|--------------|---------|
| Real GDP | +3.9 | — | +3.8 |
| Personal consumption | +3.0 | +2.11 | +1.4 |
| Residential investment | -20.1 | -1.05 | -11.8 |
| Capital investment | +7.9 | +0.82 | +11.0 |
| Inventory investment | +15.7 | +0.36 | +5.8 |
| Net exports | -546.2 | +0.93 | -573.9 |
| Exports | +16.2 | +1.79 | +7.5 |
| Imports | +5.2 | -0.86 | -2.7 |
| Government expenditures | +3.7 | +0.73 | +4.1 |
| Domestic final demand | +2.5 | — | +2.1 |

Note: The q-o-q % change (p.a.) of inventory investment and net exports are expressed as the level (unit: USD billion).
Source: US Department of Commerce.

Despite price stability, the Fed is worried about the surge of energy prices

Growth outlook revised downward

US growth in 2007 will remain more or less unchanged at 2.1%. 2008 growth unchanged at 2.4% but will be revised downward on a 4Q basis

Turning to US price developments, the year-on-year percentage change of the core personal consumption expenditure (PCE) deflator slowed sharply from 2.4% y-o-y in the Jan-Mar quarter to 1.9% y-o-y in the Jul-Sep quarter, dipping into the “price stability zone” (1.0% to 2.0%). Nevertheless, given the surge of the energy and commodity markets, the Federal Reserve Board (the Fed) remains concerned of the risks of inflation.

We have essentially revised downward our outlook on the US economy in this *Economic Outlook for FY2007 and FY2008* (the “*MHRI Outlook*”) by adding on the three points below to our view set forth in the *MHRI Outlook* released on May 21, 2007. Firstly, the current strength of the US economy may be explained that it is merely a postponement of an unavoidable correction in the near future. We now predict that the US economy will slow in the first half of 2008 rather than the second half of 2007 as previously expected. Secondly, residential prices will fall more sharply than we had previously predicted, and over-evaluated residential prices will be corrected. These developments, coupled with the tighter lending stance among financial institutions, will serve to depress personal consumption. Thirdly, given the upward revision of crude oil prices, household’s real purchasing power will be subject to a sharper-than-expected slowdown.

Subsequent to these revisions, our estimates on US growth in 2007 and 2008 now stand at 2.1% y-o-y (previous outlook: 1.9% y-o-y) and 2.4% y-o-y (unchanged from previous outlook) respectively (**Chart 2**). The upward revision for the year 2007 reflects the solid expansion up to the Jul-Sep quarter. Although our outlook on growth in 2008 is unchanged on a calendar year basis, growth based upon real GDP growth in the Oct-Dec quarter has been revised downward from 2.6% y-o-y to 2.2% y-o-y. The US economy will most likely shift down into a phase of stagnant growth below 2% p.a. in the first half of 2008.

[Chart 2: Outlook on the US economy]

| | 2006 (Actual) | 2007 (Forecast) | 2008 (Forecast) | 2006 | | 2007 (Forecast) | | 2008 (Forecast) | |
|--|------------------|--------------------|--------------------|--------|--------|-----------------|--------|-----------------|--------|
| | | | | 1H | 2H | 1H | 2H | 1H | 2H |
| GDP | 2.9 | 2.1 | 2.4 | 3.3 | 1.7 | 1.8 | 3.3 | 1.8 | 2.4 |
| Personal consumption | 3.1 | 2.9 | 2.1 | 3.1 | 2.9 | 3.2 | 2.2 | 2.1 | 1.9 |
| Residential investment | -4.6 | -16.9 | -15.9 | -3.3 | -17.5 | -15.5 | -19.3 | -18.7 | -5.9 |
| Capital investment | 6.6 | 4.5 | 4.4 | 8.5 | 3.2 | 3.4 | 8.2 | 3.0 | 3.7 |
| Inventory investment (USD100 million) | 403 | 98 | 208 | 449 | 357 | 30 | 166 | 110 | 305 |
| Government expenditures | 1.8 | 2.0 | 3.0 | 2.2 | 1.5 | 1.6 | 3.4 | 2.7 | 3.0 |
| Net exports (USD100 million) | -6,245 | -5,643 | -5,113 | -6,334 | -6,156 | -5,930 | -5,356 | -5,113 | -5,113 |
| Exports | 8.4 | 7.8 | 7.8 | 9.8 | 7.8 | 5.9 | 11.8 | 6.9 | 5.7 |
| Imports | 5.9 | 2.2 | 2.8 | 7.6 | 3.3 | 1.6 | 2.1 | 2.5 | 4.2 |
| Domestic final demand | 2.7 | 1.8 | 1.8 | 3.1 | 1.5 | 1.9 | 2.0 | 1.5 | 2.0 |
| Core PCE deflator <y-o-y ch> | 2.2 | 2.0 | 1.8 | 2.1 | 2.3 | 2.2 | 1.9 | 1.8 | 1.8 |
| Current account balance (USD100 million) | -8,115 | -7,514 | -6,575 | -4,062 | -4,053 | -3,879 | -3,635 | -3,375 | -3,200 |
| <as a percentage of nominal GDP> | -6.2 | -5.4 | -4.5 | -6.2 | -6.1 | -5.7 | -5.2 | -4.7 | -4.3 |

Notes: 1. Calendar-year figures refer to the rate of change from the previous year. Half-year term figures refer to the rate of change from the previous half-year term (annualized).

2. The shaded columns are forecasts.

3. As for the current account balance, figures for the half-year terms are adjusted for seasonal factors and the calendar-year figures are the totals. The percentages of nominal GDP are annualized.

Sources: US Department of Commerce, US Department of Labor.

There still remains a large glut of unsold homes. The fall of residential investment will continue through 2008

The tightening of financial institutions' lending stance even toward prime borrowers and may lengthen the correction

Sharper fall of home prices will depress household cash flows, leading to a slowdown of consumer spending

The US housing market is following a downturn as expected. Residential investment should continue to decline through 2008.

Inventories of unsold homes are rising to the highest level since the mid-1960s. According to the US Department of Commerce, the number of unoccupied homes for sale reached 2.07 million units as of the end of September 2007. The inventory ratio (= residential inventories ÷ residential sales per month) is high, with new homes above eight months and existing homes above 10 months. In terms of demand, new home sales have fallen to the average level in 1997, just prior to the housing bubble. On the supply-side, construction starts of new homes fell below 1 million units per annum, dropping to levels in the early 1990s. Homebuilder sentiment has fallen to the lowest level since the mid-1980s.

Our simulation on the future course of the inventory ratio remains unchanged from the previous *MHRI Outlook* even when taking into account the recent developments (**Chart 3**). Assuming that residential sales and housing starts remain weak, the inventory ratio would return to the appropriate level in the second half of 2008 (Case ③ in **Chart 3**).

The tighter mortgage lending stance among financial institutions reinforces the probability of this scenario, leading to our view that the residential investment correction will continue through 2008. However, the odds are high that it will take even longer for the housing market downturn to subside.

The Fed's *Senior Loan Officer Opinion Survey on Bank Lending Practices* reveals that financial institutions are tightening their lending standards not only with respect to subprime residential mortgages and nontraditional loans in reflection of the deterioration of the subprime mortgage problem, but also regarding loans toward sound borrowers (prime borrowers). Even though a simple comparison would be difficult, the percentage of financial institutions which responded that they had tightened their lending stance toward prime borrowers is surpassing the level in the early 1990s (even though borrowers in this case may include borrowers other than prime borrowers) when the economy fell into a recession accompanied by a credit crunch.

The tightening of financial institutions' lending stance coupled with a sharper fall of home prices will lead to a significant adjustment of household spending activities.

According to economists at the Fed, free cash from home equity extraction used for spending reached USD334.3 billion as of 2006. Of this amount, the portion channeled to personal consumption and remodeling of homes alone would be close to 2% of personal consumption

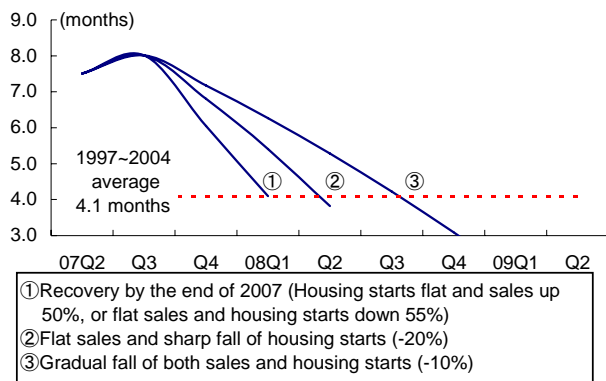
We estimate that home prices are over-valued by 16% as of mid-2007 and the futures market also factors in a drop around 10%. Based upon our assumption

that home prices will continue to fall and the overvaluation will be corrected during the forecast horizon, reducing most of the home-related loans financing the spending mentioned above.

As a result, the growth of household cash flows (personal income + free spending cash from equity extraction) will slow sharply from 5.5% y-o-y in 2007 to 3.7% y-o-y in 2008 (**Chart 4**). Given the upward revision of our outlook on the price of crude oil, household cash flows will fall to around 1.5% in real terms and serve as significant downward pressures upon personal consumption.

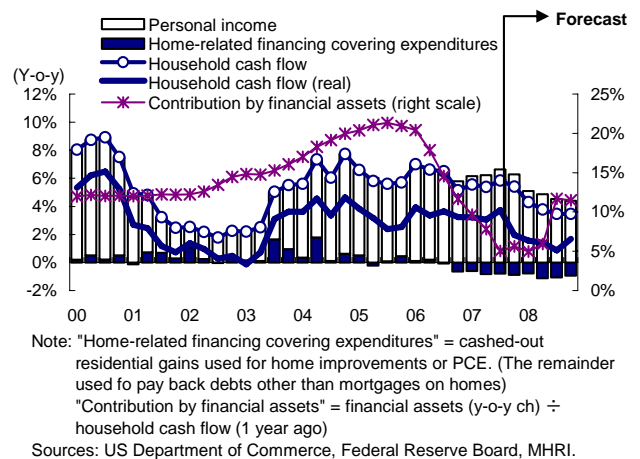
That said, we also believe that the risks of personal consumption falling into negative territory will be averted, based upon our view that crude oil prices will start to fall on a quarter-on-quarter basis from the Apr-Jun quarter of 2008 and the trends in financial assets which constitute the second key factor supporting household spending activities.

[Chart 3: Simulations on housing inventory ratios]



Note: The percentage change of sales and housing starts are q-o-q p.a.
 Source: Mizuho Research Institute Ltd. (MHRI).

[Chart 4: Household cash flows]



Capital investment activities are slowing down. Companies may put off investments due to uncertain future outlook

Capital investment in the corporate sector should slow down. Given the rising uncertainties toward the future, there are risks that corporations will put off investment in plant and equipment beyond our forecast horizon.

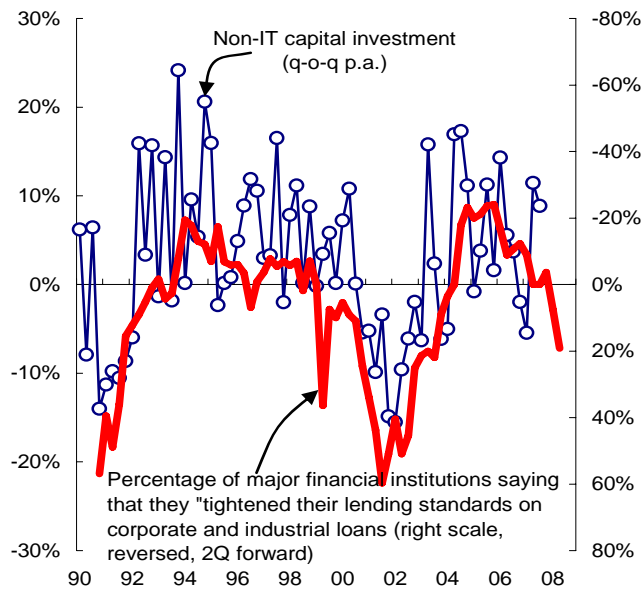
In the US, recent capital investment more or less reflects the fundamentals as shown by the fact that investment is driven by the construction of petroleum and natural gas drilling facilities in reflection of high energy prices, construction of office buildings amid the low level of vacancy rates and the construction of hotels reflecting the strength of consumer spending.

However, from the perspective of the capital investment cycle, a further rise would suggest bubble-like factors in the background, leading to prospects of a downturn. The behavior of financial institutions is also gathering attention. Looking at developments thus far, non-IT capital investment, excluding IT investment deemed as strategic investments, have been strongly interlocked with the lending stance of financial institutions, with the lending stance leading non-IT

capital investment by approximately two quarters (**Chart 5**). Given that financial institutions have shifted their lending stance on commercial and industrial loans from “accommodative” to “tight” in the summer of 2007, the odds are high that non-IT capital investment which have thus far treaded on firm grounds will start to slow down.

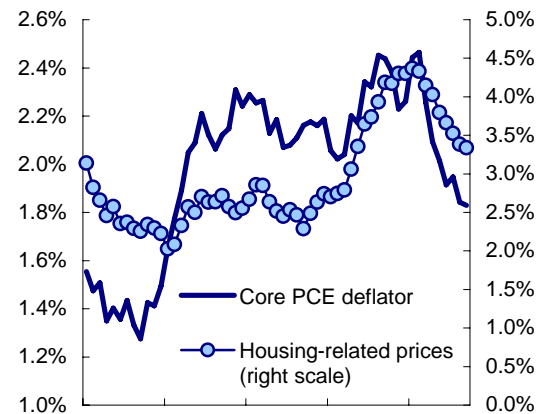
[Chart 5: Non-IT investment and financial institutions’

lending stance]



Sources: FRB, US Department of Commerce.

[Chart 6: Housing-related prices and core inflation]



Note: Y-o-y change.

Source: US Department of Commerce.

Core inflation should hover within the price stability zone as the output gap widens disinflationally and residential prices follow a downtrend

Given prospects that the US economy will slow down and the output gap will widen, core inflation should hover within the price stability zone. Furthermore, judging from forecasts that the price of crude oil will fall, the overall inflation rate should also follow a mild decline. Even though the overall inflation rate will rise 3.4% y-o-y in the Oct-Dec quarter of 2007, it should fall to 1.8% y-o-y in the Oct-Dec quarter of 2008.

Even though the rise of inflationary pressures stemming from the surge of crude oil prices and commodity markets is a source of concern, from the perspective of relative prices, the impact of housing related prices – a component factor of core inflation – may not be ignored. The rise of housing-related prices is slowing down amid the housing market correction, serving to push down the core inflation rate (**Chart 6**).

As mentioned earlier, given prospects that residential prices will continue to fall, core inflation will be subject to further downward pressures. Meanwhile, even though high energy prices will push up the core inflation rate through the rise of hotel fees and transportation & communication costs, core inflation on a net basis should remain stable.

Worries regarding the destabilization of inflation expectations amid soaring natural resource prices and the weakness of the dollar

More important than the trends in prices of goods and services are the output gap and inflation expectations. The output gap will widen due to forecasts of slower US economic growth ahead, serving to push down the core inflation rate.

There are reasons to be concerned regarding inflation expectations. Fed Chairman Ben S. Bernanke said in his Congressional Testimony on November 8th that “prices of crude oil and other commodities had increased sharply in recent weeks, and the foreign exchange value of the dollar had weakened. These factors were likely to increase overall inflation in the short run and, should inflation expectations become unmoored, had the potential to boost inflation in the longer run as well”.

If inflation expectations were to destabilize amid the surge of natural resource prices and the weakness of the dollar, inflation would rise under a slowing economy, wreaking havoc not only with respect to price developments but also upon the overall financial market. Even though our fundamental view is that prices will remain stable, it will be necessary to keep a close eye upon the destabilization of inflation expectations and the upside risks of inflation.

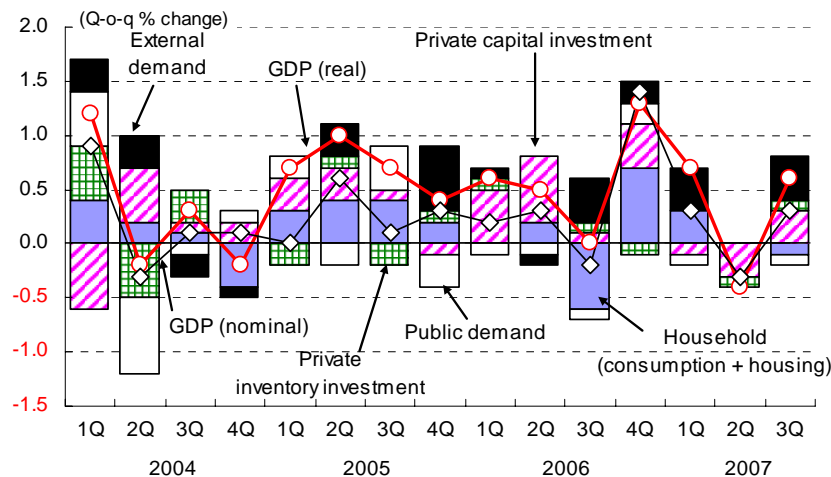
II. The Japanese economy

(1) The current state of the economy

External demand-led growth in the Jul-Sep quarter of 2007

Japan's real GDP grew 0.6% q-o-q (2.6% q-o-q p.a.) in the Jul-Sep quarter of 2007, recording positive growth for the first time in two quarters, above the potential rate of growth rate estimated to be slightly below 2% for the first time in two quarters (**Chart 7**). In addition to a slight rise of domestic demand, external sector demand made a larger contribution to growth.

[Chart 7: Japan's quarterly GDP growth]



Source: Cabinet Office, *Preliminary Quarterly Estimates of GDP*.

Looking closer at each of the components of demand, personal consumption (0.3% q-o-q) remained weak as in the Apr-Jun quarter (0.2% q-o-q). Even so, the results are surprisingly stable considering the negative impact upon disposable income stemming from the rise of local inhabitant tax burdens since June. Factors such as the ongoing brisk sale of consumer electronics such as flat-panel TVs is contributing to the stable rise of consumption of durable goods. Housing investment fell sharply (-7.8% q-o-q) due to stricter regulations on construction plans as a result of the amendment of the buildings standards law. The contribution of the household sector (personal consumption + residential investment) to the growth rate stood at -0.1% pt. Capital investment grew 1.7% q-o-q, growing for the first time in three quarters. Due in part to a larger contribution by private-sector inventory investment (0.1%pt), the contribution by domestic private-sector demand rose to 0.3% pt. Despite a mild rise of government expenditures, the contribution by public demand remained negative (-0.1% pt) for the third quarter in a row because of the ongoing decline of public investment. The contribution by domestic demand - public and private demand combined - stood at 0.2% pt. Export growth, on the other hand, surged 2.9% q-o-q and surpassed the growth of imports (0.5% q-o-q), pushing up the contribution by external demand (0.4% pt). Even though the Japanese economy grew above its potential rate of growth in the Jul-Sep quarter, the foregoing reveals

**Nominal GDP grew 0.3%
q-o-q**

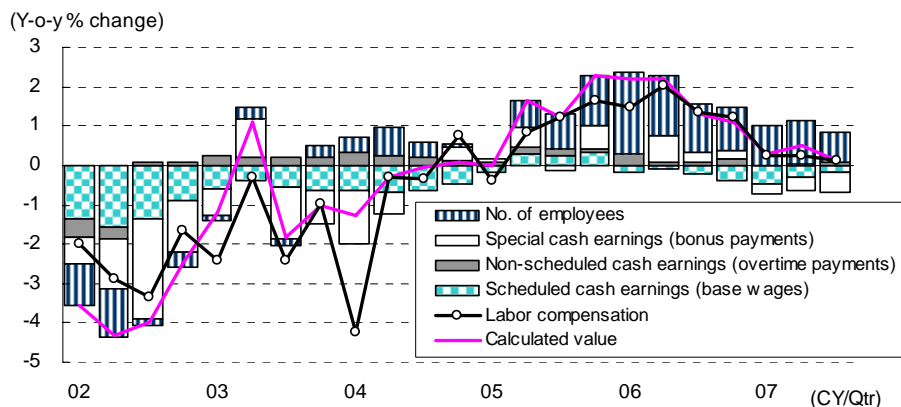
**Labor compensation
remained sluggish**

the weakness of domestic demand and a growing dependence upon foreign growth.

The GDP deflator, a broad measure of price changes, stood in negative territory (-0.3% y-o-y) as in the previous quarter. GDP growth on a nominal basis stood at 0.3% q-o-q (1.4% q-o-q p.a.), falling below growth in real terms for the first time in two quarters.

According to data on labor compensation released simultaneously with the GDP statistics, labor compensation continued to fall, declining to 0.1% y-o-y in the Jul-Sep quarter, from 0.3% y-o-y in the Apr-Jun quarter (**Chart 8**). Labor compensation is continuing to decline after peaking in early 2006. This stems from the persistent decline of nominal wages despite year-on-year rise in number of employees. In addition, for the first time in three years, bonus payments (special cash earnings) fell below the previous year mainly among small corporations. Personal consumption is subject to downside risks such as the soft income environment, rise in price of gasoline and food and the bearish stock market.

[Chart 8: Labor compensation]



Note: Calculated value = nominal wages x no. of employees. The bars represent the contribution to the line.
Sources: Ministry of Health, Labor and Welfare, *Monthly Labor Survey*, Ministry of Internal Affairs and Communications, *Labor Force Survey*, Cabinet Office, *National Accounts*.

**The Japanese economy
will continue to grow
driven by external
demand**

So far, we have held the view that the Japanese economy will be driven by domestic demand and return to a self-sustained recovery track from the second half of FY2007 to the first half of FY2008. However, we have changed our outlook that Japan's domestic demand will slump and that the economy will be dependent upon external demand. This stems from a vicious cycle as follows: weak business performance among small corporations → fall of wages → slumping personal consumption → (resulting in a further deterioration of performance among small corporations). This is serving as an obstacle to the proper functioning of the mechanism envisaged by the Bank of Japan and the government where the recovery in the corporate sector will spread to the household sector.

We have also factored in the fall of housing starts due to the tightening of building standards into our outlook.

[Chart 9: Export ratios of manufacturers]

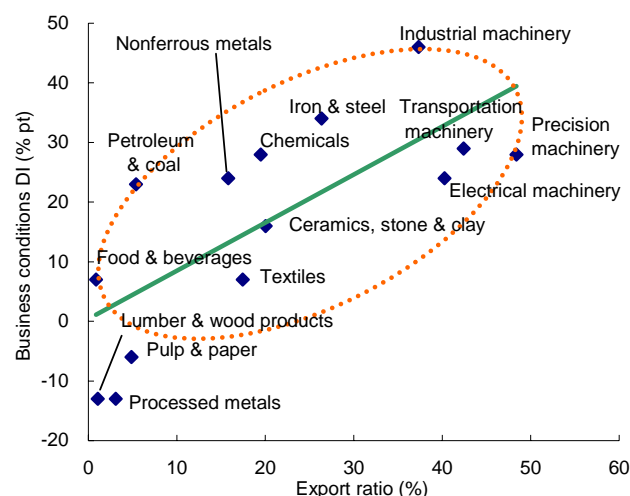
(%)

| | All enterprises | | | |
|---------------------------|-----------------|-------------------|--------------------------|-------------------|
| | | Large enterprises | Medium-sized enterprises | Small enterprises |
| Manufacturing | 22.2 | 28.5 | 11.3 | 6.7 |
| Basic materials | 13.7 | 16.6 | 10.7 | 3.7 |
| Pulp & paper | 3.6 | 4.9 | 4.4 | 0.7 |
| Chemicals | 18.0 | 19.5 | 12.7 | 11.1 |
| Petroleum & coal products | 5.3 | 5.4 | 4.6 | 3.7 |
| Ceramics, stone & clay | 12.1 | 20.0 | 5.7 | 0.9 |
| Iron & steel | 20.9 | 26.3 | 17.2 | 1.5 |
| Nonferrous metals | 13.8 | 15.8 | 12.2 | 3.7 |
| Processing | 25.9 | 33.9 | 11.6 | 7.9 |
| Industrial machinery | 28.4 | 37.3 | 23.1 | 13.8 |
| Electrical machinery | 34.2 | 40.3 | 14.4 | 9.9 |
| Transportation machinery | 37.1 | 42.4 | 15.8 | 9.4 |
| Precision machinery | 40.7 | 48.4 | 21.2 | 39.8 |

Note: Export ratio = exports ÷ sales (FY2006)

Source: Bank of Japan, *Short-Term Economic Survey of Enterprises in Japan (TANKAN)*.

[Chart 10: The export ratio and business confidence
(large manufacturers)]



Note: Export ratio = exports ÷ sales (FY2006)

Business conditions DI based upon survey in September 2007

Source: Bank of Japan, *TANKAN*.

Rising dependence upon exports

As evident from the components of growth in the Jul-Sep quarter, the Japanese economy is growing more dependent upon exports. The BOJ's *Short-Term Economic Survey of Enterprises in Japan (TANKAN)* in September revealed that the diffusion index (DI) on business conditions remained flat among large manufacturers but worsened among large non-manufacturers and small and medium-sized corporations. This gap in perception most likely stems from the difference in weight of exports in sales. According to the ratio of domestic demand and exports in sales in FY2006, ascertained by financial information in the *TANKAN* survey, most of the sales of non-manufacturers, regardless of corporate size, were domestic demand-oriented. The export ratio (the amount of exports divided by total sales) was only 3.2%. In contrast, the export ratio among manufacturers rose from 18.6% in FY2003 to 22.2% in FY2006. Of course, there are large disparities among companies of different sizes. While approximately 30% of sales among large manufacturers was comprised of exports in FY2006, the percentage of exports in sales was only 7% among small and medium-sized manufacturers (**Chart 9**). This, we believe, has led to the gap in business confidence. Even among large manufacturers, there appears to be a positive correlation between the export ratio and business confidence; the higher the export ratio, the higher the business conditions DI (**Chart 10**). Viewed overall, sectors with high export ratios are more upbeat, indicating that the Japanese economy is growing more dependent upon external demand.

Small corporations are facing slower growth of earnings due to weak domestic demand

Small corporations are finding difficult to raise prices

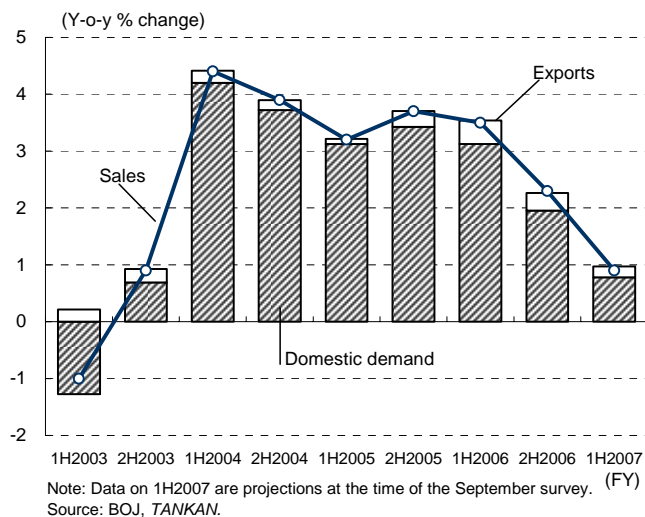
Given the stagnant growth of domestic demand such as consumer spending, earnings among small corporations (Note) having a large domestic demand ratio is slowing sharply in FY2007. According to the *TANKAN* survey in September, sales in the first half of FY2007 are projected to slow sharply to 0.9% y-o-y from 2.9% y-o-y in FY2006 (**Chart 11**). Note that the pace of slowdown is considerably faster than large corporations. Sales among large corporations are projected to fall to 4.2% y-o-y in the first half of FY2007 from 5.2% y-o-y in FY2006.

Note: In the *TANKAN* survey, enterprises with 20~99 employees in the wholesaling industry, 20~49 employees in the retailing, services and leasing industries, and 50~299 employees in other industries are classified as "small".

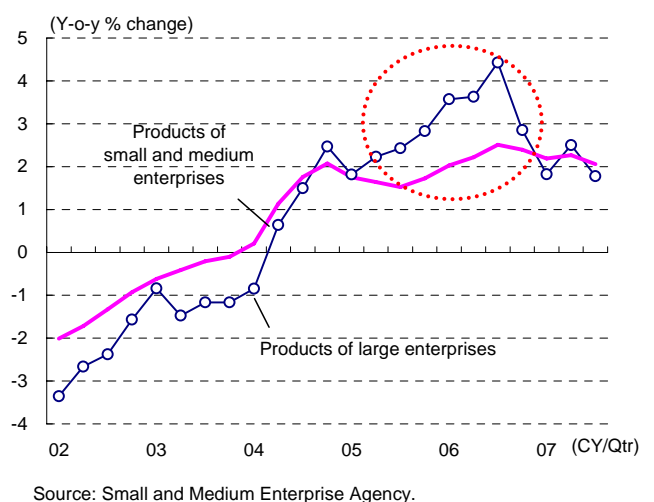
Small corporations have found it more difficult to price in the higher raw material costs stemming from the surge of crude oil and metal markets than large corporations. It appears that the difference in pricing power has served to dampen business confidence among small corporations. The trends in the corporate goods price index by corporate size (manufacturing industry products) underscores that prices of products manufactured by large corporations rose at a faster pace than those manufactured by small corporations during the period from the second half of FY2005 to FY2006 (**Chart 12**). This suggests the possibility that small corporations were not able to raise the price of their products to match rising costs as much as large corporations.

[Chart 11: Trends in sales of small enterprises in the BOJ

TANKAN]



[Chart 12: Corporate Goods Price (by corporate size)]



The labor distribution rate is rising among small corporations due to rising labor costs

Furthermore, labor costs are rising at a faster pace, hence pushing down profits among small corporations in comparison to large corporations. According to the *Financial Statements Statistics of Corporations by Industry, Quarterly*, labor costs are continuing to decline among large corporations in contrast to a significant rise of labor costs among small corporations due primarily to the increase of personnel since FY2006. A comparison of the operating profit ratio (operating profit/sales)

among large corporations and small corporations reveals a rise among large corporations up to FY2006 in contrast to a downturn from FY2005 among small corporations (**Chart 13**). During this time span, both large and small corporations were subject to the decline of the value-added ratio (value-added/sales) stemming from the rise of raw material costs. Meanwhile, while the labor distribution rate is continuing to fall among large corporations, the labor distribution rate has been climbing since FY2005 among small corporations. Even though small corporations, which are more labor intensive than large corporations, have hired more workers to stem the worker shortage and prepare for future business expansion, it appears that they have had to cut wages per worker because of stagnant sales (mainly domestic demand) and rise of raw material costs in order to maintain their profit margin.

[Chart 13: Financial ratios of large and small corporations]

(%)

| | Large corporations | | | Small corporations | | |
|---|--------------------|--------|--------|--------------------|--------|--------|
| | FY2004 | FY2005 | FY2006 | FY2004 | FY2005 | FY2006 |
| Operating profit ratio (operating profit/sales) | 4.79 | 4.81 | ↗ 5.07 | 3.01 | ↘ 2.83 | ↘ 2.72 |
| Value-added ratio (value added/sales) | 18.7 | 17.9 | ↘ 17.5 | 21.2 | 20.6 | 20.7 |
| Labor distribution rate (labor costs/value-added) | 50.0 | 49.2 | ↘ 47.4 | 77.0 | ↗ 77.9 | ↗ 78.0 |

Notes: 1. Large corporations = corporations with capital of JPY 1billion or over.

2. Small corporations = corporations with capital of JPY 10~100 million.

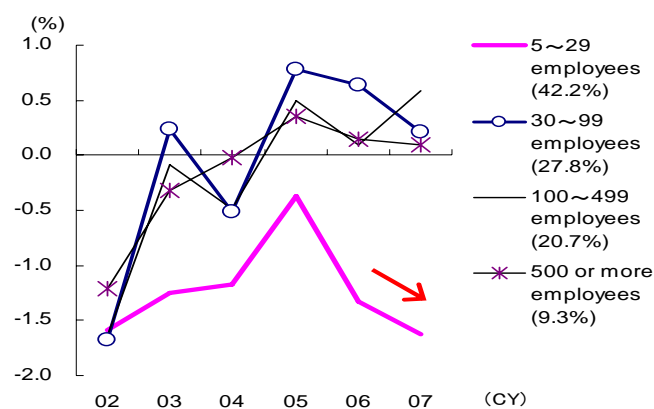
3. Value-added = operating profits + labor costs + depreciation cost.

Source: Ministry of Finance, *Financial Statements Statistics of Corporations by Industry, Quarterly*.

Base wages among small establishments are falling even in sectors unrelated to consumer spending

The current weak growth of wages stems from the stance among small corporations to reign in labor costs amid grim business conditions. A look at the trends in base wages (scheduled cash earnings) by size of establishment reveals a sharp fall among small establishments (with 5~29 employees) since 2006 (**Chart 14**).

[Chart 14: Scheduled cash earnings (base wages) by size of establishment]



Notes: 1. Data on 2007 = y-o-y change of Jan-Aug average.

2. Figures in parenthesis refer to the share in employees.

Source: Ministry of Health, Labor and Welfare, *Monthly Labor Survey*.

In the *MHRI Outlook* released on May 21, 2007, we wrote that wages among small establishments were dragged down mainly in the three following sectors

related to consumer spending: (1) wholesale and retail trade, (2) eating & drinking places, accommodations, and (3) services not elsewhere classified. We also pointed out that there is a strong possibility that the wage slump is a temporary phenomenon caused by the weakness of consumer spending in the summer of 2006. However, subsequent findings suggest that the wage slump is not temporal.

Base wages are still falling among small establishments in 2007. To see which sectors are contributing to the fall, refer to **Chart 15** which sets forth a breakdown of the decline. The breadth of the fall has narrowed among the three consumer spending-related sectors which had served as a drag upon base wages in 2006 and their contribution to the year-on-year change of base wages of small establishments as a whole contracted from -0.54% pt in 2006 to -0.15% pt. On the other hand, the chart shows a larger drag by sectors such as manufacturing, information & communications, transport and, medical, health care & welfare. It appears that wages are falling in small establishments in a wider range of sectors not only limited to consumer spending-related sectors as we had pointed out before.

[Chart 15: Breakdown of scheduled cash earnings of small establishments]

| | 2007 scheduled cash earnings (y-o-y % ch) | No. of employees (100,000) | Ratio of total (%) | FY2007 contribution (% pt) | [Reference] FY2006 contribution (% pt) |
|--|--|----------------------------------|--------------------------|----------------------------------|---|
| Industries covered | -1.4 | 1867 | 42.2 | -0.60 | -0.53 |
| Mining | -6.0 | 2 | 0.1 | -0.00 | 0.00 |
| Construction | 0.9 | 202 | 4.6 | 0.04 | -0.02 |
| Manufacturing | -0.8 | 233 | 5.3 | -0.04 | -0.01 |
| Electricity, gas, heat supply and water | 1.3 | 6 | 0.1 | 0.00 | -0.01 |
| Information and communications | -5.3 | 37 | 0.8 | -0.04 | 0.02 |
| Transport | -4.5 | 78 | 1.8 | -0.08 | 0.01 |
| Wholesale and retail trade | -0.7 | 509 | 11.5 | -0.08 | -0.21 |
| Financial and insurance | -2.0 | 58 | 1.3 | -0.03 | -0.02 |
| Real estate | -2.3 | 21 | 0.5 | -0.01 | 0.04 |
| Eating and drinking places, accommodations | -0.5 | 198 | 4.5 | -0.02 | -0.21 |
| Medical, health care and welfare | -3.0 | 160 | 3.6 | -0.11 | -0.03 |
| Education, learning support | -5.2 | 116 | 2.6 | -0.14 | -0.12 |
| Compound services | -2.7 | 24 | 0.5 | -0.01 | 0.00 |
| Services, not elsewhere classified | -0.8 | 221 | 5.0 | -0.04 | -0.13 |
| 3 consumer spending-related sectors | -0.7 | 929 | 21.0 | -0.15 | -0.54 |

Notes: Y-o-y change of Jan-Aug average.

Source: Ministry of Health, Labor and Welfare, *Monthly Labor Survey*.

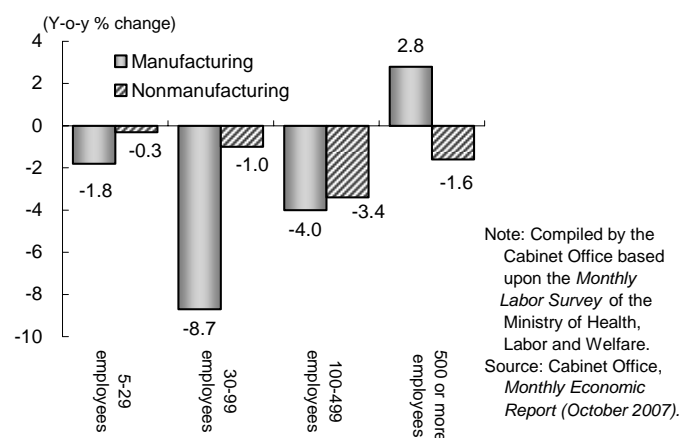
Summer bonus payments fell mainly among small and medium-sized corporations

In addition to the fall of base wages, summer bonus payments (special cash earnings) also decreased mainly among small and medium-sized corporations. This year, overall summer bonus payments fell 1.1% y-o-y, falling into negative territory for the first time in three years. According to June-August special cash earnings (mainly bonus payments) in the *Monthly Labor Survey* recalculated by the Cabinet Office in accordance to corporate size, bonus payments rose from the previous year only among manufacturers with 500 or more employees (**Chart 16**). Summer bonus payments in all other sectors fell below the previous year, revealing a clear gap between large manufacturers which are continuing to enjoy a strong earnings recovery due to the growth of exports and firms in other sectors.

Wages and personal consumption are revised downward

As shown above, the Japanese economy is at the brink of a negative spiral stemming from “weak business performance among small corporations” leading to the “fall of wages”, “slumping personal consumption” and resulting in a further deterioration of performance among small corporations. Moreover, the odds are high that these conditions will continue until the first half of 2008 when the price of crude oil will remain high and corporate profit growth will continue to slow down mainly among small corporations. Although we believe that the deterioration of corporate business performance will come to a halt in the second half of 2008 because of a downturn of crude oil prices, a full-fledged recovery of personal consumption is unlikely during FY2008.

[Chart 16: Special cash earnings (bonus payments) by size of establishment]



Judging from the foregoing, we have revised downward our forecast on wages in FY2007 and FY2008 and revised up our forecast on personal consumption in FY2008. Furthermore, imports have been revised down and the contribution by external demand has been revised up in consideration of the ongoing weakness of domestic demand. The Japanese economy should continue to grow in FY2007 and FY2008 driven by external demand.

The revision of the building standards law will push down growth in FY2007 by 0.37% pt

We have also factored in the fall of housing starts due to the implementation of stricter regulations on construction plans as a result of the revision of the building standards law. As of September, housing starts have fallen by approximately 40% from the previous year. Even though housing starts should gradually pick up from October, the fall of residential investment will inevitably push down the rate of growth in the second half of FY2007. We predict that residential investment (in nominal terms) will fall approximately 10% on a full-year basis in FY2007. According to estimates using the construction sector *Input-Output Table*, the direct impact upon growth stemming from the fall of residential investment would be -0.34% pt. Furthermore, the negative impact through the fall of durable goods consumption which would accompany the purchase of new homes is a benign -0.03% pt.

Housing starts would return to normal levels in the first half of 2008 [since the

revision of the building standard law only delays housing starts and therefore only has a temporary impact]. In a rebound from the drop in FY2007, residential investment in nominal terms would rise 10% in FY2008. The magnitude of the positive impact in FY2008 would be more or less equivalent to the magnitude of the negative impact in FY2007.

[Chart 17: The economic impact of a 10% decline of nominal residential investment]

| | Unit | Economic impact of residential construction | Consumption expenditures accompanying purchase of homes | Total |
|----------------------------------|---------------|---|---|--------|
| Construction investment | (JPY 100 mil) | -1,890 | -166 | -2,057 |
| Fall of production | (JPY 100 mil) | -3,637 | -290 | -3,927 |
| Production induction coefficient | | 1.9237 | 1.7439 | 1.9092 |
| Fall of gross value-added | (JPY 100 mil) | -1,742 | -146 | -1,888 |
| As a percentage of GDP | (%) | -0.34 | -0.03 | -0.37 |

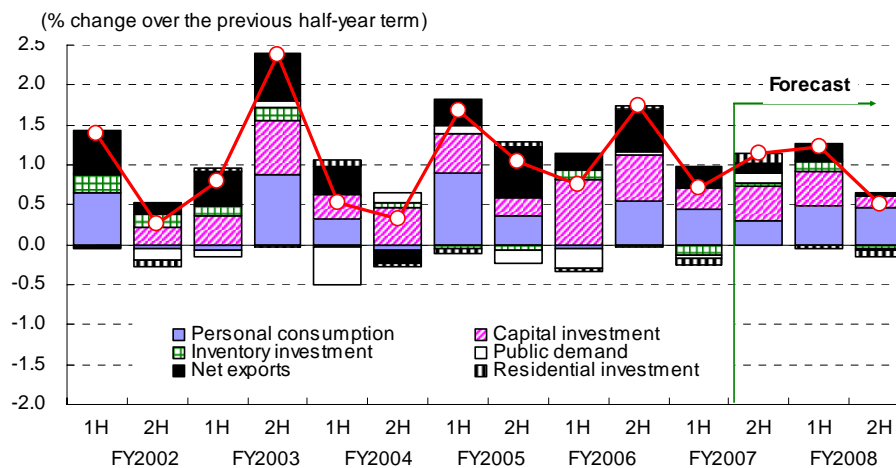
Source: Estimates based upon data released by the Ministry of Land, Infrastructure and Transport.

(2) Forecast of the Japanese economy in FY2007 and FY2008

Slumping household demand in the second half of FY2007

Although external demand and capital investment will drive the Japanese economy, household sector demand is predicted to stagnate in the second half of FY2007 (**Chart 18**). Despite prospects of further economic slowdown in the US from the Oct-Dec quarter of 2007, Japan's exports mainly toward Asia will remain on solid footing, thus keeping the Japanese economy on an external demand-driven path. Industrial production should continue to grow mainly in IT-related sectors and capital investment will most likely pick up from a temporary drop in the first half of FY2007. On the other hand, winter bonus payments are forecast to fall below the previous year because of a grimmer profit environment mainly among small corporations. The rise of gasoline and food prices and the stock market slump are dampening consumer confidence, leading to our view that personal consumption will continue to stagnate. Furthermore, the fall of residential investment due to the revision of the building standards law will push down the rate of growth. Even though growth will rise to 2.1% p.a. in the second half of FY2007, it will be dependent upon external demand and capital investment.

[Chart 18: Forecast on Japan's real GDP growth (half-year basis)]



**Real GDP will grow
1.5% in FY2007**

Judging from the foregoing, we now expect full-year GDP growth in FY2007 to stand at 1.5% in real terms (previous outlook: 1.9%). The GDP deflator will remain in negative territory for the tenth year in a row in FY2007 (-0.5% y-o-y) and growth on a nominal basis is predicted to remain at 1.0% (previous outlook: 1.4%), falling below growth in real terms.

**FY2008 1H to remain on
an export-driven growth
track**

In the first half of FY2008, the rebound of residential investment will push up the rate of growth. On the other hand, the outlook on household income growth is lackluster with the annual *shunto* wage hike in the spring remaining more or less unchanged from the previous year and summer bonus payments to fall short of the previous year. Consumer spending will remain low. Given the weak growth of domestic demand and high crude oil prices, the corporate sector – mainly small and medium-sized companies – should remain in a dire earnings environment. That said, the global economy will continue to record strong growth, albeit at a slightly slower pace, keeping Japan's exports on solid footing. The Japanese economy will continue to follow an external demand-driven growth track in the first half of FY2008. On the supply-side, the IT sector should continue to boost output based upon prospects on the rise of demand for consumer electronic appliances both in Japan and overseas prior to the Beijing Olympic Games. In the first half of FY2008, growth in real terms is forecast to rise to 2.3% p.a. due in part to a rebound of residential investment.

**Exports and production
activity to slow in
FY2008 2H**

In the second half of FY2008, the price of crude oil should take a downturn, serving to alleviate the rise of cost pressures upon corporate profits. Wages will also rise slightly above the previous year and personal consumption should also pick up. However, considering that the demand and supply of IT products and parts will ease after the Beijing Olympic Games, industrial production and exports should slow down. The pace of capital investment growth should also decline reflecting the slowdown of production activity. In the second half of FY2008, the rate of growth should slow down to 1.6% p.a.

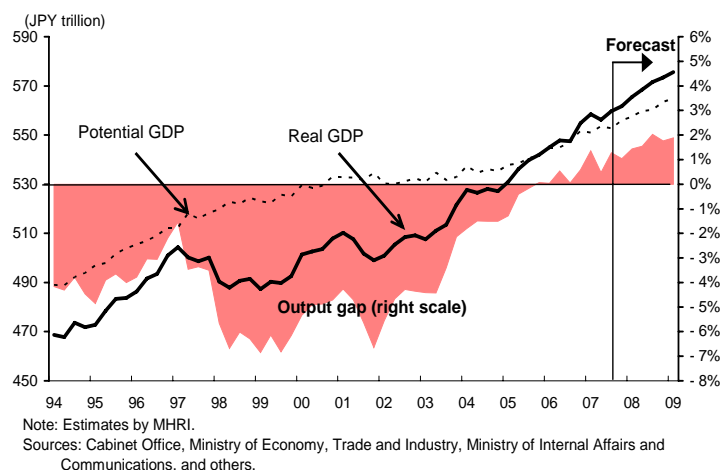
Self-sustained growth is unlikely in FY2008

The output gap will widen in the first half of FY2008

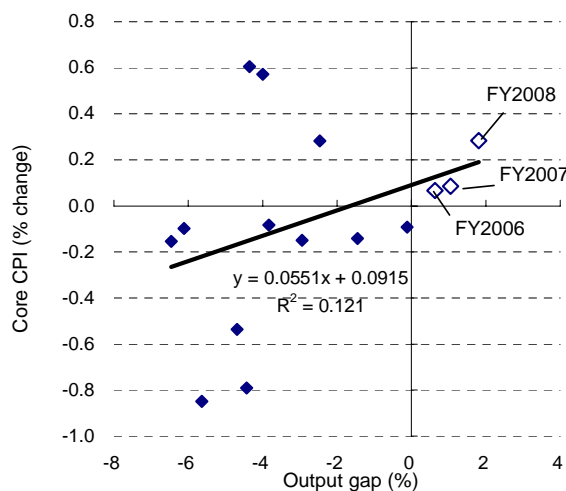
On a full-year basis, we expect the pace of real GDP growth to reach 2.0% (previous outlook: 2.0%) in FY2008. However, note that 0.3% pt stems from the rebound of residential investment. Given the large 0.6% pt contribution by external demand (MHRI estimates that the contribution by external demand in FY2007 is 0.9% pt), the word “autonomous” would not be an apt description of growth in FY2008. Nominal GDP growth should reach 2.2% (previous outlook: 2.5%), surpassing growth in real terms for the first time in 11 years.

The output gap (the gap between demand and supply) estimated by MHRI stood at +1.3% as of the Jul-Sep quarter of 2007 (**Chart 19**). As long as the Japanese economy grows in accordance to our outlook, the positive breadth of the output gap should widen to around +2% in the first half of FY2008. Even so, the correlation between the output gap and the percentage rise of the core CPI is not so strong (**Chart 20**). Despite our forecasts that the core CPI will rise 0.1% in FY2007 and 0.3% in FY2008, non-energy sector prices will not rise as much since the core CPI will be swayed by energy prices accompanying the fluctuation of crude oil prices.

[Chart 19: The output gap]



[Chart 20: The output gap and core CPI]



Note: Estimates of the core CPI and the output gap since FY1994 by MHRI. Forecasts from FY2007 onward.
Source: MHRI, based upon data including *Consumer Price Index* of the Ministry of Internal Affairs and Communications.

The waning correlation between the output gap and the core CPI suggests the possibility that other forces such as globalization are pushing down prices or that there is a margin of error in the estimation of the output gap. We shall be fine-tuning the accuracy of our estimates through further analyses of the foregoing issues.

[Chart 21: Outlook on the Japanese economy]

| | FY2006 (Actual) | FY2007 (Forecast) | FY2008 (Forecast) | FY2007 | | FY2008 | | FY2007 | FY2008 |
|--|--------------------|----------------------|----------------------|----------|------------|------------|------------|----------------|----------------|
| | | | | 1H | 2H | 1H | 2H | (Contribution) | (Contribution) |
| | | | | (Actual) | (Forecast) | (Forecast) | (Forecast) | (Forecast) | (Forecast) |
| GDP (real) | 2.0 | 1.5 | 2.0 | 0.5 | 2.1 | 2.3 | 1.6 | - | - |
| Domestic demand | 1.3 | 0.6 | 1.5 | -0.4 | 1.3 | 1.8 | 1.2 | 0.6 | 1.4 |
| Private sector demand | 2.1 | 0.9 | 1.9 | -0.3 | 1.4 | 2.4 | 1.6 | 0.7 | 1.4 |
| Personal consumption | 0.7 | 1.5 | 1.2 | 1.6 | 1.0 | 1.2 | 1.5 | 0.8 | 0.7 |
| Residential investment | 0.4 | -11.8 | 9.8 | -16.3 | -16.8 | 25.9 | 10.1 | -0.4 | 0.3 |
| Capital investment | 7.7 | 1.5 | 2.9 | -2.8 | 6.6 | 2.2 | 1.1 | 0.2 | 0.5 |
| Public sector demand | -1.4 | -0.2 | -0.0 | -1.0 | 1.0 | -0.2 | -0.4 | -0.0 | -0.0 |
| Government consumption | 0.9 | 0.8 | 0.6 | 0.9 | 0.9 | 0.6 | 0.5 | 0.1 | 0.1 |
| Public investment | -9.6 | -4.1 | -3.0 | -8.9 | 1.2 | -3.9 | -4.6 | -0.2 | -0.1 |
| Net exports (contribution) | 0.8 | 0.9 | 0.6 | 0.9 | 0.8 | 0.5 | 0.5 | 0.9 | 0.6 |
| Exports | 8.2 | 7.9 | 6.1 | 8.2 | 7.3 | 6.1 | 5.0 | 1.2 | 1.0 |
| Imports | 3.4 | 2.4 | 3.5 | 3.0 | 3.1 | 4.0 | 2.9 | -0.3 | -0.4 |
| GDP (nominal) | 1.3 | 1.0 | 2.2 | 0.0 | 1.2 | 2.9 | 2.1 | | |
| GDP deflator | -0.6 | -0.5 | 0.2 | -0.3 | -0.7 | -0.2 | 0.5 | | |
| Industrial production | 4.8 | 2.9 | 3.0 | 1.5 | 2.4 | 1.0 | 0.4 | | |
| Unemployment rate | 4.1 | 3.9 | 3.7 | 3.8 | 3.9 | 3.8 | 3.6 | | |
| Current account balance (trillion yen) | 21.2 | 24.2 | 26.0 | 25.4 | 22.4 | 26.2 | 25.0 | | |
| as a percentage of nominal GDP | 4.1 | 4.7 | 4.9 | 4.9 | 4.3 | 5.0 | 4.7 | | |
| Domestic corporate goods prices | 2.8 | 2.1 | 1.9 | 2.2 | 2.1 | 2.0 | 1.8 | | |
| Consumer prices | 0.1 | 0.1 | 0.3 | -0.1 | 0.3 | 0.4 | 0.2 | | |
| Long-term interest rate (%) | 1.75 | 1.65 | 1.88 | 1.70 | 1.61 | 1.80 | 1.95 | | |
| Nikkei stock average (JPY) | 16,450 | 17,000 | 17,600 | 17,300 | 16,700 | 17,300 | 17,900 | | |
| Exchange rate (JPY/USD) | 117.0 | 116 | 114 | 119 | 114 | 113 | 115 | | |
| Crude oil price (WTI/barrel) | 64.9 | 75.2 | 74.3 | 70.2 | 80.1 | 78.7 | 69.8 | | |

Notes: 1. FY = rate of change from the previous year. Half-year GDP = rate of change from the previous term p.a. (the GDP deflator = rate of change from the previous year).

2. Half-year corporate goods prices and half-year consumer prices = rate of change over a year ago. Consumer prices = nationwide (excluding fresh foods).

3. Half-year industrial production = rate of change from the previous term. The half-year unemployment rate and half-year current account balance are adjusted for seasonal factors and the figures on current account balance are converted into annualized rates.

4. Crude oil price = near-term contract for WTI crude futures. The long-term interest rate = yield on newly-issued 10-yr government bonds.

Sources: Cabinet Office, *National Accounts*, Ministry of Economy, Trade and Industry, *Indices of Industrial Production*, Ministry of Internal Affairs and Communications, *Labor Force Survey*, *Consumer Price Index*, Ministry of Finance, *Balance of Payments*, Bank of Japan, *Corporate Goods Price Index*.

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