

The Industrial Structure Vision 2010 (outline)

June, 2010

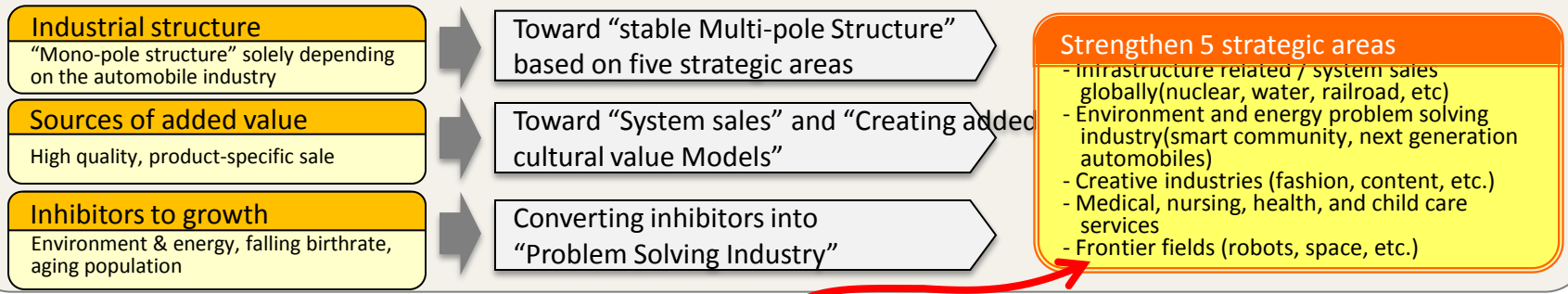
Ministry of Economy, Trade and Industry

(H P : <http://www.meti.go.jp/english/policy/economy/industrial.html>)

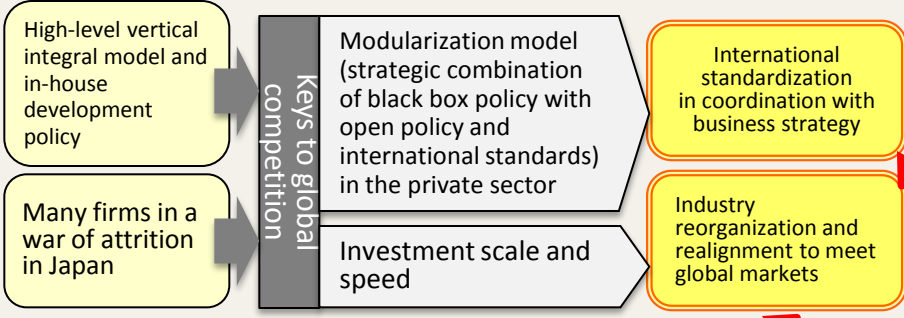
Aims of the Industrial Structure Vision - Embarking on a nationwide effort to strengthen industrial competitiveness

1. Recognize modestly the "deadlocked position" of Japanese industries' having lagged behind the world's major players and market changes
 2. Free from the success mythology built on growth in the postwar period
- "Four shifts"** in the government and the private sector

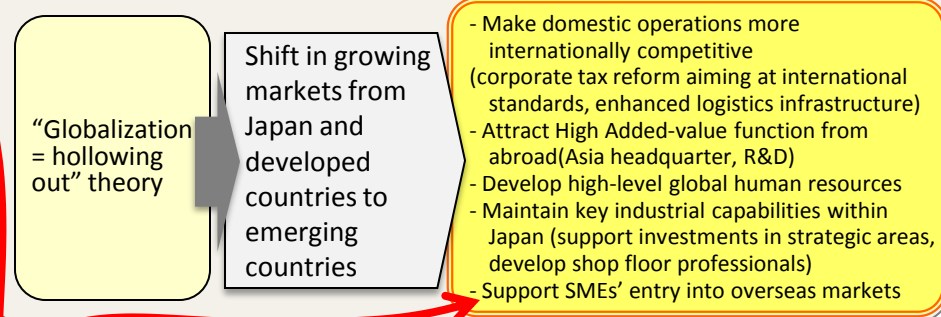
I - Shift in industrial structure - Building a new industrial structure that connects potential strengths to business -



II - Support for business model shifts by enterprises - Win by technology and by business -



III - Free from the dichotomy between globalization and domestic employment - Job creation by aggressive globalization "and" building world-class business infrastructures -



IV - Shift in the government role - Survive in global market to acquire added value -



Japan needs to formulate and implement a strategy that allows it to winner in the global by crossing the boundary between the government and enterprises, between ministries, and between the national and local governments.

Current Situation and Issues of Japanese Industry

1. The Deadlocked Japanese Economy

Change in global ranking for per capita GDP

2000	2008
3 rd	23 rd

Change in share of global GDP

1990	2008
14.3%	8.9%

Change in IMD World Competitive Power Ranking

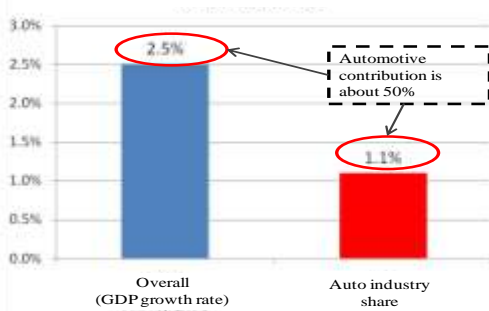
1990	2008
1 st	22 nd

2. Background to the Stalemate

① Problems in the Overall Industrial Structure

- Extreme dependent on automotive industry

Contribution of auto industry to GDP growth rate (2000-2007)

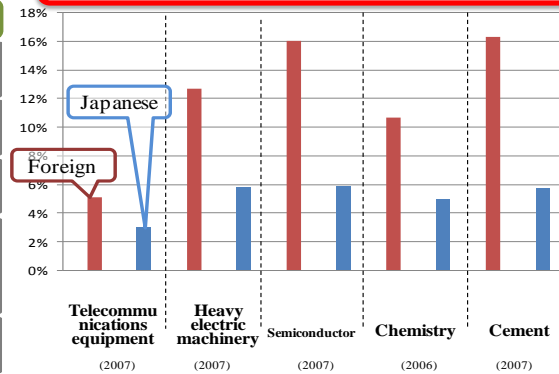


- Too many companies in one industry: low profitability due to domestic wars of attrition.

	Japan	North America	Europe	Asia & others
LCD TVs	Sony; Sharp; Toshiba; Panasonic; Funai Electric	Vizio (U.S.)	Philips (Netherlands)	Samsung (ROK), LGE (ROK), TCL (China)
Railways	Nippon Sharyo; Hitachi; Kawasaki Heavy Industries; Tokyu car corp.; Kinki Sharyo	Bombardier (Canada)	ALSTOM (France), Siemens (Germany)	Hyundai Rotem (ROK)
Nuclear Power	Toshiba (WH), Hitachi, Mitsubishi Heavy Industries	GE (U.S.)	AREVA (France)	Doosan Heavy Industries & Construction (ROK)
Water business (Drinking water & sewerage)	oray; Metawater; Ebam; Kubota, others *The number of leading companies is 16 in Japan, 9 in plant construction, and 3 in operation and maintenance management.	GE (U.S.), Nalco (U.S.)	Veolia (Europe); Siemens (Germany), Suez (France)	Thames Water (Australia)
Diagnostic imaging equipment	Toshiba Medical systems, Hitachi Medical, Shimadzu; ALOKA	GE (U.S.)	Philips (France)	?

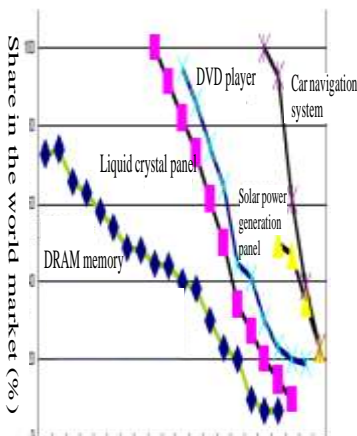
(Profitability)

Japanese companies profitability is less than half that of overseas companies



② Problems Involved in Corporate Business Model

- Japanese Share Has Decreased Rapidly in Line with Growth of the Global Market



③ Problems Involved in Corporate Business Infrastructure

- Japan has rapidly lost competitiveness in all functions as the central stronghold of Asia.

Evaluation of stronghold functions by foreign companies (Japan's location competitiveness)

	Japan	China	India	Singapore
Integrated base in Asia	1 st			
Manufacturing base		1 st	2 nd	
R&D base	1 st	2 nd		
Back office	2 nd	1 st	2 nd	
Distribution center		1 st		

	Japan	China	India	Singapore
		1 st	2 nd	2 nd
	2 nd	1 st	2 nd	
		1 st	2 nd	
		1 st		2 nd

Sunstar moves HQ to Switzerland
The effective corporate tax rate is 21.1% in Switzerland. Also, a reduced tax rate of 5%-10% applies to holding companies for 5 years.

Nissan shifts control of all its "March" model production locations to emerging economies such as Thailand
In Thailand, if receive approval as a local holding company, corporate tax is cut from 30% to 10%.

U.S. goods manufacturer P&G moved its Asia HQ from Kobe to Singapore (2009)

Sharp established a design & development center for LCD panels & TV in China (Nanjing)
In China, corporate tax is cut from 25% to 15% for qualifying high-tech companies.

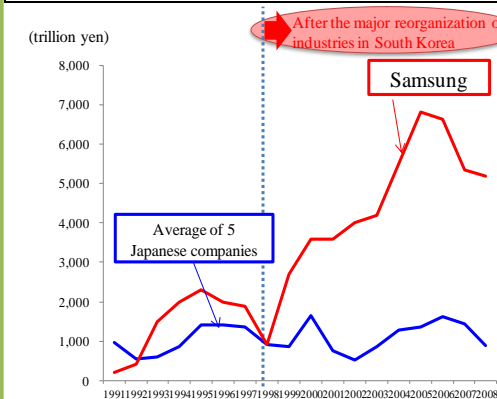
U.S. medical device manufacturer Medtronic (pacemakers) moved Asia HQ from Tokyo to Singapore (2009)

Fujitsu does joint R&D with Singapore Agency for Science, Technology and Research
Singapore has a 17% corporate tax, and support menu & incentives apply, such as lower tax on investments.

Swiss pharmaceutical company Novartis closed its Tsukuba Research Institute, and strengthened its Shanghai R&D center (2008)

Finland mobile phone manufacturer Nokia moved its development location from Tokyo to Singapore (2009)

- The "key" to capture the global market is the "scale and speed of investment."



※ Domestic market size per company in South Korea (Market size in Japan = 1)

Passenger cars	Iron and steel	Cellular phones	Electricity	Oil distributor
1.5	1.5	2.2	3.9	1.1

South Korea's domestic market is smaller than Japan's, but market size per company is bigger in South Korea.

5 Strategic Areas

- From a “one-legged structure” based on automobiles and electronics to a “multi-legged structure” based on the following 5 strategic industrial fields
- From a high-functional, one-item selling industry to industries focused on system sales, business solutions and cultural value-added products

I. Industries with high income elasticity in Asia
II. High carbon productivity fields
III. Areas where markets are expected to expand due to low birthrates and longevity

1. Infrastructure-related / system export (nuclear power, water, railways, etc.)

2. Environment-Energy problem solving industry (smart community, next-generation vehicles, etc.)

3. Becoming a Country with a Powerful “Creative Industry”(fashion, contents, food, tourism, etc.)

4. Medical, nursing-care, health, child-rearing services*

5. Advanced areas (robots, space, etc.)

Infrastructure-related / system export(nuclear power, water, railways, etc.)

Overall Strategy

Main Sectors

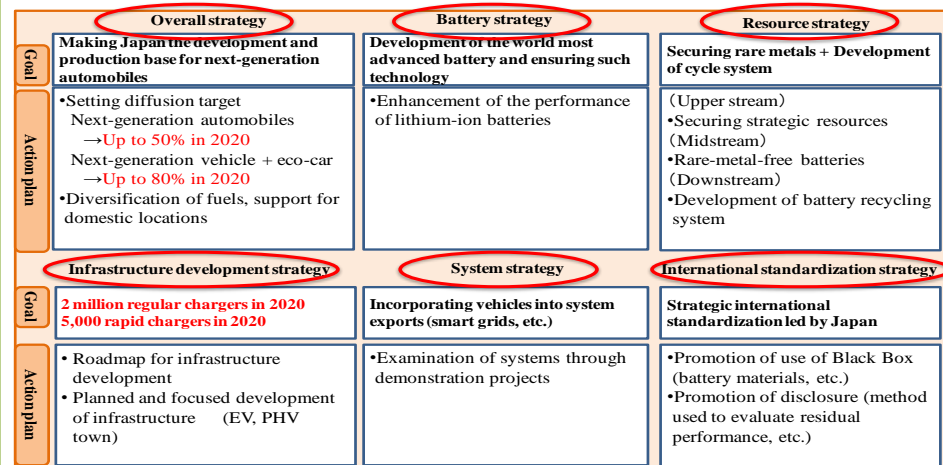
- (1) Strengthen international competitiveness of infrastructure related industries (form consortiums, etc.)
- (2) Strengthen financial assistance (Restart JICA overseas loans soon, strengthen functions of JBIC & NEXI, support investment in infrastructure funds)
- (3) Cooperation starting from the planning stage (Delhi Mumbai Industrial Corridor, etc.)
- (4) Packaged assistance, top level diplomacy (Economic cooperation, financial assistance, education, technical cooperation, human resource development, etc.), (progress in top level diplomacy)
- (5) Manage international rules for promoting overseas expansion
- (6) Strengthen government's promotion organization. Build organization.
 - [1] Strengthen METI's initiatives
 - [2] Build all-Japan organization

In each sector, arrange goals & action plan (support other countries in making master plans, form consortiums, human resource development, etc.)

- (1) Water
- (2) Coal-fired power & coal gasification plants
- (3) Electricity transmission
- (4) Nuclear power
- (5) Railways
- (6) Recycling
- (7) Space industry
- (8) Smart grid & smart community
- (9) Renewable energies
- (10) Information & communications
- (11) Urban development & industrial parks

Environment-Energy problem solving industry (smart community, next-generation vehicles, etc.)

- Maintaining and developing Japan as the world production and development center
- Strategy package is important.**



Creative Industry (fashion, contents, food, tourism, etc.)

Japanese fashion is very popular in China

Ranking of female fashion magazines in China		
1	Chinese version of Ray	Japan (SHUFUNOTOMO)
2	VIVI	Japan (Kodansha)
3	ef	Japan (SHUFUNOTOMO)
7	GLAMOROUS	Japan (Kodansha)
10	an*an	Japan (Magazine House)

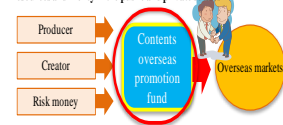
However, the export ratio is extremely low

	Exports/imports by textile industry
Japan	2%
South Korea	50%
France	50%
Italy	149%
Germany	50%

Efforts toward culture-industry superpower

1. Thorough support for the commercialization of contents in other countries

- Capturing the overseas market by mobilizing underutilized human resources and money in the public and private sectors



The export ratio of the Japanese contents industry is one decimal place smaller than its U.S. counterpart.

Export ratio of contents industry

Japan	U.S.
1.9%	17.8%

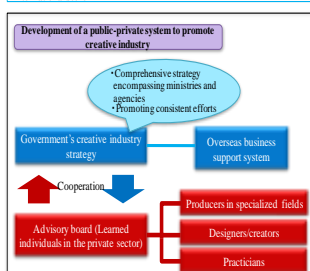
2. Creating “adoration” for Japanese lifestyle

- Concentrated information transmission to Asian trend centers (Shanghai, etc.)
- Integrated transmission of information on fashion, contents, foods, etc.



3. Making Japan the world's creative center

- Holding competition in Japan by drawing in creators from around the world
- Helping young producers and creators to be active in the international scene



Medical, nursing-care, health, child-rearing services*

【 Current problems 】

Services not covered by public insurance

- ◆ Financial constraints on public insurance
- ◆ Diversifying needs (health, livelihood support)
- ◆ Lack of coordination

【 Specific efforts 】

- ◆ Creation of health-related industries not covered by public insurance
- ◆ Providing services meeting various needs
- ◆ Integrated services through collaboration between medical institutions and private businesses

Capture the world market for medicinal drugs, medical equipment, and nursing-care robots

- ◆ The scope of legality is unclear → Entry risk is extremely high
- ◆ It takes a long time for a drug/medical equipment in clinical trial to be commercialized

- ◆ Improvement of R&D environment of medicinal drugs and medical equipment
- Expedited the pharmaceutical screening

Promotion of international operations of medical services

- ◆ “Medical tourism” is on an expanding trend on a global scale.
- ◆ On the other hand, there are high expectations toward advanced Japanese

- ◆ Expands Acceptance of “Medical tourism”
- Creation of a medical-stay visa
- Networking of domestic and foreign medical institutions

Cross-cutting policies to support Japanese industry

1. Comprehensive strategy to make Japan Asia's industrial center

- (1) Attract advanced functions (Asian integration and R&D) from overseas
- (2) Attract and nurture excellent international human resources (introduction of a point system for accepting excellent human resources, scheme for united graduate school in Tsukuba Nanotech Innovation Arena, etc.)
- (3) Improve systems and infrastructure for transport and distribution (strong promotion of open-skies policy, intensive investment in port infrastructure to handle larger container ships, APEC-wide standardization of IT)
- (4) Enhance tax convention network
- (5) Establish strategic centers (smart communities, life-related industry support centers, open innovation centers)

2. Corporate tax reform aiming at international standards

- (1) Lower the effective corporate tax rate to meet international standards (25%~30%) (lower effective corporate tax burdens)
→ First, lower the corporate tax rate by about 5% as part of Growth Strategy
- (2) Give strong incentives to investments in R&D and leading-edge fields, in view of trends in other countries

3. Facilitation of industrial restructuring and consolidation conducive to profitability

Basic policy: Restructuring and consolidation led by the private sector → enhanced corporate governance capacity and removal of institutional, financial, and personnel/employment-related inhibitors

- (1) Competition policy (ensured transparency of procedures, conversion to corporate merger review that considers the medium- to long-term and the global market)
- (2) Employment and human resources issues (increased support for vocational training for labor mobility, increased subsidies for industries hiring unemployed workers)
- (3) Legislation for corporate organizations (make procedures for M&A, prevention of abuse of claims for repurchase of shares)
- (4) Finance (use of Innovation Network Corporation of Japan, financial support for restructuring)
- (5) Stronger corporate governance (promotion of introduction of outside/independent officers, etc.)
- (6) Support for business foundation/change and corporate revival (supply of risk money, development of human resources for global ventures, establishment of a bioventure support center)

4. International Strategy

- (1) International standardization (identification of ten strategic fields, support for Asia's conformity capacity building)
- (2) Trade policy strategy: (a) closer integration with the Asian economy (wider network of EPAs, investment cooperation, etc.); (b) creation of Asia's internal demand (infrastructure development support, business expansion into the volume zone); (c) job creation based on a virtuous circle of internal and external demand (government-led promotion of new exports and investments)
- (3) New CO₂-related mechanisms (creation of a new system incorporating overseas contributions in low-carbon technologies)

5. Enhancement and retention of key industrial capabilities

- (1) Support domestic investments (program to promote siting of low carbon job creating industries, etc.)
- (2) Develop shop floor professionals (establish a school for regional manufacturing technique preservation, using retired regional professionals; launch an innovator creation program through industry-academia collaboration)
(joint curriculum development, joint scholarships, preferred employment of those having completed the school course)
- (3) Support overseas market cultivation (a comprehensive support package covering preparation, entry, and contracting)
- (4) Establish inter-company centers for performance measuring/evaluation (for batteries, robots, functional chemical products, advanced nanomeasurement, etc.)
- (5) Maintain corporate/industrial clusters (support "factory apartment" construction and wider-area industrial clusters across prefectural and ministerial boundaries)
- (6) Provide business succession and integration support for SMEs

6. Promotion of R&D to produce new values

- (1) Enhance government investments in R&D (aims at 1% compared with GDP. Shift from support limited to common platform technologies to support extending even to field-functional evaluation and standardization)
- (2) Construction of new research system that industrial-academic-government complex concentrated (Tsukuba Nanotech Innovation Arena scheme)
- (3) Demonstrate and disseminate R&D results overseas (public-private joint technological demonstration overseas)
- (4) Secure diverse technical human resources (enhanced hands-on training program for post doctors, et al.)
- (5) Review the patent system and one-stop support of patent utilization for small or venture business

7. "IT" to support advancement of overall industry

- (1) Promoting cloud computing
- (2) Standards establishment for embedded software for improved reliability

8. Increased human resources capacity to meet changes in industrial structure

- (1) Attract and educate for higher-level global human resources
- (2) Facilitate career changes with restructuring
- (3) Training factory worker
Overcome the dualism of non-regular and regular workers and provide steps toward career development by:
- (4) Enhance "Second life" for middle-aged people and seniors,
- (5) Consider a position somewhere between regular and non-regular workers, and
- (6) Establish the Japanese version of National Vocational Qualifications (NVQs)

9. Industrial finance to produce growth

- (1) Diversify the source of risk money supply (attract foreign risk money and use public pension money, postal savings funds and personal financial assets)
- (2) Strengthen the financial intermediation function supporting growth (create a bond market for professional investors)
- (3) Promote financing by government policy, e.g., facilitation of SMEs' access to finance
- (4) Design business accounting supporting economic growth.

New Growth Strategy and The Industrial Structure Vision 2010

The Industrial Structure Vision 2010

5 Strategic Areas

- Infrastructure related / system sales (nuclear power, water, railways, etc.)
- Environment and energy problem solving industry (smart community, next-generation vehicles, etc.)
- Creative industries (fashion, content, etc.)
- Medical, nursing, health, and child care services
- Frontier fields (robots, space, etc.)

Cross-cutting policies to support Japanese industry

Comprehensive strategy to make Japan Asia's industrial center

- Attract high-valued functions from overseas
- Attract and nurture excellent international human resources
- Improve systems and infrastructure for transport action and distribution (strong promotion of open-skies policy, etc)
- Establish strategic centers

Corporate tax reform aiming at international standards

- Lower the effective corporate tax rate to meet international standards (25%~30%)
→ First, lower the corporate tax rate by about 5% as part of Growth Strategy

Facilitation of industrial restructuring and renewal to increase profitability

- Competition policy (ensured transparency of procedures, conversion to corporate merger review that considers the medium- to long-term and the global market)
- Legislation for corporate organizations (make procedures for M&A, etc)

Strategic development of national rules that facilitate added-value acquisition

- International standardization (identification of ten strategic fields,)
- Trade policy strategy: (a) closer integration with the Asian economy (wider network of EPAs, investment cooperation, etc.)

Enhancement and retention of key industrial capabilities (Support overseas market cultivation)

Promotion of R&D to produce new values

- Enhance government investments in R&D (aims at 1% compared with GDP.etc)
- Construction of new research system that industrial-academic –government complex concentrated (Tsukuba Nanotech Innovation Arena scheme)

“IT” to support advancement of overall industry

Increased human resources capacity to meet changes in industrial structure

- Legislation for corporate organizations (Establish the Japanese version of National Vocational Qualifications (NVQs) etc)

New Growth Strategy

Environment&energy

- solving (smart community, next-generation vehicles, etc.)
- “Eco-future city”concept

Health(medical/nursing care)

- Developing new drug and medical equipment, promote regenerative medicine and resolve drug and device lags
- International medical exchange (Create a system for certification of medical institution)

Co-prosperity with Asia

- Infrastructure-related system
- Reducing the effective corporate tax rate
- Promotion of Japan as an Asian industrial center
- Fostering global talents and increasing acceptance of highly-skilled personal (provide preferential treatment based on a point system and accept a broad range of personnel)
- Promoting full open skies, intensive investment in port infrastructure to handle larger container ships,
- Strategies for standardization (identification of ten strategic fields,)
- Exporting the Cool Japan
- Free Trade Area of Asia-Pacific(FTAAP)and EPAs/FTAs

Tourism-oriented nation and local revitalization

- Introducing a “comprehensive special zone system”
- Support overseas market cultivation

Science-and-technology-oriented nation

- “Leading graduate school” and other schemes to enhance
- Construction of new research system that industrial-academic –government complex concentrated (Tsukuba Nanotech Innovation Arena scheme)
- Enhance government investments in R&D (aims at 4% compared with GDP.etc)
- Promoting utilization of information and communication technologies

Employment and human resources

- integration of kindergartens and nursery schools etc,
- Introduction of the “Career Grading” system,(Establish the Japanese version of National Vocational Qualifications (NVQs) etc))

Financial Sector

- Competition policy (ensured transparency of procedures, conversion to corporate merger review that considers the medium- to long-term and the global market)
- Legislation for corporate organizations (make procedures for M&A, etc)