#### Chapter 3 Issues to be Addressed for Vitalizing Japanese Economy

#### [Section 1 Construing the Concern over the "Hollowing Out of Industry"]

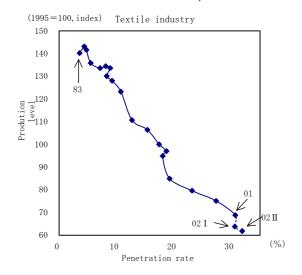
- (1) Changes in the trade structure: Are increase in imports from China a threat?
- While imports are decreasing on the whole, those from China are rapidly increasing. In the textile industry, the growth in imports runs parallel with the cutback in domestic production (rise of import penetration).
- Imports from China exceeded exports to China particularly in the area of IT-related goods (negative coefficient of specialization).
- Specialization in different stages of production between Japan and China (high intra-industry trade index).
  - → Background: 1) modularity; and 2) establishment of overseas production bases by external direct investment.
- Up to now, the structure of international division of labor has changed in line with the changes in comparative advantage. However, it is important to establish an economic structure that can promptly deal with China's rapid economic development. To this end, economic vitalization is necessary.
- Trends of the trade/services balance: Will it go into the red?
- The decline of surplus in the trade/services balance until the middle of last year was due to the influence of the U.S. economic recession.
- The competitiveness of the services industry should be enhanced.
- The amount of surplus in the income balance is on the increase, and signs of structural changes in the current account balance are observed.
- (2) Changes in the industrial structure: Is the manufacturing industry shrinking?
- The share of the manufacturing industry is tending to decline on the bases of nominal GDP and the number of workers.
- The growth of labor productivity in the manufacturing industry is high  $\Rightarrow$  Relative prices in the manufacturing industry fall  $\Rightarrow$  The share remains at the same level on the basis of real GDP  $\Rightarrow$  The manufacturing industry will continue to make great contributions to production.
- Demand for the services industry has grown ← 1) Rise of the income level, advancement of the aging of the society; 2) expansion of choices made possible by regulatory reform; and 3) outsourcing from corporations and households.
- Labor productivity should be improved not only in the manufacturing industry, but also in

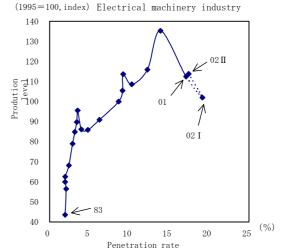
the non-manufacturing industry so as to deal with changes in comparative advantage and to improve the national life.

- (3) Dealing with structural changes in the international division of labor
- Concerns for rise of unemployment as a short-term adjustment cost  $\Rightarrow$  Speedy mobilization of labor.
- Concerns for a decline in growth potential due to resources staying with non-manufacturing businesses with relatively low productivity growth  $\Rightarrow$  1) Mobilization of production factors to highly productive industries; and 2) All industries should strive to raise productivity.
- Compared to the structural adjustment at the time of the oil crisis in the 1970s and the strong-yen shock in the mid 1980s, the current phase faces big challenges: 1) Promotion under deflation; and 2) reform of the economic system itself, which has been regarded as a precondition of economic activities, which is composed of such elements as the Japanese-style employment practice.

#### Relationship Between Imports and Domestic Production

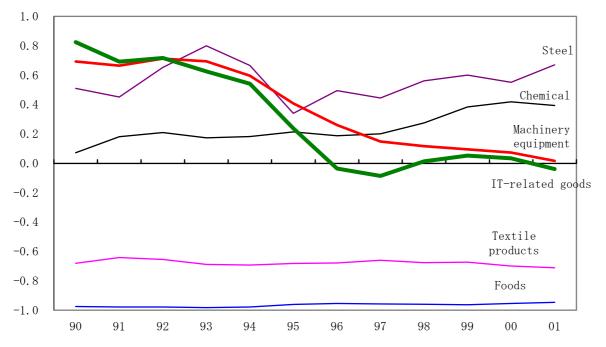
Both Domestic Production and Import Penetration Rate are increasing in the electrical machinery industry.





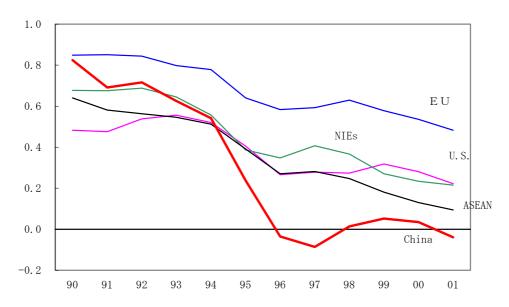
#### Coefficient of Spacialization by Goods in trade with China

The figure of IT-related Goods is negative in 2001.



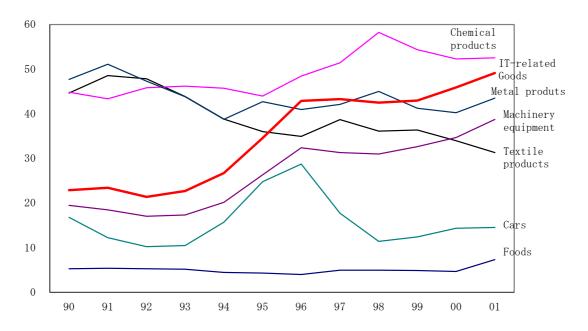
#### Coefficient of Spacialization for IT-Related Goods by Regions

Coefficient of Spacialization of trade with China has become negative in 2001.



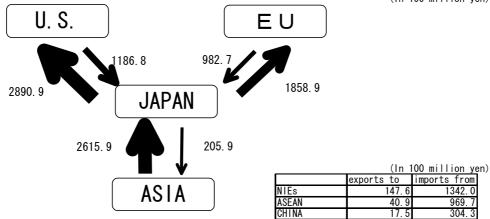
#### Intra-Industry Trade Index by Goods

Intra-industry Trade Index has been increasing in the IT-related industry since 1990.

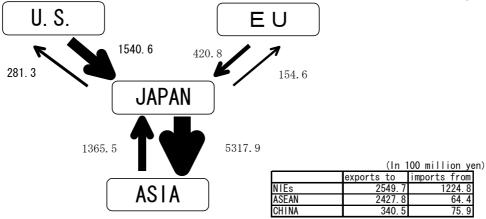


Trade with U.S., EU, and Asia.
(1) Desktop type PC (The share of office machines in total trade amount is 18.3%.)

(In 100 million yen)

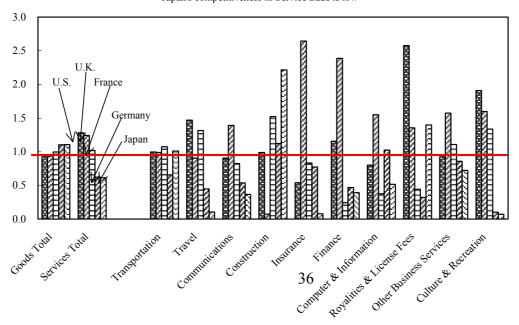


(2) Uncased IC (The share of semi-conduction and other electronic parts in total trade amount is 15.2%.) (In 100 million yen)



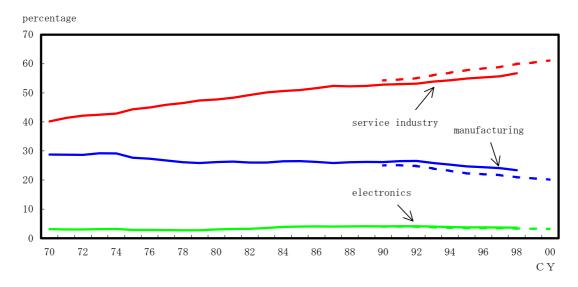
#### Revealed Comparative Advantage Index for Services Trade

Japan's competitiveness in Service trade is low



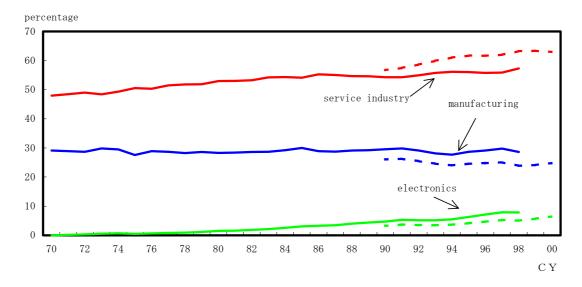
#### Composition of Workers by Industry

Transfer from the manufacturing industry to the service industry is proceeding.



#### Composition of Real GDP by Industry

Change of share is small on real basis.



# [Section 2 Current Situation of the Structural Adjustment and Tasks for Economic Vitalization]

- (1) Decline in the rate of increase of labor productivity
- The rate of increase of labor productivity slowed down from the 1980s to 1990s.
- The major reason for it was the slowing of the increase rate of total factor productivity (TFP).
- ⇒ The tasks to be tackled are: efficiency improvement in corporate management; efficiency improvement in allocation of production factors, such as labor and capital; and efficiency improvement in research and development.

#### (2) Improvement of efficiency in corporate management

- Foreign-affiliated companies (embodying corporate governance that emphasizes capital efficiency) are more profitable than Japanese companies  $\Rightarrow$  While taking on the good aspects of the U.S.-style governance, lessons should be learnt from the recent turmoil, and diversity should be offered to allow for choice.
- The lineup of companies should be more actively renewed by business start-ups and closings and efficient companies should enter, while inefficient companies should withdraw. However, there have not been so many business start-ups or closings Utilization of venture capital, introduction of the "special structural reform areas," securing of funds, establishment of an environment for supporting business attempts.

#### (3) Improvement of efficiency in labor allocation

- Workers should be mobilized to industries with high total factor productivity.
- With respect to reallocation channels, recruitment of fresh graduates decreased, the number of retired workers increased, and mobilization of labor through job switching became more active. Non-regular employees, such as part-timers and temporary workers increased, and employment types diversified.
- The mismatch of employment has expanded ← 1) Since technical progress advanced rapidly, skills and knowledge became obsolete; 2) by the reviewing/restructuring of businesses in the corporate sector, middle-aged and elderly persons flowed into the labor market; and 3) more workers have come to seek diversified employment types in terms of the contract period and working hours.
- It is important to conduct regulatory reform that does not cause disadvantage to mobilization, such as by enhancing the functions of the labor market, rectifying the mismatch, securing smooth mobility, and securing pension portability.

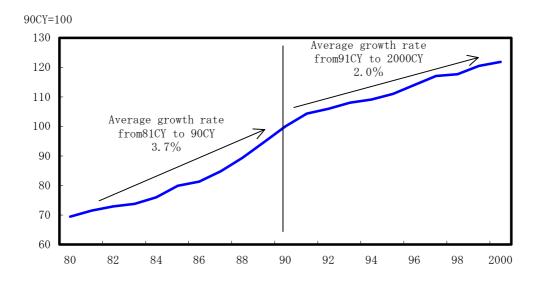
#### (4) Improvement of efficiency in fund allocation

- Bank loans are fixed to industries with low total factor productivity.
- Financial assets holding of households are risk averse, and the corporate sector became a sector with excess savings ←Decline of companies' capital needs, and weakening of financial institutions' function as financial intermediaries.
- Indirect finance and direct finance should develop in a balanced manner by recovering banks' function as financial intermediaries, enhancing the function of direct finance, and supplying risk money.

#### (5) Improvement of efficiency in research and development

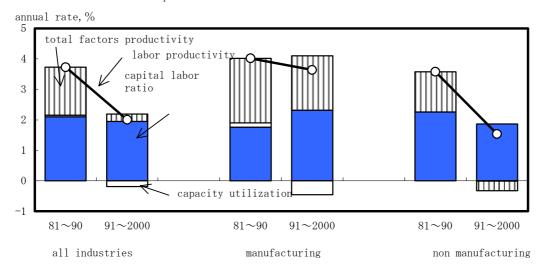
- The amount of research and development investment in Japan is one of the highest in the world. However, total factor productivity is not improving in correspondence to the amount invested.
- Such efforts as the strengthening of basic research and promotion of industry-university cooperation are important from the viewpoint of improving the quality of research and development and effectively utilizing the research findings.

#### Slowdown of Labor Productivity Growth



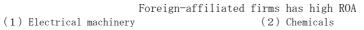
#### Factor Decomposition of Labor Productivity Growth

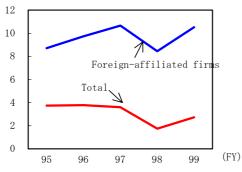
Comparison of the rise before 90 and after 91

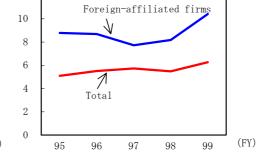


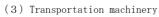
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#### Comparison of ROA

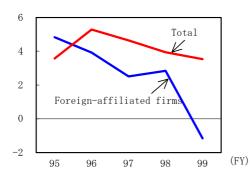


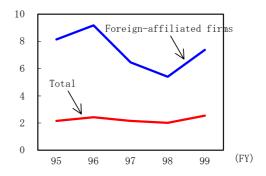




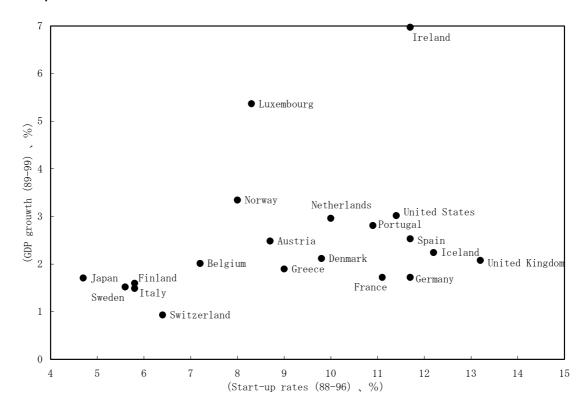


(4) Wholesale and retail

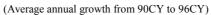


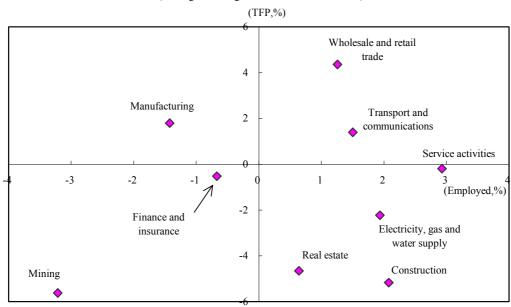


#### Start-up Rates and GDP Growth

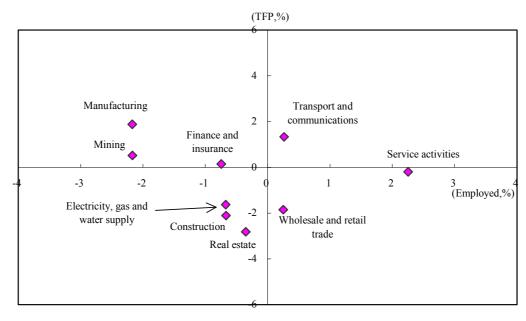


## Growth of Total Factor Productivity(TFP) and Change of The Number of Employed by Industry

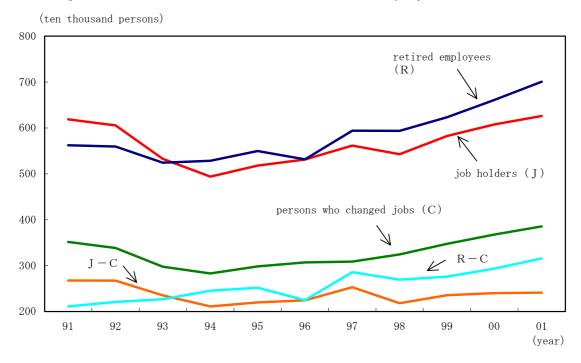




#### (Average annual growth from 97CY to 2000CY)

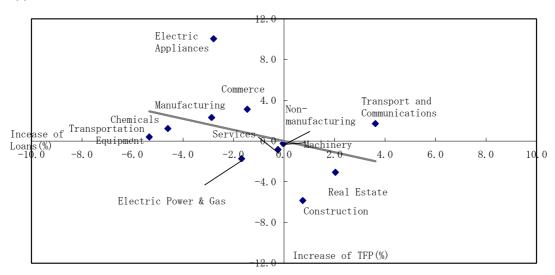


### The Change of The Number of Job Holders and Retired Employees

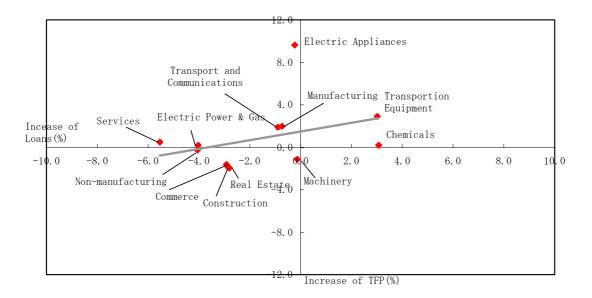


#### Correlation Between TFP and Loans (by Industries)

#### (1) Year' 94-' 97

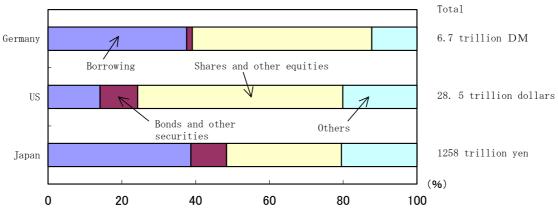


#### (2) YEAR' 98-' 00



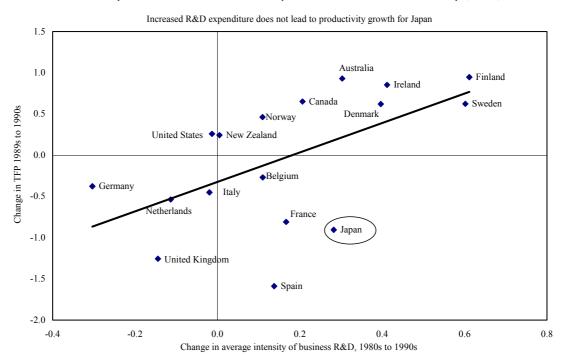
#### International Comparison of Corporate Financing

Japanese Corporation relies less on direct finance and more on indirect finance.

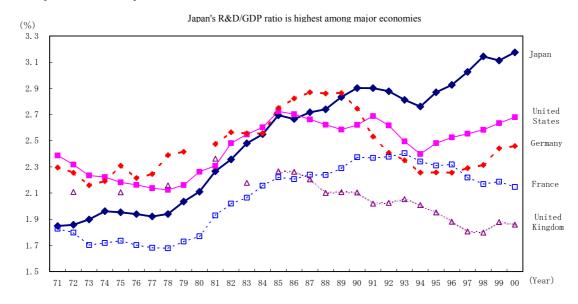


(Source) Flow of Funds Accounts (Germany CY2000, US CY2001, Japan FY2001) (Note)'Others' includes trade credits and foreign trade credits and deposits money, etc.

#### ${\tt Cross-Country~Correlation~between~R\&D~Intensity~Ratio~and~Total~Factor~Productivity~(TFP)}$

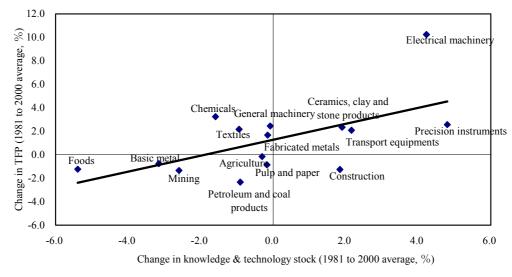


#### Development in R&D Expenditure Ralative to Nominal GDP



#### Cross-Industry Correlation Between Knowledge & Technology Stock and Total Factor Productivity (TFP)





#### [Section 3 Future Outlook on the Economic Structure]

#### (1) Outlook for the new economic system

- Market-oriented transactions becoming dominant: The incentive structure will change from one assuming long-term stable relationships to a price-based competition one having a function of discovering new business areas.
- Distribution of high-quality information: A larger amount of information will be distributed and the quality of information will become more important. The importance of transparency and accountability will further increase.
- Awareness of risks and accepting the challenge to take those risks: Various risks will become evident, and awareness of risks will increase. The relation between risks and returns will also be reviewed.
- The principle of self-responsibility will take firm root.
- Establishment of safety net: A safety net for providing for economic uncertainties will be established, in response to the principle of self-responsibility.
- Recognition of diversity: The Japanese-style corporate management system will undergo great changes. Companies will respectively choose systems that are suitable for them, and there will be flexibility in recognizing diversity.
- Active participation in the global economy.

#### (2) Outlook for the new economic growth

- Structural reform and economic growth: The structural reform aims to raise the potential growth rate, which declined in the 1990s. While it is a policy intended for the supply side, it also has the effect of spurring demand.
- Technological progress and economic growth: Technological progress will play the main role in the new economic growth. Expectations are placed on the promotion of improvement of efficiency in research and development and the upgrading of the capacity for technological progress.
- Economic growth that is chiefly driven by technological progress is capable of dealing with:
- 1) the diminishing of labor and savings caused by population decline and the aging of the society; and 2) the strengthening of measures addressing environmental problems.