The Industrial Structure Vision 2010 (outline)

June, 2010
Ministry of Economy, Trade and Industry

### 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

#### Shift in industrial structure

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

<table>
<thead>
<tr>
<th>Industrial structure</th>
<th>Toward “stable Multi-pole Structure” based on five strategic areas</th>
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</thead>
<tbody>
<tr>
<td>“Mono-pole structure” solely depending on the automobile industry</td>
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<table>
<thead>
<tr>
<th>Sources of added value</th>
<th>Toward “System sales” and “Creating added cultural value Models”</th>
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<tbody>
<tr>
<td>High quality, product-specific sale</td>
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<table>
<thead>
<tr>
<th>Inhibitors to growth</th>
<th>Converting inhibitors into “Problem Solving Industry”</th>
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<tbody>
<tr>
<td>Environment &amp; energy, falling birthrate, aging population</td>
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</tbody>
</table>

#### Strengthen 5 strategic areas

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

#### Free from the dichotomy between globalization and domestic employment

- Win by technology and by business

<table>
<thead>
<tr>
<th>Support for business model shifts by enterprises</th>
<th>Shift in growing markets from Japan and developed countries to emerging countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-level vertical integral model and in-house development policy</td>
<td>“Globalization = hollowing out” theory</td>
</tr>
<tr>
<td>Many firms in a war of attrition in Japan</td>
<td>Shift in growing markets from Japan and developed countries to emerging countries</td>
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<table>
<thead>
<tr>
<th>Keys to global competition</th>
<th>Investment scale and speed</th>
</tr>
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<tbody>
<tr>
<td>Modularization model (strategic combination of black box policy with open policy and international standards) in the private sector</td>
<td></td>
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- International standardization in coordination with business strategy

<table>
<thead>
<tr>
<th>In the private sector</th>
<th>Shift in global markets from Japan and developed countries to emerging countries</th>
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</thead>
<tbody>
<tr>
<td>Industry reorganization and realignment to meet global markets</td>
<td></td>
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</table>

#### Shift in the government role

- Survive in global market to acquire added value

<table>
<thead>
<tr>
<th>Change in the global marketing game</th>
<th>Build new public-private partnerships making the best possible use of the market function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postwar period to early 1980s</td>
<td>Postwar period to early 1980s</td>
</tr>
<tr>
<td>- Government-led resource allocation and protection of specific industries</td>
<td>- Strategic partnership among the government, public and private sectors (top-level diplomacy, formation of consortiums)</td>
</tr>
<tr>
<td>- Convoy system</td>
<td>- Restructuring of enhance the function of the financial agencies such as JBIC</td>
</tr>
<tr>
<td>- Compartmentalized government structure</td>
<td>- New R&amp;D and performance evaluation centers jointly established by industry, academia and government</td>
</tr>
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<table>
<thead>
<tr>
<th>From 1990s onward</th>
<th>- Globalization of capital market</th>
</tr>
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<tbody>
<tr>
<td>- Rise of Market fundamentalism ideologue completely denying the national government’s role</td>
<td>- Rise of the state capitalism / socialist market economy</td>
</tr>
<tr>
<td>- Solution business such as environment and the energy problem is changed into the center of growth.</td>
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</tbody>
</table>

| National governments striving to support, attract and promote strategic areas | |

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Japan needs to formulate and implement a strategy that allows it to win 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Rank</th>
<th>2000</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3rd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>23rd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Change in share of global GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>14.3%</td>
</tr>
<tr>
<td>2008</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

#### Change in IMD World Competitive Power Ranking

<table>
<thead>
<tr>
<th>Year</th>
<th>Rank</th>
<th>1990</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>1st</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>22nd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. Background to the Stalemate

#### Problems in the Overall Industrial Structure

- Extreme dependent on automotive industry

#### Problems Involved in Corporate Business Infrastructure

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

#### Problems Involved in Corporate Business Infrastructure

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

### Evaluation of stronghold functions by foreign companies

<table>
<thead>
<tr>
<th>Function</th>
<th>Japan</th>
<th>China</th>
<th>India</th>
<th>Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated base in Asia</td>
<td>1st</td>
<td>1st</td>
<td>2nd</td>
<td></td>
</tr>
<tr>
<td>Manufacturing base</td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D base</td>
<td>1st</td>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Back office</td>
<td>2nd</td>
<td>1st</td>
<td>2nd</td>
<td></td>
</tr>
<tr>
<td>Distribution center</td>
<td>1st</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FY 2009

- Sharp established a design & development center for LCD panels & TV in China (Nanjing)
- U.S. medical device manufacturer Medtronic (pacemakers) moved its HQ from Tokyo to Singapore (2009)
- Nuine shifted control of all its "March" model production locations to overseas companies except Thailand
- Fujitsu does joint R&D with Singapore Agency for Science, Technology and Research
- Singapore has a 20% corporate tax, and support funding & incentive apply such as lower tax on investments
- Sharpar established a design & development center for LCD panels & TV in China (Nanjing)
- U.S. goods manufacturer P&G moved its Asia HQ from Kobe to Singapore (2009)
- Sunstar moves its HQ to Switzerland

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

- After the major reorganization of industries in South Korea

#### FY 2009

- Japanese companies profitability is less than half that of overseas companies

#### Average of 5 Japanese companies

- 0%
- 2%
- 4%
- 6%
- 8%
- 10%
- 12%
- 14%
- 16%
- 18%

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

<table>
<thead>
<tr>
<th>Industry</th>
<th>Domestic market size in Korea</th>
<th>Domestic market size in Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger cars</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Laptops and notebooks</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Cellular phones</td>
<td>39</td>
<td>11</td>
</tr>
<tr>
<td>Electricity</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>Oil distributor</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

- Domestic market size per company in South Korea 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

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

- Overall Strategy
  - (1) Strengthen international competitiveness of infrastructure-related industries (form consortiums, etc.)
  - (2) Strengthen financial assistance
    - Restart JICA overseas loans soon, strengthen functions of JIBIC & 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.

Main Sectors

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

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.

- Making Japan the development and production base for next-generation automobiles
- Development of the world most advanced battery and ensuring such technology

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

- Creating ‘advanced’ for Japanese family
- Developing ‘advanced’ for Japanese family

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

- Japanese fashion is very popular in China
- Efforts toward culture-industry superpower

Exports/imports by textile industry

<table>
<thead>
<tr>
<th>Country</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>2%</td>
</tr>
<tr>
<td>South Korea</td>
<td>50%</td>
</tr>
<tr>
<td>France</td>
<td>50%</td>
</tr>
<tr>
<td>Italy</td>
<td>149%</td>
</tr>
<tr>
<td>Germany</td>
<td>50%</td>
</tr>
</tbody>
</table>

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

Medical tourism is on an expanding trend on a global scale.
- 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

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
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)
(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, etc.)
(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 (NVOGs)

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

#### 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)

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### 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)