Annual Report on the Japanese Economy and Public Finance 2009

- Overcoming Financial Crisis and Vision for Sustained

Recovery -

Summary

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Contents

Chapter 1	Japanese Economy Fallen into Steep Recession	1
Section 1	Characteristics of Present Recession	1
Section 2	Trades, Exchange Rate and Japanese Economy	4
Section 3	Vision for Economic Recovery	7
Chapter 2	Financial Crisis and Japanese Economy	10
Section 1	Global Financial Crisis and Domestic Finance	10
Section 2	International Repercussion of Financial Crisis: Historical Experience and Its	
	Mechanism	13
Section 3	Viewpoint of "Post-Crisis" Japanese Economy	15
Chapter 3	Employment/Social Security and Household Behavior	19
Section 1	Structural Change in Labor Market and Household Behavior	19
Section 2	Wage/Income Disparity and Redistribution Effect	22
Section 3	Uncertainty, Social Security System and Household Behavior	25
Conclusion		. 28

This material has been tentatively prepared to explain the "Annual Report on the Japanese Economy and Public Finance." For quotation and other purposes, please refer to the text of the "Annual Report on the Japanese Economy and Public Finance."

Chapter 1 Japanese Economy Fallen into Steep Recession

Section 1 Characteristics of Present Recession: 1 General Characteristics

- The present recession can be classified into two stages, before and after Lehman Shock which occurred in September 2008. That is, Japanese economy was originally getting weaker moderately, but after the Lehman Shock, it showed a rapid worsening while the financial instability centered on Western countries developed into financial crisis called a global recession.
- The present recession is record-quick speed and may reach an average of the past recession periods. It is also "deep" recession from the perspective of GDP gap.

Figure 1-1-6 (1) GDP Gap Figure 1-1-4 (2) Comparison with Recession Phase of Production



Source: "Industrial Production Index", Ministry of Economy, Trade and Industry

1980 82 84 86 88 90

Figure 1-1-7 Industrial Production, Share Price and Bank Lending Figure 1-1-8 Contribution of domestic and Foreign Demands in the in Recession Phases

The percent decreases in industrial production and share prices are large but no decrease in bank lending is found in the present recession





The present recession is a deep one from the perspective of GDP





Past Recession Periods (quarterly)

Exports drastically decrease compared with the past recession periods



Note: Estimated by Director-General for Policy Planning in charge of economic and fiscal analysis based on "National Accounting", Cabinet Office

Source: "Industrial Index", Ministry of Economy, Trade and Industry, "Loans and Discounts Outstanding by Sector", Bank of Japan, and Bloomberg

2 Advancement of Corporate Sector's Adjustment

- The global financial crisis has a strong impact on trade contraction, decrease in exports from Japan and corporate sector through weak domestic demand.
- After the Lehman Shock, the corporate sector cut capital investment due to 1) worse-than-expected slump in final demand such as exports and required rapid decrease in production for inventory adjustment, 2) rapid decrease in sales and profit reflecting slump in demand in spite of decline in oil and material prices, and 3) raised sense of equipment surplus and decrease in anticipated growth rate.



Source: "Industrial Index", Ministry of Economy, Trade and Industry, "Short-term Business Sentiment Survey", Bank of Japan

Figure 1-1-14 Accumulated Profit, Liquidity in Hand and Fixed Assets

Companies with Little Stock

(1) Major Manufacturing Companies



Source: "Company Statistics Seasonal Report", Ministry of Finance



Increase in Inventory Adjustment Rate



Source: "Industrial Index", Ministry of Economy, Trade and Industry

Figure 1-1-17 Circular-Capital Stock diagram

Stock adjustment may be advanced due to decrease in anticipated growth rate



Notes: 1. Source: "Private Companies Capital Stock", Cabinet Office 2. Dotted lines are hyperbolic lines at the level of anticipated growth rate.

3 Impact of Recession on Households

- The worsening of corporate sector worsens households through employment adjustment, etc. After the Lehman Shock, individual consumption has shifted to gradual decrease and Japanese economy is in a difficult situation in that sense.
- Characteristics of households after the Lehman Shock are: 1) drastic employment adjustment was delayed while employment uncertainty was rapidly growing, 2) household income growth has been basically weak since the economic expansion period and individual consumption shifted to gradual decrease, and 3) new housing starts rapidly decreased due to the cause of suppliers as well as weak households.

Figure 1-1-21 Compensation for Employees, Individual Consumption and Durable Goods in the Past Recession Periods Individual consumption has decreased moderately after Lehman Shock



Figure 1-1-23 Housing Affordability Index

Housing affordability index had decreased and became flat in 2008



Notes 1. Source: "Household Survey (with two or more persons)" and "Family Saving Survey", Ministry of Internal Affairs and Communications, data from Real Estate Economic Institute Co., Ltd., and data from Bank of Japan

2. House affordability index indicates the degree of households' procurement amount against housing price. The larger the index is, the higher the housing affordability becomes.

The drastic decrease in foreign demand in Japan after the Lehman Shock is possibly caused by several factors such as slump in domestic demand in export counterparts, great impact on automobiles and IT products which occupy a high share of exports, moderate decrease in domestic demand in Japan and yen appreciation.

Figure 1-2-5 Export Counterparts' Rate of Decrease in Domestic Demand and Rate of Decrease in Exports (October-December Ouarter, 2008)

Japan's export counterparts' high rate of decrease in domestic demand

- (1) Export Counterparts' Rate of Decrease in Domestic Demand and Rate of Decrease in Exports
- (2) Breakdown of Contributions to Export Counterparts' Rate of Decrease in Domestic Demand



Canada 🔶

Mexico

US

Japan

-1.8

-4

-6

-8

-10

-12

-14

-16

-2.2

Sweden

٠

Korea

-1.4

Eurozone Turkey

-1.0



Notes 1. Source: "STAN Database" and "National Accounts", OECD and CEIC database 2. The previous quarter of October-December quarter, 2008, was calculated by exporters' domestic demand (2006) divided by export amount weight with weighted average method.

Figure 1-2-7 OECD Members' Export Share of Key Items and Increase-Decrease Rate compared with the Previous Quarter (October-December quarter, 2008)

Drastic decrease in exports in countries exporting many automobiles and IT products

(1) Automobiles and IT Products

(Export counterparts' rate of decrease in domestic demand)

(2) Materials and Services



Notes 1. Source: OECD

2. Shares of automobiles, IT products and services in total exports are as of 2006.

3. Japan's shares of automobiles and IT products in exports are 19% and 17% respectively.

2 Japan's International Balance Structure

• As a result of slump in foreign demand, Japan's current account surplus decreased and goods and services account fell into the red. However, it is explicable that it is mostly caused by global economic downturn including US economy and as global economy recovers, the current account would approach the original economic level.

• If US economic expansion is mostly based on bubble economy and is not recovering soon, Japan's improvement of the balance would be limited.

Figure 1-2-11 Nominal GDP Ratio of Equilibrium Nominal Current Account



Source: "National Accounting", Cabinet Office, "International Financial Statistics", IMF, "Economic Outlook", OECD, etc.

Figure 1-2-12 Simulation of Balance on Goods and Services

After the crisis, the recovery of balance on goods and services may be limited



Notes 1. Source: "National Accounting", Cabinet Office, "International Financial Statistics", IMF, "Economic Outlook", OECD, Bloomberg, etc.

2. Case 1 is based on the level of US share price in 1995.

Case 2 is based on the level of US share price in the first quarter, 2003, which was a bottom price before emergence of US housing bubble.

3 Exchange Rate Fluctuations and Japanese Economy

- Although the yen against the US dollar was moving in the direction of appreciation to around the 90 yen level and it aggravated the economic downturn, it was temporary and the impact was limited. On the other hand, comparing the negative impact of home currency on economic conditions internationally, it is relatively smaller in Japan than that in other countries. The vulnerability to yen appreciation can be more mitigated by nonprice competitiveness such as product differentiation. It is also important to make a great ripple effect of yen appreciation to consumer prices by promoting domestic transport systems, etc.
- Looking at equilibrium exchange rate, Japanese export industry's competitiveness became more competitive by wage control and this led the direction of yen appreciation. Anyway, the direction of appreciation to around the 90 yen level was severe for the export industry from the perspective of such equilibrium exchange rate.

Figure 1-2-15 Factors Affecting Depression Effect on GDP by Appreciating Exchange Rate

Depression effect on GDP by appreciating exchange rate is small in countries with high foreign direct investment ratio and/or high R&D ratio.



(1) Foreign direct investment ratio

Notes 1. Source: "Interlink Model" and "STAN Database", OECD, and "Foreign Direct Investment Statistics", UNCTAD

2. Second year's effect by 10% of home currency

Figure 1-2-18 (3) Equilibrium Exchange Rate by Industry (2007)





Source: "National Accounting", Cabinet Office, and US Department of Commerce

(2) R&D ratio (Depression effect on GDP, %)



(Manufacturing industry's R&D costs/manufacturing output, %)

Figure 1-2-19 Industrial Average Equilibrium Exchange Rate, Profitable Export Yen Exchange Rate and Real Exchange Rate







Section 3 Vision for Economic Recovery 1 Domestic and International Initial Business Recovery Patterns

- In the early phase of business recovery, every country's exports have increased. Since businesses are linked worldwide and emerging countries' high-growth rate boosts the trade volume, developed countries' exports are likely to rapidly increase in the early phase of business recovery.
- Creations of employees' income by government expenditures and capital investment are strong. Exports also create relatively high employees' income. This is because derived demands such as business services are large centered on the processing industry for exports and they would induce employees' income.



Figure 1-3-4 Each country's Real GDP in the Early Phase of Business Recovery

Notes 1. Source: "National Accounting", Cabinet Office, and "OECD. Stat", OECD 2. Average rate of change from bottom of the recession to subsequent three quarters in the past three times





Exports induce employees' income more than consumption. Consumptions induce the number of employees.

Source: "Inter-industry Relations Table 2005", Ministry of Internal Affairs and Communications

2 Force Acting on the Direction of Economic Boost

• There are visible signs of economic recovery now. In order to support this movement, as force acting on the direction of future recovery, policy effect, terms of trade improvement effect and foreign economic recovery are important as well as decreased inventory adjustment pressure. The policy effect has already been actualized as increase in public investment. On the other hand, the terms of trade improvement has delayed since fall 2008 and it has affected purchase prices and consumer prices. In overseas, inventory adjustment has progressed coupled with each county's policy effect.



Notes 1. Source: "Public Works Upfront Amount Guarantee Statistics", East Japan construction Surety Co., Ltd., etc. 2. Year-on-year rate was calculated for cumulative total value of the current fiscal year in each quarter.



Reduce in real GDP is mitigated by increase in trading gain.





Figure 1-3-16 Timing Correlation between Trading Gain and Real Private Demand

Trading gain's effect of boosting private demand emerges gradually. (correlation coefficient)



Notes 1. Source: "National Accounting", Cabinet Office

2. Estimated period: From 1st quarter, 1972 to 1st quarter, 2009 using differences with the previous year.

3 Risk Factors

When looking toward economic recovery, the following downside risks should be noted: 1) since production level is extremely low, employment adjustment pressure is still strong, 2) there is a concern about going back to deflation if demand-supply gap continues expanding or narrows slowly and 3) it is possible that global economic recovery scenario is downwardly revised due to a vicious circle of financial market and real economy centered on Western countries.



Source: "Industrial Index" and "Index of All Industrial Activities", Ministry of Economy, Trade and Industry, "Labor Force Survey", Ministry of Internal Affairs and Communications, and "Monthly Labour Survey", Ministry of Health, Labour and Welfare

Figure 1-3-25 Relationship between Demand-Supply Gap and Consumer Prices The expansion of demand-supply gap drives down consumer prices moderately.

2. Case 1 (figure) is based on the availability at a peak during the

period. Case 2 is based on the availability of 2005.



Source: "National Accounting" and "Gross Capital Stock of Private Enterprises", Cabinet Office, "Industrial Production Index", Ministry of Economy, Trade and Industry, "Consumer Price Index", Ministry of Internal Affairs and Communications, etc.

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