# Economic Outlook for FY2008 and FY2009

**December 2008**

The Mizuho Research Institute Ltd. (MHRI) has revised its economic outlook for FY2008 and FY2009 subsequent to the release of *The First Preliminary Quarterly Estimates of GDP (1st QE")* for the Jul-Sep quarter of 2008. The key points are as follows.

## <The US Economy>

| | |
|---|---|
| | Progress of balance sheet adjustment in the household sector will drag economic growth into negative territory |
| **2008** | 1.5% (previous outlook) → 1.3% (current outlook) |
| **2009** | 0.7% (previous outlook) → -0.8% (current outlook) |

## <The Japanese Economy>

| | |
|---|---|
| **FY2008** | Exports and capital investment will fall at a faster pace in the second half of the fiscal year |
| | Real GDP: 0.6% (previous outlook) → -0.5% (current outlook) |
| | Nominal GDP: -0.2% (previous outlook) → -1.2% (current outlook) |
| **FY2009** | Negative growth looks unavoidable, reflecting the global economic slowdown |
| | Real GDP: 1.0% (previous outlook) → -0.9% (current outlook) |
| | Nominal GDP: 2.0% (previous outlook) → 0.1% (current outlook) |



Mizuho Research Institute

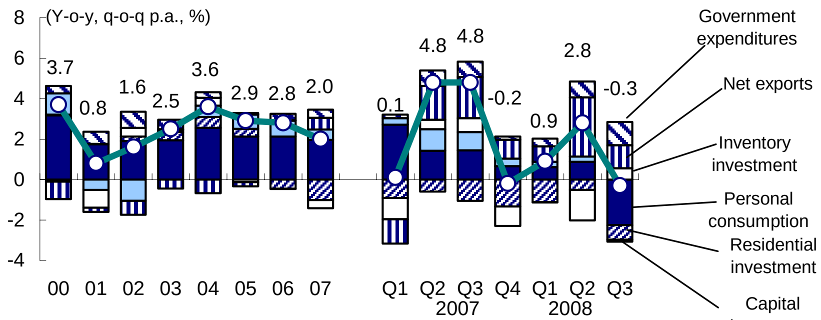
# I. The US economy

**US economic conditions worsened (-0.3% q-o-q p.a.) in the Jul-Sep quarter of 2008, given the broad fall of domestic private demand**

US gross domestic product (GDP) in real terms fell 0.3% q-o-q p.a. in the Jul-Sep quarter of 2008 (advance estimates)(Note), recording negative growth for the second time after the Oct-Dec quarter of 2007 (**Chart 1**). Looking closer at the components of growth, personal consumption fell sharply (-3.1% q-o-q p.a.) as a result of the ongoing deterioration of labor market conditions and the sharp contraction of consumption activity in the household sector due to its loss of support from tax cuts. In addition to the ongoing reduction of residential investment (-19.1% q-o-q p.a.), corporate capital investment also slowed down (-1.0% q-o-q p.a.). Totaling the foregoing, domestic private-sector final demand fell sharply (-3.5% q-o-q p.a) In contrast, the expansion of defense spending (18.2% q-o-q p.a.) and external demand (contribution 1.1% q-o-q p.a.) served to keep real GDP growth from falling deep into negative territory.

(Note) US real GDP growth in the Jul-Sep quarter of 2008 was revised down to -0.5% p.a. according to preliminary estimates released on November 25, 2008

**[ Chart 1: US real GDP growth ]**




Note: The line represents real GDP (calendar year data on a y-o-y basis and quarterly data on a q-o-q basis). The bars represent the contribution to the line.
Source: US Department of Commerce.

**Deepening financial crisis leads to a turnaround in stance among regulatory authorities**

There have been signs since September that the financial turmoil stemming from the subprime mortgage meltdown is spreading around the world. The rise of credit uncertainties triggered by the collapse of Lehman Brothers led to a flight to safety and liquidity among a wide range of markets including the inter-bank, CP and deposit markets. In turn, such broad capital flight movements resulted in aggravating the concerns regarding the availability of credit. Amid the deepening financial crisis, the US regulatory authorities shifted from a passive stance stressing the avoidance of moral hazard to a positive regulatory intervention stance, as symbolized by the G-7 Action Plan announced in October.

**US Treasury prioritizes capital injection. FDIC provides broad insurance coverage.**

The US Department of the Treasury is placing priority upon capital injections (Capital Purchase Program) instead of purchasing distressed assets under the USD700 billion Troubled Assets Relief Program (TARP) as initially intended. Furthermore, the Federal Deposit Insurance Corporation (FDIC) has moved forward to provide full deposit insurance coverage toward Non-interest Bearing

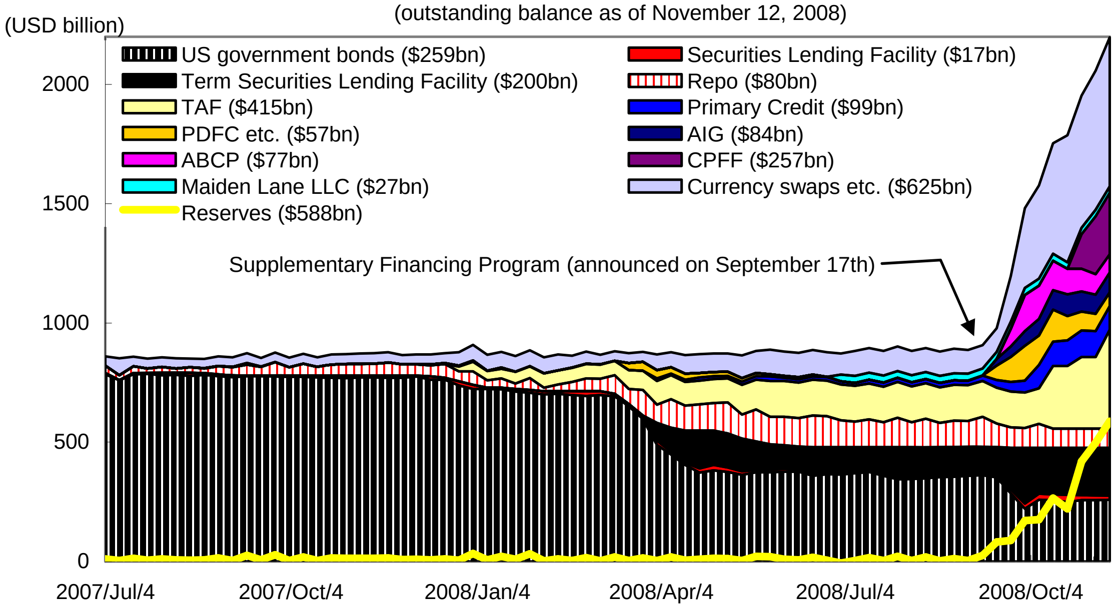
Transaction Accounts used for corporate funding and newly issued senior unsecured debt of banks (including promissory notes, commercial paper, inter-bank funding).

**Fed provides new liquidity-boosting facilities for purchase of commercial paper**

On the other hand, the US Federal Reserve Board announced the following facilities to improve the liquidity of money market mutual funds (MMMF): (1) the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), a special facility targeted toward financial institutions, providing funding for the purchase of asset-backed commercial paper from MMMF, and (2) the Money Market Investor Funding Facility (MMIFF), a special facility targeted toward special purpose vehicles established by the private sector (PSPVs), providing funding for PSPVs' purchase of instruments such as negotiable certificates of deposit issued by the ten designated financial institutions from MMMFs. Moreover, the Fed also announced the creation of the Commercial Paper Funding Facility (CPFF) for the direct purchase of commercial paper from CP issuers. Given the large scale of the Fed's liquidity-boosting measures including the expansion of currency swap agreements with central banks overseas, the Fed's balance sheet has doubled since the end of August, surpassing USD2 trillion as of mid-November (**Chart 2**).

**[ Chart 2: Reserve bank credit ]**

(outstanding balance as of November 12, 2008)




Note: Breakdown of Reserve Bank credit and reserves. Based upon balances as of Wednesday every week.
US government bonds exclude the Securities Lending Facility and the Term Securities Lending Facility.
Sources: MHRI, based upon Federal Reserve Board, Federal Reserve Bank of New York.

**Growth forecast slashed. 2008 real GDP growth: 1.3% y-o-y (September outlook: 1.5%). 2009 economic growth to chart negative territory for the first time since 1991 (-0.8%, September outlook: 0.7%)**

Given the deepening financial crisis, the US economy appears to have slipped into a recession in the Jul-Sep quarter of 2008. Triggered by the fall into recession, a worse-than-expected stock adjustment in the housing market and balance sheet adjustment in the household sector will most likely lead to a sharp deterioration of the US economy. Since a prolonged labor market adjustment comparable to the early 1990s and the early 2000s will serve as a significant drag upon personal consumption, US economic growth is expected to drop into negative territory in 2009 for the first time since 1991. Even though growth will turn positive in the second half of 2009, the ongoing adjustment of labor will keep the sense of recovery subdued during 2010.

Even though the Federal Open Market Committee (FOMC) implemented a major interest rate cut, bringing down the federal funds rate to 1.00%, the rate cut will not have much effect during 2009 due to the debilitating state of the financial system.

In this Economic Outlook, we have revised down our forecasts on real GDP growth to 1.3% in 2008 and -0.8% in 2009 (the forecasts in our Economic Outlook in September were 1.5% and 0.7% respectively). The rate of real GDP growth in 2010 should also remain below the potential rate of growth.

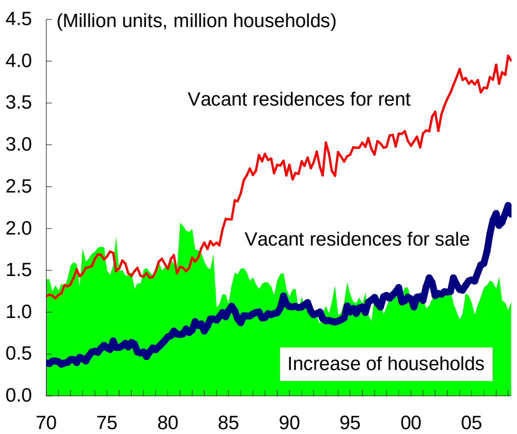
**The number of vacant residences is surpassing housing demand, leading to the deterioration of household assets**

In the following section, we shall look at the environment surrounding personal income – the cornerstone of the US economy – from the perspective of household balance sheet adjustment and labor market adjustment.

Firstly, on the asset side of household balance sheets, we expect a further deterioration of assets along with the fall of residential prices. In our previous Economic Outlook, we said that “residential prices are overvalued by 10%~20%”. Our view remains unchanged and we believe that stock adjustment will serve as a drag upon the recovery of home prices.

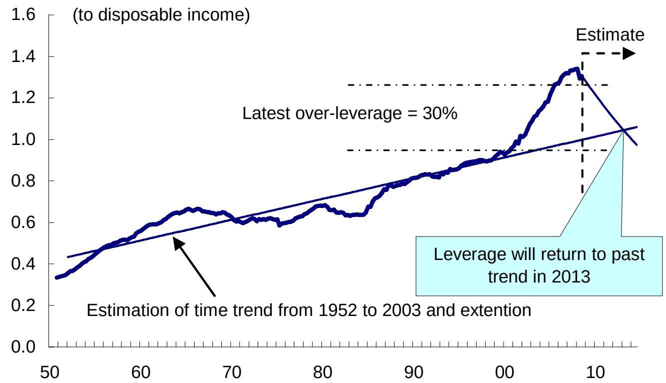
There are approximately 6.24 million vacant residences in the US housing market, including both residences for rent and for sale (owner-occupied homes), as of the end of September 2008 (**Chart 3**). A simple way to assess the level surpassing 6 million units is to compare this number with the rise in number of new households per year. US households have been growing at a pace of 1.13 million households per year since 1990 in terms of averages during a period of three years or so (the increase is expressed in three-year averages since the increase of households every year is subject to wide fluctuations depending upon demographic trends and economic conditions). Even at its highest pace of growth, the increase of new households was only 1.64 million households in 2005. The number of vacant residences in the US housing market is equivalent to the increase of households – comprising the fundamental demand for housing – for five to six years. Even when limiting the count of vacant residences to owner-occupied homes and excluding rental housing which have been following an uptrend since the mid-1980s, the number of vacant residences would still be equivalent to two years worth of household growth. Looking forward, according to the US Census Bureau of the Department of Commerce, there are no signs that US population growth will gather momentum at least up to around 2010. Even in terms of the 20-34 age bracket – the age group perceived to generate new residential demand – the population will only increase by 1.6 million by 2010.

**[ Chart 3：The number of vacant residences and the increase of households ]**




Note: In the graph above, the increase of households is represented as the average of the past 3 years due to wide fluctuations in annual figures.
Source: US Department of Commerce.

**[ Chart 4: Household leverage ratio ]**




Note: Household leverage ratio = credit market debt outstanding ÷disposable income. Calculated under the given condition of outstanding household debt in the Apr-Jun quarter of 2008 and the assumption that disposable rises at a pace of 5% p.a. (more or less equivalent to the average during the past 20 years).
Sources: US Department of Commerce, FRB, MHRI.

From a demographic perspective, namely the increase of households, the odds are high that the US housing market will be subject to strong stock adjustment pressures for several years. Of course, it is still possible that the rise of new industries in certain regional cities will lead to the rise of housing demand through the relocation of people from other areas and result in the recovery of residential investment. At the same time however, a demographic exodus from residential “boom towns” in areas such as California, Florida and Nevada will be inevitable.

**Household debt burdens reach record highs. Unavoidable need to reassess excessive borrowings**

Let us now turn to the debt side of household balance sheets. Outstanding debt in the household sector (outstanding debt in the credit market) reached USD14 trillion as of the end of June 2008, equivalent to approximately 1.3 times of disposable income. The ratio of debt repayment burdens to disposable income (the debt service ratio) stood at 14% in the Apr-Jun quarter of 2008, reaching the highest level since 1980 when such statistics are available. This leads to our view that excess debt among households including mortgage loans and consumer loans is growing to considerable levels. In the event we attempt to lower the leverage (= credit market debt outstanding ÷ disposable income) by keeping the current level of outstanding debt unchanged, it would take approximately five years to return to the past trend (**Chart 4**).

Financial institutions are also tightening their lending stance. According to past experience, it would take more than a year for such stance to return to neutral positions. We are thus inclined to believe that financial conditions surrounding the household sector will continue to tighten from both the demand-side and supple-side perspectives.

**The return of a job-loss recovery**

Along with balance sheet adjustment pressures, the aggravation and prolongation of the labor market downturn will serve as a drag upon personal consumption. Unlike conventional phases of economic recovery, employees continued to cut jobs in the past two economic recessions and subsequent recovery phases, leading to the coinage of terms such as the "jobless recovery" or the "job-loss recovery". Going forward, the chances are extremely high that a similar adjustment will occur in the labor market. US corporations will implement significant job cuts over a prolonged period in a bid to improve productivity and profitability, serving to stem the recovery of personal consumption.

**Fiscal spending is the risk factor in economic growth forecasts**

Amid the full-blown deterioration of domestic private-sector demand, comprised mainly of personal consumption, fiscal spending is an upside risk in the outlook of the US economy.

US president-elect Barack Obama promised during his election campaign that he would implement a USD190 billion economic stimulus package (the size of the package is based upon estimates by the Committee for a Responsible Federal Budget, a bipartisan NGO). The stimulus package will most likely be formed into legislation and discussed by the new Congress starting in 2009. The contents will be comprised mainly of public investment and assistance toward low-income earners and the unemployed, and will not have as much immediate effect as the tax rebates. Even so, given the rising sentiment that "significant fiscal spending is inevitable", US growth may be driven up temporarily depending upon the contents and size of fiscal spending (there will be no need to be concerned about the rise of interest rates and the crowding out of private investment due to fiscal spending).

## [ Chart 5: Outlook on the US economy ]

(%)

| | 2007 | 2008 | 2009 | 2008 (Forecast) | | 2009 (Forecast) | |
|---|---|---|---|---|---|---|---|
| | | (Forecast) | (Forecast) | 1H | 2H | 1H | 2H |
| GDP | 2.0 | 1.3 | -0.8 | 1.1 | -0.3 | -1.9 | 0.9 |
| Personal consumption | 2.8 | 0.3 | -1.4 | 1.0 | -2.3 | -2.0 | 0.7 |
| Residential investment | -17.9 | -20.8 | -17.3 | -22.9 | -17.1 | -20.6 | -10.1 |
| Capital investment | 4.9 | 2.9 | -5.5 | 2.7 | -1.2 | -8.3 | -4.1 |
| Inventory investment (USD100 million) | -25 | -462 | -508 | -304 | -621 | -626 | -389 |
| Government expenditures | 2.1 | 3.0 | 3.8 | 2.1 | 4.8 | 3.5 | 3.5 |
| Net exports (USD100 million) | -5,465 | -3,834 | -3,264 | -4,217 | -3,452 | -3,279 | -3,250 |
| Exports | 8.4 | 8.0 | -0.5 | 6.7 | 4.6 | -3.0 | -0.3 |
| Imports | 2.2 | -2.5 | -3.3 | -2.8 | -4.3 | -4.3 | -0.5 |
| Domestic final demand | 1.8 | 0.2 | -1.2 | 0.4 | -1.3 | -2.1 | 0.6 |
| Unemployment rate | 4.6 | 5.7 | 7.5 | 5.1 | 6.3 | 7.2 | 7.8 |
| Nonfarm payrolls (per month, 1,000 persons) | 127 | -118 | -150 | -55 | -180 | -235 | -65 |
| PCE deflator <y-o-y ch> | 2.6 | 3.7 | 1.8 | 3.6 | 3.9 | 2.4 | 1.3 |
| Core PCE deflator <y-o-y ch> | 2.2 | 2.3 | 1.9 | 2.2 | 2.3 | 2.0 | 1.8 |
| Current account balance (USD100 million) | -7,312 | -7,069 | -6,058 | -3,588 | -3,481 | -3,095 | -2,963 |
| <as a percentage of nominal GDP> | -5.3 | -4.9 | -4.2 | -5.0 | -4.8 | -4.3 | -4.1 |

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. Regarding 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, MHRI.

# II. The Japanese economy

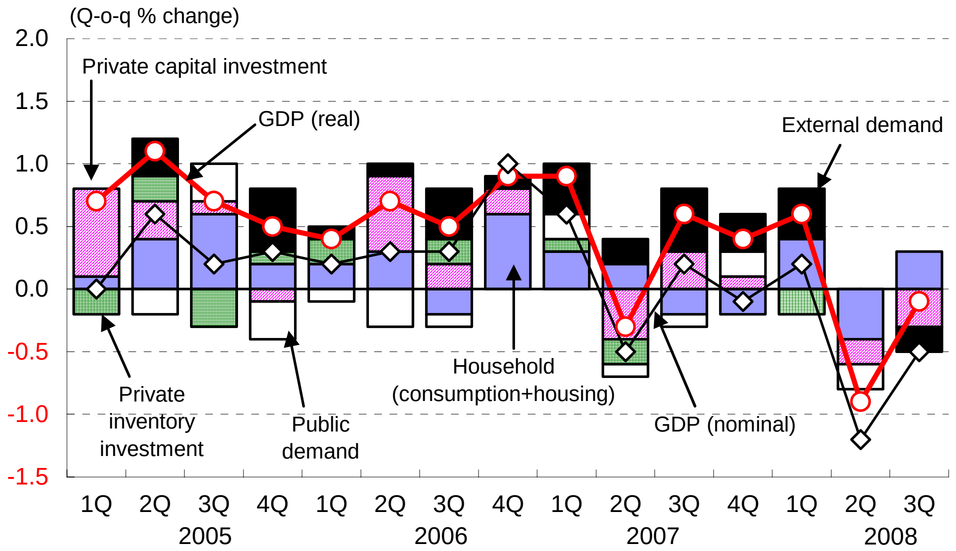
## (1) The current state of the economy

**The Japanese economy shrank for the second quarter in a row due to the fall of capital investment and negative contribution by external demand**

Japan's real GDP shrank 0.1% q-o-q (-0.4% q-o-q p.a.) for the second quarter in a row in the Jul-Sep quarter of 2008 (**Chart 6**).

Looking closer at each of the components of demand, personal consumption edged up (0.3% q-o-q) primarily among durable goods given the increase in purchase of air conditioners due to the hot weather this summer. On a work-in-progress basis, residential investment increased for the first time in two quarters (4.0% q-o-q), reflecting the materialization of housing starts up to the beginning of the year. Capital investment continued to decline (-1.7% q-o-q) due to the deterioration of corporate business performance. Given a slight acceleration of private-sector inventory investment, its contribution to Japan's economic growth turned out to stand at +0.0% pt. The contribution by domestic private-sector demand managed to stay in positive territory (0.1% pt). Public investment and government consumption both inched up, rising 0.4% q-o-q and 0.1% q-o-q respectively, resulting in the positive contribution (0.0% pt) by public demand for the first time in three quarters. As a result, the contribution by domestic demand turned out to be slightly positive (0.1% pt). In contrast, the contribution by exports turned out to fall (-0.2% pt) and serve as the major drag upon growth as a result of exports growing only 0.7% q-o-q and falling below the growth of imports (1.9% q-o-q)

**[ Chart 6：Japan's quarterly GDP growth ]**




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

**Fall of gross domestic income (GDI) due to worsening terms of trade**

The GDP deflator, a broad measure of price changes, turned out to be the same as the Apr-Jun quarter of 2008 (-1.6% y-o-y). The rate of nominal GDP growth fell 0.5% q-o-q (-2.1% p.a.), falling far below growth in real terms. Given the rise of raw material and fuel prices, the domestic demand deflator rose to 1.3% y-o-y from 0.8% y-o-y in the Apr-Jun quarter. However, as the import deflator surged to 17.5% y-o-y (Apr-Jun quarter: 10.7% y-o-y) due to the rise of natural resource prices, the breadth of the GDP deflator in negative territory remained unchanged from the previous quarter. Furthermore, since trading gains fell deeper into negative territory due to the deterioration of Japan's terms of trade, real gross domestic income (GDI) fell 2.5% y-o-y (Apr-Jun quarter: -1.3% y-o-y). This indicates that the deterioration of terms of trade was the major cause of the economic slump up to the Jul-Sep quarter of 2008.

**Growth in the Oct-Dec quarter will lose further momentum, dragged down mainly by exports and capital investment**

The recent results indicate that as early as the Jul-Sep quarter, the Japanese economy had fallen into conditions lacking a driver, such as the flat growth of personal consumption and exports amid the decline of capital investment. Even though the deterioration of terms of trade will subside from the Oct-Dec quarter when the impact of the financial crises starts to emerge in the real economy, the pace of real economic growth should fall deeper into negative territory, dragged down mainly by exports and capital investment.

**The impact of the financial crisis will start to emerge in the real economy from the Oct-Dec quarter**

Even though Japan's worsening trade terms was the main cause of the economic downturn up to the Jul-Sep quarter, the impact of the financial crisis will start to emerge in the real economy from the Oct-Sep quarter. The collapse of Lehman Brothers in September triggered a global stock market plunge and wild fluctuations in currency exchange rates. It now appears certain that the global economic slowdown will speed up as the impact of the financial turmoil spreads to the real economy.

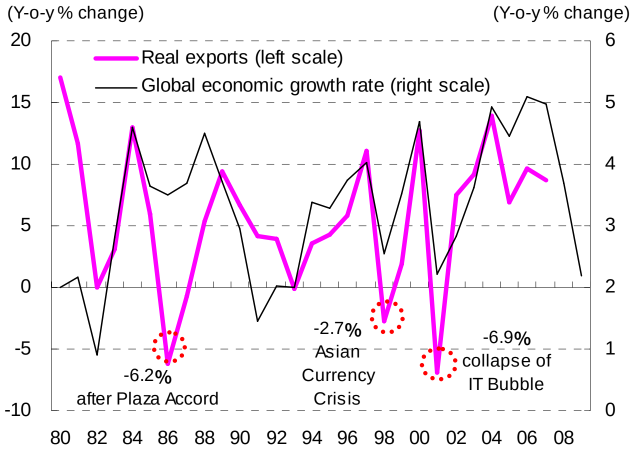
**Exports will start to plunge**

The global economic slowdown will lead to the decline of Japan's exports. The signs are already evident in Japan's statistics on production. While industrial production fell 1.3% q-o-q in the Jul-Sep quarter, falling for the third quarter in a row, the forecast indices (October: -2.3% m-o-m, November: -2.2% m-o-m) predict a sharp production downturn from October onward. While this stems from a full-fledged production downturn in the automobile industry which has thus far kept up a high level of production, the odds are high that exports will fall sharply from the Oct-Dec quarter since the downturn of car output corresponds to the global fall of automobile sales reflecting the financial crisis.

**Exports will decline for the first time in eight years in FY2009**

Given its dependence upon external demand, the decline of exports will serve as a significant blow upon the Japanese economy. In contrast to the high rate of global economic growth, ranging around 4~5% during the four years up to 2007, the IMF's World Economic Outlook (as of November) projects that growth will slow down to 3.7% in 2008 and 2.2% in 2009. It is the first time since 2001~2002, when the global IT bubble collapsed, that the global economy will slow down to the 2%-level. While Japan's exports fell sharply at the three following junctures since the 1980s, it now appears certain that 2009 will mark the fourth major fall of Japan's exports: (1) 1986 after the Plaza Accord (-6.2% y-o-y), (2) 1998 after the Asian currency crisis (-2.7% y-o-y) and (3) 2001 after the collapse of the IT Bubble (-6.9% y-o-y). Exports will slump from the second half of FY2008 and fall in FY2009 for the first time in eight years since FY2001 (**Chart 7**).

**[ Chart 7: Global economic growth and real exports ]**




Note: The global economic growth rates in 2008 and 2009 are based upon the IMF's outlook (as of November 2008).
Sources: Cabinet Office, *National Accounts,* IMF, *World Economic Outlook*.

**[ [Chart 8: The impact of the export slowdown ]**

(%)

| | Breadth of export downturn | | | |
|---|---|---|---|---|
| | -1% | -3% | -5% | -7% |
| Real GDP | -0.12 | -0.36 | -0.61 | -0.85 |
| Corporate earnings | -0.19 | -0.58 | -0.97 | -1.36 |
| Industrial production | -0.39 | -1.16 | -1.93 | -2.70 |

Note: Estimates based upon the *SNA Input-Output Table (2005)* and the breakdown of mining and manufacturing shipments. Corporate earnings refer to "operating surplus + mixed income". Indirect effects are not taken into consideration.
Sources: Cabinet Office, *SNA Input-Output Table (2005),* Ministry of Economy, Trade and Industry, *Breakdown List of Mining and Manufacturing Shipments.*

**The fall of exports will lead to the stagnation of domestic demand**

The downturn of exports will have a negative impact upon production in the manufacturing sector and corporate earnings (**Chart 8**). According to an estimate based upon the *Breakdown List of Mining and Manufacturing Shipments*, approximately 40% of manufacturers' shipments are related to exports. In particular, processing industries such as general machinery, transportation equipment, electrical machinery and precision instruments are affected greatly by the downturn of exports, given their large weight of shipments overseas. In FY2009, larger production cuts in these industries will entail the decline of wages and employment and serve to dampen personal consumption. The downturn of exports, leading to the deterioration of production and corporate earnings, will result in the stagnation of personal consumption and adjustment of capital investment. The Japanese economy faces an extremely bleak outlook from the second half of FY2008 to FY2009.

**The strong yen and bearish stocks will serve as headwinds**

Japan also suffered major stock market falls amid the financial and capital market turmoil from mid-September. The Nikkei stock average, which stood at the JPY14,000-level at the beginning of the year, fell to the JPY7,000-level at one time. Since then, Japanese stocks have been trading at a low level of JPY8,000 to JPY9,000. Note also that the Japanese yen has been appreciating against all other major currencies.

**The stock market plunge will serve as a heavy blow upon both the corporate and household sectors**

Corporate businesses will suffer major financial blows from the fall of stock prices. Pension assets managed by corporate businesses are shrinking in value due to the recent stock market plunge. Unless the stock market picks up by the end of the accounting term, the amortization costs could drag down periodical profit during the coming decade or so. Furthermore, the evaluation losses on cross-shareholdings will also erode core capital. The deterioration of corporate financial conditions will serve as a damper upon corporate capital investment behavior. Moreover, in addition to households suffering losses due to the fall in value of stockholdings, the stock market plunge will also lead to the stagnation of overall personal consumption through the deterioration of consumer confidence. According to estimates using MHRI's Mizuho Macroeconometric Model, a 50% fall of stock prices will lead to the decline of personal consumption (-1.8%), capital investment (-2.2%) and real GDP (-1.3%) (**Chart 9**).

**The appreciation of the yen will have an adverse impact upon the economy through the fall of earnings among export-oriented firms**

Despite the positive aspects of a strong yen such as the improvement of purchasing power on a mid- to long-term perspective, its negative impact through the deterioration of profits of export-oriented firms in the short run is far greater. According to estimates using the aforementioned Mizuho Macroeconometric Model, the appreciation of the yen from JPY100/USD to JPY90/USD would drag down ordinary profits (-1.3%) and real GDP (-0.3%) (**Chart 10**). While the fall of exports accompanying the global economic slowdown is the principal cause of the economic downturn from the second half of FY2008 to FY2009, the stock market fall and appreciation of the yen will also serve to aggravate the economic slowdown.

**[ Chart 9: The impact of the stock market fall ]**

(%)

| | Percentage fall of stock prices | | |
|---|---|---|---|
| | -10% | -30% | -50% |
| Ordinary profits | -0.9 | -2.7 | -4.6 |
| Real GDP | -0.3 | -0.8 | -1.3 |
| Personal consumption | -0.4 | -1.1 | -1.8 |
| Capital investment | -0.4 | -1.3 | -2.2 |

Note: Calculations based upon the Mizuho Macroeconometric Model. Ordinary profits are based upon the *Financial Statements Statistics of Corporations by Industry, Quarterly.*

**[ Chart 10: The impact of the appreciation of the yen ]**

(%)

| | Exchange rate (JPY/USD) | | |
|---|---|---|---|
| | 95 | 90 | 85 |
| Ordinary profits | -0.6 | -1.3 | -1.9 |
| Real GDP | -0.1 | -0.3 | -0.4 |
| Exports | -0.6 | -1.3 | -1.9 |
| Capital investment | -0.5 | -1.0 | -1.5 |
| CPI | -0.2 | -0.3 | -0.5 |

Note: Calculations based upon the Mizuho Macroeconometric Model (compared with JPY100/USD). Ordinary profits are based upon the *Financial Statements Statistics of Corporations by Industry, Quarterly.*

**The economic stimulus measures will only have limited effect in boosting the economy**

A key point in providing an outlook on the economy in FY2009 will be how to evaluate the effect of the economic stimulus measures. Along with the deepening sense of Japan's economic recession since the summer months, the government of Japan unveiled a series of economic stimulus packages as follows: the "Comprehensive Immediate Policy Package – Easing Anxiety – " (announced on August 29th, stimulus worth JPY11.7 trillion, of which JPY2.0 trillion will be funded by central government outlays) and the "Policy Measures for Securing a Stable Life" (announced on October 30th, stimulus worth JPY26.9 trillion yen, of which JPY5.0 trillion will be funded by central government outlays). Even though the stimulus packages will only have limited direct effect upon economic growth since the packages are comprised mainly of liquidity-providing measures and support toward businesses and households affected by the rise of energy prices, they will serve to some extent in alleviating the pains stemming from the economic recession.

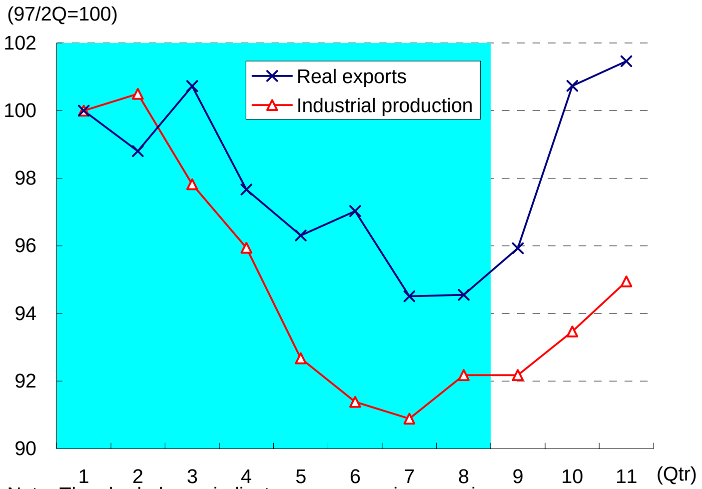
**The fixed-sum benefits toward households will push up the rate of economic growth by approximately 0.1% pt**

The portions of the stimulus package which are expected to have an impact upon the rate of economic growth are the JPY 2 trillion fixed-sum benefits and the mortgage loan tax cut. Our outlook is based upon the premise that the fixed-sum benefits will be paid out in March 2009. Of the JPY 2 trillion, assuming that roughly 30% will be channeled to personal consumption (marginal consumption propensity), approximately JPY600 billion (around 0.1% of GDP) will be spent during the Jan-Mar and Apr-Jun quarters of 2009. The impact of the mortgage loan tax cuts is not taken into consideration in this outlook since the details are currently unavailable.

**The upturn of exports will hold the key to economic recovery**

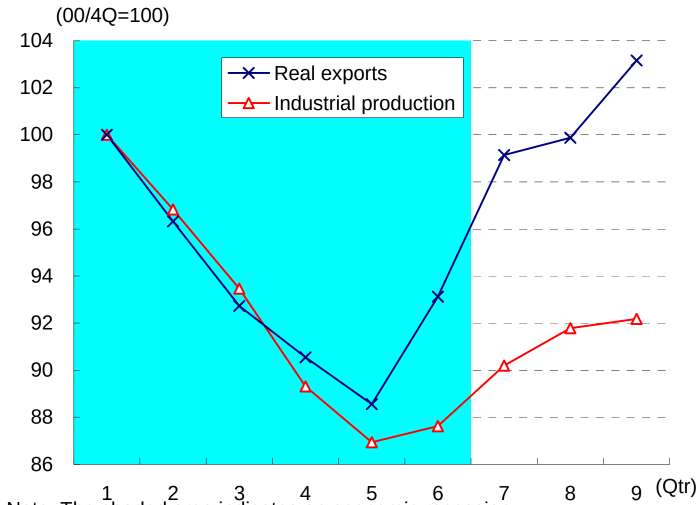
The Japanese economy faces extremely bleak prospects during FY2009 as explained above. When will the economy start to pick up and what are the requisite conditions for the economic upturn? Yet again, exports will hold the key to Japan's economic recovery. During the recession starting from May 1997 when exports fell as in the current cycle and the recession from October 2000, economic conditions bottomed after one quarter from the point in time that exports and industrial production hit bottom (**Charts 11 and 12**). In the current economic recession, the bottoming of exports and production will signal a recovery.

**[ Chart 11: Exports and production (from the 2nd quarter of 1997) ]**




Note: The shaded area indicates an economic recession.
Sources: Ministry of Economy, Trade and Industry, *Indices of Industrial Production,* Cabinet Office, *National Accounts.*

**[ Chart 12: Exports and production (from the 4th quarter of 2000) ]**




Note: The shaded area indicates an economic recession.
Sources: Ministry of Economy, Trade and Industry, *Indices of Industrial Production,* Cabinet Office, *National Accounts.*

**The economy will bottom out in the second half of FY2009**

Despite the weak growth of the US economy until 2010 due to the slow adjustment of the housing market and household balance sheets, the rate of US economic growth should bottom out in the first half of 2009. In such event, the odds are high that Japan's exports will also bottom out around the same time. Assuming a slight lag until the economy hits bottom, the trough of the economy will occur sometime during the second half of FY2009. According to our forecast, the economy will bottom out around the Oct-Dec quarter of 2009. If events unfold as expected, the economic recession starting from the end of 2007 will turn out to last approximately two years (roughly 24 months), surpassing the average length of economic recessions in the post-WWII period (roughly 17 months). Even though the economy should recover in FY2010, the pace of recovery will be mild amid the absence of a full-fledged recovery of the overseas economies. The Japanese economy will only return to a pace comparable to its potential growth rate – estimated to be around the upper half of the 1%-level – sometime after FY2011.

## (2) Forecast of the Japanese economy in FY2008 and FY2009

**The Japanese economy will fall deeper into a slump in the second half of FY2008, due primarily to weak exports and capital investment**

In the second half of FY2008, the downturn of exports will trigger the rise of adjustment pressures, and the deterioration of industrial production and corporate earnings will lead to a further decline of capital investment. Wages will also soften due to the fall of overtime payments (non-scheduled cash earnings) and bonus payments (special cash earnings) amid the rise of downward pressures upon employment mainly among non-regular workers, accompanying larger production cuts in the manufacturing sector. Personal consumption will also slump, given the deterioration of consumer confidence reflecting the stock market fall as well as the deterioration of labor market conditions. In the second half of FY2008, the contraction of both domestic and external demand should keep Japan's economic growth in negative territory (**Chart 13**).

**Real GDP growth in FY2008: -0.5%**

As a result, the rate of real GDP growth in FY2008 will drop to -0.5% (previous outlook: 0.6%), turning negative for the first time since FY2001. The GDP deflator will stand at -0.7% y-o-y, staying negative for the 11th consecutive year, due primarily to the rise of the import deflator stemming from the rise of raw material prices. Thus, the rate of nominal GDP growth will fall deep into negative territory (-1.2%, previous outlook: -0.2%).

**A second consecutive year of negative growth looks unavoidable**

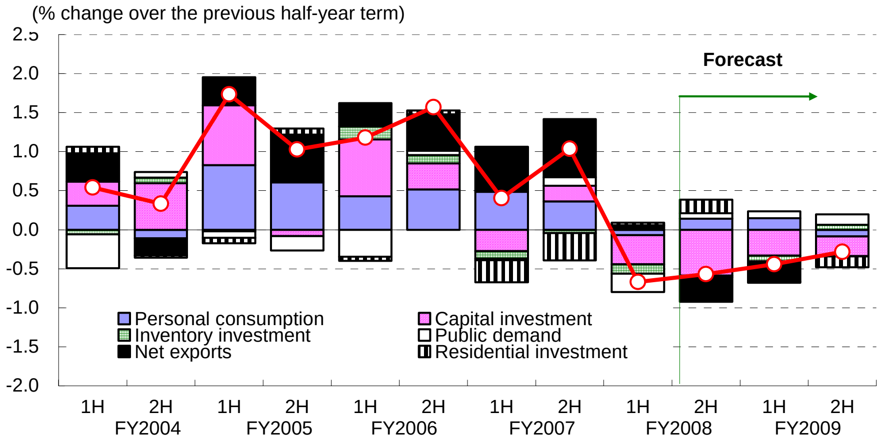
Exports and industrial production will continue to fall in the first half of FY2009 reflecting the global economic slowdown, keeping the Japanese economy in negative territory. The improvement of Japan's terms of trade as a result of the fall of raw material prices from the second half of FY2008 will serve to cut costs for the Japanese economy as a whole. In the event the average price of crude oil in FY2009 stands at USD60/bbl, the value of crude oil imports alone would fall by approximately JPY6.6 trillion (1.3% of GDP) (**Chart 14**). There is no doubt that this will serve as a positive factor for Japanese corporations which have suffered from the rise of costs stemming from the deterioration of trade terms. However, corporate earnings will continue to fall in FY2009 given the large impact of the stagnation of domestic and external demand and downturn of sales accompanying the appreciation of the yen. Capital investment should continue to shrink, reflecting the deterioration of corporate business performance and the decline of the capacity utilization rate. Personal consumption is also predicted to slump as the unemployment rate rises to the upper half of the 4%-level. Even though personal consumption will pick up slightly in the Jan-Mar and Apr-Jun quarters of 2009 as a result of the fixed-sum benefits, the overall weakness of consumer spending throughout the fiscal year will remain unchanged.

In the second half of FY2009, exports should stop falling and production activity is expected to bottom out. Even so, the slow recovery of capital investment should keep the rate of Japan's economic growth slightly negative in the second half of FY2009.

**FY2009 real GDP growth: -0.9%. Recovery of nominal growth to 0.1%**

Full-year real GDP growth in FY2009 will slow to -0.9% (previous outlook: 1.0%), marking the second consecutive year of negative growth. In contrast, nominal GDP growth should turn slightly positive (0.1%, previous outlook: 2.0%) due mainly to the decline of the import deflator accompanying the fall of raw material prices.

**[ Chart 13: Forecast on Japan's real GDP growth (half-year basis) ]**




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

**The output gap will dip deeper into negative territory in FY2009**

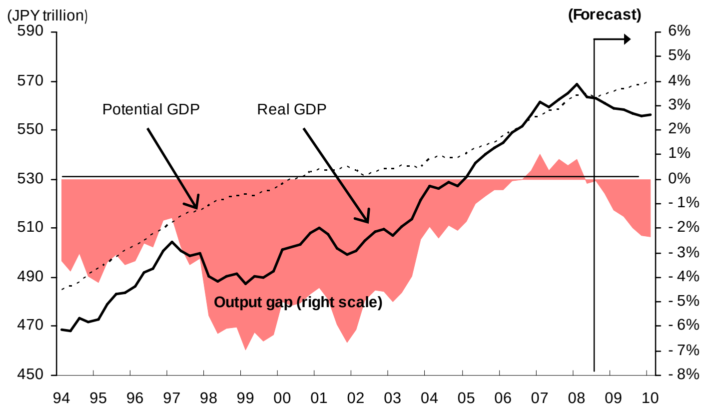
The output gap (the gap between real GDP and potential GDP) estimated by MHRI stood at -0.1% as of the Jul-Sep quarter of 2008 (**Chart 15**). If the Japanese economy grows in accordance to our outlook, the output gap should dip deeper into negative territory to around -2% in FY2009. In addition to price falls of natural resources, supply and demand conditions should serve as downward pressures upon consumer prices in FY2009. The CPI (general, excluding fresh food) should take a downturn (-0.2% y-o-y) in FY2009. During the period from FY1998 to FY2002, the breadth of the negative output gap spread to -5%~-7% amid the rise of adjustment pressures stemming from excess debt and capacity, falling into a so-called "deflationary spiral". Even though it is unlikely that similar conditions will occur, there will be the need to operate financial and fiscal policy in consideration of the risks of deflation.

**[ Chart 14: The impact of the fall of crude oil prices ]**

| FY2009<br>Price of crude oil | The fall in value of crude oil imports (JPY trillion) | Perentage of GDP (%) |
|---|---|---|
| USD90 | 2.2 | 0.4 |
| USD80 | 3.6 | 0.7 |
| USD70 | 5.1 | 1.0 |
| USD60 | 6.6 | 1.3 |
| USD50 | 8.0 | 1.6 |

Note: Compared with the case where the price of crude oil is USD100/bbl. The JPY/USD exchange rates are assumed as follows: FY2008 (JPY105/USD), FY2009 (JPY100/USD). Based upon the assumption that crude oil imports remain flat from the actual results in FY2007.

**[ Chart 15: The output gap ]**




Note: Estimates by MHRI.
Sources: Cabinet Office, Ministry of Economy, Trade and Industry, Ministry of Internal Affairs and Communications, and others.

## [ Chart 16:  Outlook on the Japanese economy ]

(%)

| | FY2007 | FY2008 | FY2009 | FY2008 | | FY2009 | | FY2007 | FY2008 | FY2009 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1H | 2H | 1H | 2H | (Contribution) | (Contribution) | (Contribution) |
| | (Actual) | (Forecast) | (Forecast) | (Actual) | (Forecast) | (Forecast) | (Forecast) | (Actual) | (Forecast) | (Foreast) |
| GDP (real) | 1.7 | -0.5 | -0.9 | -1.3 | -1.1 | -0.9 | -0.6 | - | - | - |
| Domestic demand | 0.5 | -0.9 | -0.5 | -1.6 | -0.5 | -0.4 | -0.6 | 0.5 | -0.8 | -0.4 |
| Private sector demand | 0.6 | -0.9 | -0.8 | -1.4 | -0.8 | -0.7 | -1.1 | 0.4 | -0.7 | -0.6 |
| Personal consumption | 1.7 | 0.3 | 0.3 | -0.3 | 0.5 | 0.5 | -0.3 | 0.9 | 0.2 | 0.2 |
| Residential investment | -13.3 | -1.8 | 0.3 | 2.5 | 13.3 | -0.9 | -9.3 | -0.4 | -0.1 | 0.0 |
| Capital investment | -0.1 | -3.9 | -4.9 | -4.7 | -7.5 | -4.4 | -3.5 | -0.0 | -0.6 | -0.7 |
| Public sector demand | 0.2 | -0.8 | 0.9 | -2.3 | 0.7 | 0.9 | 1.3 | 0.0 | -0.2 | 0.2 |
| Government consumption | 0.7 | 0.1 | 1.2 | -0.6 | 0.1 | 1.4 | 2.1 | 0.1 | 0.0 | 0.2 |
| Public investment | -1.8 | -4.3 | -1.0 | -9.4 | 3.4 | -1.5 | -2.8 | -0.1 | -0.2 | -0.0 |
| Net exports (contribution) | 1.2 | 0.3 | -0.4 | 0.1 | -0.6 | -0.5 | 0.0 | 1.2 | 0.3 | -0.4 |
| Exports | 9.5 | 0.6 | -4.2 | -1.3 | -5.7 | -5.4 | -0.1 | 1.4 | 0.1 | -0.7 |
| Imports | 2.0 | -1.6 | -2.4 | -3.0 | -2.9 | -3.3 | -0.1 | -0.2 | 0.2 | 0.3 |
| GDP (nominal) | 0.7 | -1.2 | 0.1 | -2.7 | 0.7 | 2.5 | -5.0 | | | |
| GDP deflator | -1.0 | -0.7 | 1.0 | -1.6 | 0.1 | 2.7 | -0.6 | | | |
| Industrial production | 2.6 | -4.3 | -5.8 | -1.8 | -6.3 | -2.6 | -0.2 | | | |
| Unemployment rate | 3.8 | 4.2 | 4.6 | 4.1 | 4.3 | 4.6 | 4.6 | | | |
| Current account balance (JPY trillion) | 24.6 | 14.5 | 15.3 | 16.5 | 12.1 | 18.8 | 11.0 | | | |
| as a percentage of nominal GDP | 4.8 | 2.8 | 3.0 | 3.2 | 2.4 | 3.6 | 2.2 | | | |
| Domestic corporate goods prices | 2.3 | 4.3 | -1.4 | 6.0 | 2.7 | -1.8 | -1.0 | | | |
| Consumer prices | 0.3 | 1.6 | -0.2 | 1.9 | 1.3 | 0.0 | -0.3 | | | |
| Long-term interest rate (%) | 1.59 | 1.52 | 1.41 | 1.60 | 1.43 | 1.40 | 1.43 | | | |
| Nikkei stock average (JPY) | 16,000 | 10,950 | 8,800 | 13,300 | 8,600 | 8,500 | 9,100 | | | |
| Exchange rate (JPY/USD) | 114.2 | 101 | 96 | 106 | 96 | 96 | 97 | | | |
| Crude oil price (WTI) | 82.2 | 92.8 | 59.1 | 121.0 | 64.7 | 56.0 | 62.2 | | | |

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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Mizuho Research Institute Ltd., Kazuhiko Yano, Senior Economist  kazuhiko.yano@mizuho-ri.co.jp