Chapter 3  Japan’s global economic strategy and external economic policy

Chapters 1 and 2 looked into (i) how the world-shaking financial crisis emerged and spilled over to the real economy, and (ii) how the Japanese economy was before the financial crisis occurred, how the financial crisis impacted the Japanese economy and where Japan can find a way to overcome the current situation.

The impact of the global financial crisis clouded the world and dealt great damage to Japan. However, even before this crisis, Japan had overcome two major crises: the Opening and Meiji Restoration, and the war defeat and postwar reforms.

We have experienced crisis situations twice over the last two centuries. Japan's history has been one of transforming our way of life at each time of crisis and emerging with breathtaking success. The first was the opening of our country to the world and the Meiji Restoration. Having been left behind as a result of the policy of national isolation, Japan changed course toward the promotion of industry. We achieved rapid industrialization and became the sole non-Western world power. The second was defeat in war (the Second World War) and postwar reforms. Japan, which was reduced to burnt-out ruins, shed its militarism and shifted its emphasis to the economy. We grew to become the second-largest economy in the world and built a society that is both stable and egalitarian.

(An excerpt from the policy speech by Prime Minister Taro Aso at the 171st Diet session)

After the two major crises, Japan overcame various other crises, including the Nixon Shock, the oil crises, the yen appreciation following the Plaza Accord, the collapse of the bubble economy and the Asian Economic Crisis. Through the two oil crises, Japan converted its energy-intensive industries into energy-conserving industries. ¹ Through the recession caused by the yen’s appreciation, Japanese-owned companies made painful business restructuring efforts and made great progress in international expansion. Particularly, manufacturers developed overseas production bases. Japan courageously tackled crises and turned them into opportunities.

The current global recession has been described as a once-in-a-century financial crisis. But the crisis allows us to find the structural problems in the Japanese economy that had been overlooked during the 2002–2007 economic recovery period. We can also look into factors behind these problems. Unless a problem is found, no action is launched to address the problem. A West European proverb says, “A problem understood is a problem half solved.” What we can do now is to learn lessons from the crisis, reform industrial structures and build a stronger economic system. We should turn the crisis into opportunities, in the same way as our predecessors did with the crises they faced.

This chapter proposes a future course that Japan should take in response to the latest economic crisis and what Japan’s external economic policy can do in this respect.

¹ During the decade between 1975 and 1985, Japan achieved steady economic growth without increasing energy consumption.
Section 1 Direction of external economic policy

Section 1 looks into the future course of the Japanese economy following the latest global financial and economic crisis and the role of foreign economic policy in fighting against the crisis. It emphasizes that all Japanese players, including enterprises, citizens, universities and other research institutes, and media organizations, should be united to solve Japanese and global problems.

1. Japan's position in the global economy

(1) Japan sees its share of the world economy declining — falling to the third largest economy in the world

As described in Chapter 2, Japan’s share of the world economy decreased before this financial crisis, despite the country’s longest postwar recovery, which was supported by exports. Japan's share of world gross domestic product once stood at about 18%, second only to the U.S., but it gradually fell from 1995 and reached 8% in 2008. The Japanese share is likely to drop further. The International Monetary Fund forecasts China to eclipse Japan in nominal GDP in 2010. Japan's position as the second-largest economy in the world may thus last for only a short period of time. In terms of per capita nominal GDP as an indicator of affluence, Japan's ranking among the members of the Organization for Economic Cooperation and Development dropped rapidly from third in 2000 to 19th in 2007. Japan's international competitiveness ranking, as measured by the International Institute for Management Development, remained at number one for five years in a row from the ranking initiation in 1989 but then declined gradually. After falling to 20th, the Japanese position has remained at around that level. In 2008, it dropped to 22nd. As the environment surrounding the Japanese economy is expected to grow even more difficult in the future, the economy is required to switch from quantitative expansion to qualitative improvement. Unless Japan launches reforms to break through the current difficulties, its national power is likely to decline further. In the face of the global financial/economic crisis, Japan should take the crisis as a good opportunity to review its industrial and social structure problems and launch a medium- to long-term strategic program that should not be limited to a

2 From the IMF Data Base. The world economic growth rate was expected to average about 4% a year in the 21st century. Unless Japan achieves a faster growth rate than the world economy growth, its share of the world economy will not cease to decline.
3 The Chinese economy could overtake the Japanese economy even within 2009, if China achieves an annual growth rate of 8% and Japan suffers a contraction of 3.5% or more.
4 In 2009, Japan’s ranking rose to 17th (as announced on May 20, 2009).
short-term economic recovery.

**Figure 3-1-1-1** Share of each country’s nominal GDP in the world economy

![Graph showing share of each country’s nominal GDP in the world economy](image)

*Source: World Economic Outlook Apr. 2009 (IMF).*

**Figure 3-1-1-2** Major countries’ per capita nominal GDP rankings within OECD

![Graph showing major countries’ per capita nominal GDP rankings within OECD](image)

*Source: Cabinet Office of Japan.*

(2) Waves of globalization — the world is being integrated

As noted in Chapter 2, a major factor behind the current recession is that the Japanese economy has grown dependent on exports mainly to the United States and has had no pillar other than exports to shore up demand.

There is a view that the recession has resulted from quick production adjustments made in response to a global economic stall, which indicates that the Japanese economy may be flexible only if
there are indeed sufficient social safety nets. Industries that are very internationally competitive may
recover exports as the world economy rebounds. Cyclical problems will ease as time goes by. It is true
that the global recession is a problem, but Japan’s structural problems are much more serious.

In other words, an essential problem for the Japanese economy is how Japan should tackle the
huge waves of globalization that have been crashing on this country for more than 10 years.

Japan's population totaled about 126 million in April 2009, declining by 136,000 in one year (by
400 every day). World population reached about 6.77 billion as of April 2009, increasing by 80 million
in one year (by about 200,000 every day). Until the Cold War ended, only a tiny portion of the current
world population of 6.8 billion were viewed as the world's major consumption market (product sales
destination), namely, Western industrial countries (with a population at the time of 900 million). Since
then, however, China, India and the former Soviet republics have joined the consumption market. All
economies in the world, including Asian, African and Latin American countries, have been integrated
into a single market led by the United States. Excluding a few countries that have closed their
domestic markets to foreign goods, all the countries in the world now form a single market.

Globalization is the integration of all countries into a single world market, representing economic,
social and other interactions and exchanges that have been deepening on a global scale. It can be
interpreted as modern society's new cultural and historic stage, where diversified civilizations and
cultures in the world maintain constant contact with each other through movements of people, goods
and money.

(3) Economic globalization — global expansion of the market mechanism

Economic globalization means that various economic entities (including enterprises) are allowed
to pursue economic efficiency on a global scale. The global operation of the market economy
mechanism is said to lead resources to be used at enterprises capable of more efficient production in
order to increase the productivity of the entire world and sustain the development of the world
economy. This means that new systems for the international division of labor will be formed in every
country to promote competition and develop industry. China represents the most successful case for a
country's integration into the world economy. In the 30 years since China was opened to the rest of the
world on a full-fledged basis in 1979, its per capita GDP has expanded some 10-fold, while the
population of those living in poverty has declined by more than 500 million. African countries have
recently been growing at an annual pace of 5% above the world average. The world is coming closer
to a society where effort is rewarded similarly in all countries.

At the same time, negative aspects of the market economy mechanism spread globally. The world
economy's integration increases the synchrony of the world economy and the risk of a global recession
occurring. In industrial countries, information technology can advance industry while bringing about
industrial hollowing-out, causing higher unemployment rates and deflation. In emerging economies,
international capital flight can trigger an economic crisis, as shown by the Asian currency crisis. The
domestic industrial structure of such countries can change rapidly to increase the gap between the rich
and the poor. The market economy mechanism makes the distribution of resources efficient. But the
distribution may not necessarily become fair. The market mechanism has no ethical discipline to prevent food price spikes from causing starvation in poor countries.

(4) Three impacts that economic globalization exerts on domestic economies

What would happen if globalization causes economic borders to collapse and integrates domestic economies into the world economy? Three specific impacts of globalization are cited as follows:

(A) Movements of people, goods and money — all are linked when moving

People: The number of international travelers in 2007 came to 1.1 billion. (This means one of every six people in the world travels overseas. In the OECD countries, one of every two people travels abroad.) More than one million people immigrate to the United States every year.

Goods and services: Many everyday necessities come from China and Southeast Asia. Services from hamburger, coffee and other fast food services to life insurance are provided by foreign countries. Container carriers transport cargo from Japan to the United States in two to three weeks. A person in Tokyo can have cargo delivered to someone in New York via air transport within two days.

Money: Global trade and annual world GDP total about $17 trillion and $55 trillion respectively (as of 2007). On the other hand, foreign exchange transactions total $1,460 trillion (as of 2007): some 86 times as much as trade and about 27 times as much as world GDP. Foreign ownership of listed Japanese-owned companies is about 30% on average (27.6% as of 2007). Foreign ownership of many such firms exceeds 50%.

(B) Full realization of the theory of capital — money’s predominance against goods

Since even before the global financial crisis, money has increased faster than goods have been produced. Money flow becomes capital flow that affects controls on enterprises. Money that represents property rights as the basis of private ownership moves globally and intensively, bringing about stock price and foreign exchange rate fluctuations that affect national economies, politics and societies.

(C) The world becoming uniform and flat — the law of one price

In a winner-takes-all manner, multinationals provide their products or services throughout the world. Cola, hamburgers and coffee are sold in the same forms in every country in the world. Just as rural cities have lost individual characteristics and become mini versions of Tokyo through postwar economic growth, cities around the world have become similar to each other and urban residents’ lives have become uniform.

According to the “factor price equalization theorem,” prices of various goods and services (factors) become globally equalized (the global law of one price). Although gasoline prices differ from gas station to gas station within a town, Internet sales prices excluding delivery fees are the same

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5 McDonald’s alone sells hamburgers to 58 million people in 118 countries every day (according to the McDonald’s website).

6 The theorem is also called the Heckscher-Ohlin theorem.
throughout Japan. The eBay 7 global Internet auction site handles global transactions. In the real economic world, the same products made in China are distributed to 100-yen shops in Japan, one-dollar shops in the United States and 1,000-won (about 77 yen) shops in South Korea. Wages for U.S. IT engineers may become closer to those of their Indian counterparts. Wages for Japanese workers may become closer to those of Chinese workers doing similar jobs. 8 For example, prices of products around the world may become closer to those of similar products made in China, which features cheaper labor.

(5) Japan is being caught up with for the first time — a period for Japan to be caught up with and overtaken

It is not the first time for Japan to face large waves of globalization. Japan did so when it ended its policy of isolation and opened up 150 years ago and when it was under postwar occupation 60 years ago. In the current form of globalization, however, other countries are catching up with Japan. Japan had been catching up with and overtaking other countries, but it is now positioned to be caught up with and overtaken by others. In some industries, Chinese or South Korean enterprises have caught up with or overtaken Japanese-owned companies.

Western countries had been caught up with and overtaken by others in the 1970s and 1980s; now it is Japan’s turn. During the 1970s and 1980s, western countries saw traditional steelmakers and automakers slumping and watch, camera and other precision instrument manufacturers collapsing due to exports from Japan. Angered by Japanese exports, some U.S. citizens hammered Japanese cars, as was shown repeatedly on television. Through such experiences, Western countries have changed their styles and achieved growth again with the creation of venture businesses and innovations using information and communications technologies, and financial engineering.

Japan is now experiencing hardships similar to those Western countries experienced in the past. Japan's future target image was clear when it was catching up with and overtaking Western countries. But the target image has become vague in line with the diversification of values.

**Column 22 Impacts of the yen's historically low levels**

Sharp export growth before 2008 had been attributable mainly to the yen's historically low levels serving as an advantage for Japan's industry. According to “real effective exchange rates” as tabulated by the Bank of Japan, the yen had depreciated substantially since 2000. In 2007, the yen had dropped to the lowest levels since before the 1985 Plaza agreement to drive down the dollar against other major currencies, including the yen. The historically low yen was combined with the then robust

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7 The largest online trade community in the world has some 88 million users, with transactions reaching about 60 billion dollars (about 6 trillion yen) in 2008.
8 When a person in Tokyo makes a phone call to a personal computer maker, a Chinese operator at a call center in Dalian, China, may respond in Japanese.
9 But the Big Mac indexes prepared by Britain’s Economist magazine indicate that a McDonald’s Big Mac sells for 5.5 ringgits (about 1.5 U.S. dollars) in Malaysia against 6.5 Swiss francs (about 5.6 U.S. dollars) in Switzerland. The highest price is nearly four times as much as the lowest one.
489
expansion in global demand to boost Japan's exports to a new high (84 trillion yen in 2007) and its rate of dependence on exports to a record (16.3% in 2007).

Column Figure 22-1 Changes in real effective exchange rate

Note: What is the real effective exchange rate?

The real effective exchange rate is viewed as an overall measure of a country's external competitiveness that cannot be indicated by an exchange rate between two specific currencies alone.

A rising yen's impacts on Japan's price competitiveness and its trade balance may differ depending on whether the yen rises against the dollar alone or many other currencies. Therefore, the yen's weighted average exchange rate with other major currencies is calculated as a “nominal effective exchange rate” in the form of an index (100 at a base point in time) in accordance with the weights of Japan's trade with countries or regions represented by the other currencies. The external competitiveness can change according to fluctuations of prices as well as foreign exchange rates. Even if Japan's nominal effective exchange rate remains unchanged, for example, its relative competitiveness against a trading partner country may be enhanced as the partner's inflation rate exceeds the Japanese level. With this point taken into account, the nominal effective exchange rate is adjusted for inflation to become the “real effective exchange rate.”

(6) From an homogeneous society to a diversified society — innovation begins with differentiation

Earlier, Japan learned from success stories in other countries, introduced excellent overseas goods and business models and improved them in order to produce better products at lower cost. Japan was thus sufficiently competitive in the world market. As Japan is now about to be caught up with and overtaken, it cannot compete in the world market with products that are the same as those made in countries with cheaper labor. The key point for Japan is now whether it can develop goods or services that countries with cheaper labor cannot produce. This means Japan should differentiate its products from those made by others. Japan's future depends on whether it can continuously develop the world's
best-quality (Number One) or unique/distinctive (Only One) goods and services that other countries cannot imitate.

From now on, Japan should focus on how to develop better quality (profit) rather than compete in a price-cutting race to expand market shares. It is desirable for Japan to become a society in which profit rather than sales should be the measure of whether an industry is Number One. Japan's product quality has become the best in the world because all of its businesspeople, from top managers to frontline workers, hold quality in high regard and have accumulated daily efforts to scientifically improve quality through quality control circles. Japan will be able to become the world's Number One in terms of profit because it has already become the best in terms of quality. The late Konosuke Matsushita, who was the founder of Panasonic Corp. and was referred to as “the god of management,” left the following message:

The Value of Profit
Profit is valuable.
Neither of the two Chinese characters in the word “Rieki” (profit) have any bad meanings.
Profit enriches our lives as well as the lives of others and society.
Profit has great potentials

Society is moving in pursuit of profit.
This profit obviously includes some kind of spiritual profit.

Failing to gain profit while engaging in commerce or business amounts to committing a sin against society.
Such commerce or business may not survive for a long time.
Such commerce or business may bring trouble upon its operators and upon society.
Profit, as interpreted correctly, is designed to be returned to society.
Based on this idea, there is nothing wrong with advocating profit.

(7) Diversified Japan — all are different, and all are good

How can profit “be returned to society”? In a global society where everything becomes uniform due to globalization, things that stand out may be valuable. Japan has physical diversity, including the affluence of each of its four seasons and its abundant foodstuffs from all over the world. But the

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10 The late Matsushita also left the following message:
“The ‘small profit and quick return’ system represents a defect of the capitalist economy, amounting to an unsocial, egoistic practice. The small profit and quick return system means lower wages. A company that produces goods under lower wages and sells them at a smaller profit may temporarily earn much. But such practice may impoverish many people, confuse the industry and make the country poorer. We are determined to correct such a basic mistake. When large profit, quick return and high wages are taken as natural in Japan, its society may be as prosperous as the U.S. society. Small profit and quick return may enrich one and impoverish all others. Our large profit and quick return policy will produce affluent consumption, affluent production and a wealthy society.”

11 M. Kaneko, *WATASHI TO KOTORI TO SUZU TO*, Kaneko Misuzu, Chosaku Hozon-kai
diverse opportunities provided by Japanese ways of working and living should also be recognized and respected. Japan can make use of such diversity to create unique attraction and value throughout the world and clear the path to the future.

**Column 23 Differentiation meeting customer needs**

Japan has a consumption market worth 300 trillion yen and household financial assets worth 1,500 trillion yen. Therefore, it is important to meet consumer demand successfully. Even during an economic crisis, many enterprises take advantage of various differentiation efforts to secure profit.

For example, a small fruit shop called “Sugiyama Fruits” on the Yoshihara shopping street in Fuji, Shizuoka Prefecture, has been growing by gaining customer confidence in its higher-priced, quality goods. The shop’s manager goes to markets in Tokyo almost every day to purchase fruit for retail. The manager takes all the fruit out of boxes and discards the defective fruit before putting the normal goods back into boxes.

Tombo Beverage Co., is Japan’s oldest lemon soda maker. It is based in Toyama Prefecture and has been successful in niche markets that are left untapped by large companies. Specifically, it has developed Chanmerry (the bestselling nonalcoholic sparkling beverage in Japan) for Christmas and frozen jelly drinks that are available at zoos only.

Nakamura Brace Co. is an orthopedic and rehabilitation device maker in a mountainous region of Shimane Prefecture. It was founded in 1974 by President Toshiro Nakamura who at the time said, “Let’s make our company indispensable for Japanese people within a decade and for people all over the world in two decades.” It has made prosthetic ears, noses, fingers, arms and feet that are kind to physically disabled people and contribute to enhancing and protecting human dignity.12

**Column Figure 23-1 Vigorous enterprises under the recession**

Japan’s industrial productivity has remained low, as companies have competed in a price-cutting race to take bigger shares of the saturated domestic market in the face of lower prices for imports (Japan has thus plunged into a deflationary spiral), according to some experts. IT introduction and other efforts to improve productivity and provide cheaper goods and services can contribute to enhancing added value for the whole of Japan. But simple price cuts transfer profit from product providers to households while failing to raise added value for Japan. In fact, price cuts reduce corporate profit, which forms financial resources for productivity improvements, and could make negative contributions to the entire economy over the medium to long term.

Prices may collapse even for high-quality products due to oversupply, leading to what is known as “impoverishment caused by a bumper harvest.” Competition itself is desirable because it stimulates new product development and improvement in services. But a price-cutting race involving the same goods is theoretically expected to last until producers’ profit falls to zero. In order to prevent impoverishment of the entire Japanese industry due to a bumper harvest, enterprises should differentiate their goods and services from others and consider developing mechanisms (business models) to achieve higher profit.

Specifically, the following models are conceivable:
1) Putting core technologies under control to secure higher profit
2) Putting system integration under control to secure higher profit
3) Increasing procurement efficiency through international supply chain expansion to secure higher profit
4) Integrating historical or mature consumption cultures with trend signals and implementing international expansion to secure higher profit (brand profit model)
5) Cutting prices for copiers, elevators and other equipment on first delivery before earning higher profit through expendable supplies and after-sales services (installed base profit model)
6) Developing mid-spec, lower-priced products and services (volume zone) in addition to high-spec, higher-priced ones the wealthy class in order to expand sales channels and improve logistic efficiency and thereby secure greater lots and higher profit (product-pyramid profit model13)

A long time has passed since regional promotion measures using ICT were first expected to

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13 According to Adrian J. Slywotzky, there are 21 profit-generating business models, including the product-pyramid profit model. If a company’s product pyramid (lineup) fails to cover lower-priced products, its rivals may participate at the bottom of the pyramid, get resources and begin to pursue the top position. Slywotzky says if Ford and GM had developed lower-priced brands designed to generate profit in the second half of the 1960s, they could have delayed the expansion of Japanese vehicles into the U.S. market by at least 10 years. (Slywotzky, Adrian J. and David Morrison (1999), *The Profit Zone*, Diamond Inc.)
spread. Japan has tackled a wide range of regional information measures, including the development of ICT infrastructure, the promotion of ICT infrastructure uses and the training of regional ICT experts. At the same time, demonstration research has been carried out on telemedicine and health guidance services. Japan has been steadily developing into a country that uses advanced ICT.

At the same time, individual styles of ICT use have changed dramatically. Individuals were previously recognized mainly as consumers of goods and services. Now, individuals have become homeworkers who undertake contracts and engage proactively in marketing processes from product development to sales promotion. Homeworking, e-commerce and affiliates can be included in telework\(^\text{14}\) to take advantage of ICT and work free from time or location constraints.

Furusato Marche of the Iwaki Telework Center based in Iwaki, Fukushima Prefecture, is seeking to develop a regional information platform where people and information gather under the idea that teleworkers’ energy should invigorate regional communities. (http://www.furusatomarche.com/index.php?main_page=index)

The website has the following three features:

First, it is a customer center responding to individual requests, stating that, “We will find the information or goods you want. Make inquiries about anything.” While producers focus on developing better products, the customer center undertakes one-stop services, covering from order acceptance and placement to shipment and payment arrangements. Such division of labor supports regional capacity.

Second, Furusato Marche stakeholders have been collaborating in a dynamic manner. A mechanism has been developed for collaboration and participation by various individuals, including producers and sellers (for provision of goods and materials and introduction of producers), teleworkers (for preparation and updating of information, and face-to-face and referral sales), local enterprises (for development of products and database management), U-turn (people returning to hometowns) and I-turn (people moving from urban regions to rural regions) workers (for collection of information and blogging), retired citizens (for information search, regional human connection development, negotiations, and face-to-face and referral sales).

Third, the website offers quality products. Under the standard that all products are “secure, safe, healthy and scrumptious,” it is linked to products only available from the website, seasonal regional products, jointly developed products and other original products, as well as regional human connections (in Fukushima Prefecture and the Tohoku Region).

-- Regional teleworkers linked to the world --

Furusato Marche is expanding its services to cover even excellent foreign goods, such as olive oil made on Crete Island in Greece and 100% royal jelly made in Thailand. For example, the owner of the sales agency for the Greek olive oil claimed that “Greece had the world’s No. 1 product, unknown in Japan,” and began to handle the olive oil through a website. The agency owner, a former wine company president, lives in Yotsukaido, Chiba Prefecture, has set up an office in Tokyo and does business as a teleworker.

\(^{14}\) Telework means a flexible working style using ICT, free from location or time constraints.
In a society where homeworkers can flourish, agents are required to receive service orders from government offices and private enterprises and distribute these orders to homeworkers. The Iwaki Telework Center, which operates Furusato Marche, started up in 1994 as a pioneer telework agent to guide and train homeworkers and receive work orders for homeworkers. In Okinawa, Office Karisara (http://www.karisara.com/), led by Kaori Asato, has taken advantage of the Internet to develop a virtual office to network homeworkers throughout Japan. In Hokkaido, Wise Staff (http://www.ysstaff.co.jp/) led by Yuri Tazawa provides Internet services and engages in marketing and tourism promotion in the Okhotsk area with contract homeworkers at home and abroad.

Attempts to create such telework agents and new virtual markets have been going on throughout Japan. In such a new business field, start-up companies or individuals can break through traditional business constraints regarding company size, age, sex or past business achievements.

Once upon a time, Oumi merchants explored markets on foot with carrying-poles on their shoulders. As these merchants earned 1,000 ryo through working in this manner, the phrase of “Oumi’s 1,000-ryo carrying-pole” emerged. It is well known that descendants of Oumi merchants founded general trading companies that have supported modern Japan. In modern times, young and old teleworkers use personal computers connected through networks to create markets and are serving the role of trading companies while expanding their activities. As the charm of individuality is amplified, the uniformity of cultures changes to diversity. Telework is now being exploited for building “only one” communities and knowledge-based economies.

Column 26 Broad-minded society, efficient society, happy society

Japan’s miracle postwar restoration from ashes provided hope to many people in developing countries. In the 1988–2000 period (excluding the recession in 1998), Japan outperformed the United States in terms of per capita GDP. The phrase “made in Japan,” which had once been used to describe cheap products, now stands for excellent quality.

In the course of postwar economic growth, Japan’s society has grown more and more efficient. Machines have been introduced one after another at factories, while trains run on time, down to the second. Muri, muda, mura — overburden, waste and irregularity — have been reduced. The process may be called the streamlining of economic growth or society.

Meanwhile, Japan’s society has lost its diversity and open-mindedness through modernization. As the most efficient systems and services have been adopted throughout Japan under the “winner takes all” approach, similar goods and services have been made available throughout the country, while regional traditional cultures and streetscapes have been lost. At the same time, regional communities have disappeared. An open-minded, idyllic society, as seen in the movie entitled “Always 3-chome no yuhi”15 (called “Happy street” in China and Taiwan) that depicts Tokyo over a ten-year period from 1955, has been lost.

Globalization is leading emerging economies to follow the same path as Japan. People in these

15 Distributed by Toho Co.
countries have grown busier with pursuing affluence and efficiency. Globalization is similar to riding a big rotating log: if someone on the log makes it spin faster, others must also step quickly to prevent themselves from being thrown off the log.

Wall Street’s capitalism, which caused the global financial crisis, has been a symbol of efficiency. As investors pursued more efficient investment, global investment funds went to U.S. mortgage-backed securities that were rated as carrying low risks and generating higher yields. In 2004, Britain, known as a financial services-based country, eclipsed Japan in per capita GDP, indicating that speculative money games outperformed manufacturing in capital efficiency.

Japan can pursue an efficient, diverse society. Japan has already been switching from large-lot production of a narrow range of products to small-lot production of wider-ranging products. Services have been diversified so that consumers can reserve their respective personal travel plans through the Internet. It is not impossible to create a happy society where the world’s highest efficiency, seen in Japanese society, coexists with diversity and open-mindedness to allow individuality to be respected. The creation of such a society is a new challenge for Japan, which has overcome pollution and energy problems. The creation also represents Japan’s contributions to other countries that are losing their respective social identities due to globalization and modernization.

2. Direction of external economic policy

(1) “Future development strategy” and “growth initiative towards doubling the size of Asia’s economy”

On April 9, Prime Minister Taro Aso announced a future development strategy as Japan’s new growth strategy, stating, “In a situation in which major worldwide adjustments have become necessary, it is no longer realistic for Japan alone to return to a growth trajectory that relies on exports of traditional goods.” Proposing “leading the world in the low carbon revolution,” “a healthy society with
longevity, in which people feel secure and strong” and “promoting the attractiveness of Japan” as the strategy’s three pillars representing “fields in which we can capitalize on Japan’s strengths and characteristics,” Prime Minister Aso vowed to intensify public and private investment in these areas and implement bold institutional reforms to promote such investment. Specifically, the prime minister said the government would seek to boost real GDP by ¥120 trillion and create four million jobs by 2020. (In the coming three years, particularly, the government will seek to create ¥40 to ¥60 trillion in demand and 1.4 to 2 million jobs.16)

Table 3-1-2-1 Future development strategy — a new growth strategy

<table>
<thead>
<tr>
<th>Future vision for 2020</th>
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<tbody>
<tr>
<td>(1) Leading the world in the low carbon revolution</td>
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<tr>
<td>(2) A healthy society with longevity, in which people feel secure and strong</td>
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<td>(3) Promoting the attractive points of Japan</td>
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[In 2020] Increasing real GDP by ¥120 trillion Creating employment opportunities for 4 million people in the strategic sector

[Over the next three years (total)] Creating demand ¥40–60 trillion Creating jobs for 1.4 to 2 million people

Ten big projects

| Leading the world in the low carbon revolution |
| Plan to be the number one solar power nation in the world |
| Plan to be the first nation that popularizes eco-cars |
| Low carbon traffic revolution |
| Plan to become a major power in terms of resources |

| A healthy society with longevity, in which people feel secure and strong |
| Plan to create nursing care jobs for 300,000 people |
| Plan to revitalize regional health care systems |
| Plan to create innovative medical technology |

| Promoting the attractive points of Japan |
| Plan to utilize potential of agriculture, forestry and fisheries |
| Plan to transmit the soft power of Japan |
| Enhancement of fundamental power of Japan |

In the same speech, Prime Minister Aso also announced “the growth initiative towards doubling the size of Asia’s economy” by 2020 through (i) “strengthening Asia’s growth potential” by promoting wider-area infrastructure development, industrial development and institutional improvement integrally and systematically to dramatically develop Japan’s surroundings and a wide range of industries, (ii) the “comprehensive Asian development plan” to be prepared by the Economic Research Institute for ASEAN and East Asia (ERIA) to improve arterial infrastructure such as railways and roads, relevant infrastructure including power stations and industrial parks, industry development plans, fund-raising mechanisms and customs clearance systems to make the initiative more concrete, and (iii) expanding the middle-income class’ consumption by developing safety nets and education.

While the future development strategy indicates Japan’s future shape, “the growth initiative towards doubling the size of Asia’s economy” suggests the basic perspective of Japan’s global economic strategy or external economic policy showing how Japan should behave in the world,

16 See Annex 1 (METI estimates) to “Future Development Strategy” (prepared on April 17, 2009). These estimates are vulnerable to various uncertainties and should be viewed flexibly.
particularly in Asia.

(2) Three viewpoints for external economic policy

Given economic and social environment changes over recent years, we believe that the exploration of new markets at home and abroad, the development of a resilient economic structure responding to changes and a country that solves problems for the world are important as the three basic viewpoints for Japan’s global economic strategy or external economic policy. In order to overcome the current difficulties first, the government should take fiscal measures to make up for a decline in domestic demand and should step up efforts to secure steady economic recovery and enhance the entire economy. Such efforts refer to the exploration of new markets to expand the economic pie. Efforts are also required to make the Japanese economy capable of responding quickly and flexibly to various crises. The efforts amount to the protection of the existing pie. Furthermore, Japan should try to become a problem-solving country that can proactively contribute to solving problems facing the international community and take advantage of such contributions for boosting its national power in a win-win manner to benefit both itself and the world.

(A) Exploration of new markets at home and abroad — increasing per capita GNI

National wealth (or gross national income) is an infrastructure for our sound, cultural lives. The New Economic Growth Strategy, which METI developed in 2006, projected per capita real GNI to grow at an annual rate of around 2.5% over the coming decade. In this case, per capita income in FY2015 would increase by about 30% compared with FY2004.17

GNI covers domestic demand, external demand (net exports), the income balance and trading gains. We should consider how to expand each component.

Column 27 What is GNI? Changing from GNP to GNI

Internationally, the measure of national economic activities is called the system of national accounts, or SNA. The SNA is an international standard or measure to systematically record a national economy’s flow, including production, consumption and investment, and its stock such as assets and liabilities. It is an accounting principle amounting to the business accounting principle used by enterprises to prepare financial statements.

Japan has made changes regarding GDP as recommended by the United Nations in order to facilitate better analysis of the economy. The 93SNA eliminated the concept of GNP (gross national product), which had been used in the 68SNA. Instead of GNP, the 93SNA introduced GNI (gross national income). GNP has been calculated by deducting income for overseas payments from domestic added values or GDP and adding income payments from abroad. In this way, GDP and net income from abroad had been combined into GNP. Therefore, GNP should have been the measure of national

17 The same projection was put into the 2008 version of the New Economic Growth Strategy. Since the economic environment is expected to change, the strategy notes that the projection should be viewed flexibly.
income rather than output.

In order to specify GNP in the 68SNA as the measure of national income, the 93SNA redefined GNP as GNI, covering all economic entities’ income, including payments from abroad. While nominal GNP based on the 68SNA was identical to nominal GNI based on the 93SNA, the 93SNA made an adjustment for computing real GNI. Real GNP based on the 68SNA had covered net exports as a real export-import gap while failing to include real income (trading gains) emerging from an export-import price gap. In order to indicate real national income more precisely through the adjustment, the 93SNA adds trading gains when computing real GNI.

Defining equation

Nominal GNP (68SNA) = Nominal GDP + Net income from abroad = Nominal GNI (93SNA)
Real GNP (68SNA) = Real GDP + Net income from abroad (real)
Real GNI (93SNA) = Real GDP + Trading gains + Net income from abroad (real)

(a) Exploring domestic demand

When considering domestic demand, we must look at both flow (annual gross domestic product) and stock (outstanding national assets and liabilities). This is because asset increases and decreases are expected to exert great impacts on consumption in Japan, as seen in Western countries, where private consumption declined substantially upon residential price drops, as reviewed in of Chapter 1, Section 2.

Among Japan’s latest available stock data, outstanding national assets at the end of 2007 declined by ¥121.6 trillion or 1.4% from a year earlier to ¥8,427.7 trillion for the first drop in five years. Of the total, nonfinancial assets totaled ¥2,544.3 trillion, up ¥29.0 trillion or 1.2%. Financial assets aggregated ¥5,883.5 trillion, down ¥150.5 trillion or 2.5%. Household financial assets alone came to ¥1,503.6 trillion, down ¥62.0 trillion or 4.0%.

Outstanding liabilities at the end of 2007 stood at ¥5,633.3 trillion, down ¥185.6 trillion or 3.2% from a year earlier. National wealth (or net assets that are computed by subtracting liabilities from assets) came to ¥2,749.5 trillion, up ¥64.1 trillion or 2.3%, rising for the second straight year.

![Figure 3-1-2-2 Changes in outstanding national assets](image.png)

Source: Cabinet Office of Japan

499
Among flow data, nominal GDP (spending side) in FY2007 expanded 1.0% from the previous year for the fifth straight year of growth. Real GDP (spending side) grew 1.9% for the sixth straight year of rise.

Table 3-1-2-3 GDP components

Worthy of attention here is a decline in residential assets among real net fixed assets. The decline, though attributable to the impact of the revised building standards law, indicates the absence of progress in private residential investment during the economic recovery.

The 1986 Maekawa Report described housing measures as the largest pillar of domestic demand expansion and a new plan to double living space released in 1999 noted housing space was the most fundamental element to support not only affluent lives of the people but also Japan’s vigorous economy based on the people’s total economic activities, including consumption and working. Housing development has thus been Japan’s important constant challenge. Nevertheless, private residential investment’s share of nominal GDP declined substantially from an average of 7.0% in the 1970s and an average of 5.3% in the 1980s to 3.2% in FY2007. Efforts are required to double living space to enrich the people’s lives and expand domestic demand.

While private consumption must be increased to 57% of GDP in order to expand domestic demand, pension and employment fears have reportedly dampened consumption. It is indispensable for the government and private sectors to jointly improve social safety nets to ease such fears. In order to increase private consumption, Japan will also have to provide new goods and services through innovation, improve productivity of the services sector and promote the introduction of excellent resources (biotechnology, financial services, designs, etc.) through Japanese firms’ cooperation with

18 An excerpt from the Maekawa Report (1986):
(1) Promoting housing and urban redevelopment projects
Housing policy should be fundamentally reformed to expand and enhance housing measures. In major metropolitan regions, particularly, urban zones should be redeveloped to promote the creation of living spaces adjacent to workplaces and the construction of new residential towns. At the same time, urban functions should be improved.
their foreign counterparts and the exploitation of advanced foreign human resources (through the Career Development Program for Foreign Students from Asia, the conclusion of bilateral economic partnership agreements and the promotion of telework).

As well as a rise in Japanese people’s consumption, increases in foreign visitors to and foreign investment in Japan are effective for expanding domestic demand. In order to attract foreign tourists and investors, Japan will have to (i) advertise its attractiveness and (ii) improve the business environment through the enhancement of its Asian hub functions (including distribution, financing, career development, information and culture).

(i) Acceptance of foreign enterprises

In December 2008, the government revised the Program for Acceleration of Foreign Direct Investment in Japan to make Japan an attractive country for foreign enterprises’ business operations and investment. Specific measures in the revised program are as follows:

<table>
<thead>
<tr>
<th>(A) Invigorating local communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Supporting multiple local governments’ wider-area cooperation to attract foreign enterprises</td>
</tr>
<tr>
<td>- Promoting regional reinvestment or secondary investment by foreign enterprises operating in Japan</td>
</tr>
</tbody>
</table>

(B) Developing investment climate

- Effective utilization of investment funds (promotion of consultations, invigoration of fund councils, etc.)
- Attracting foreign enterprises in a manner to contribute to business continuation/rehabilitation and overseas expansion of Japanese-owned companies, including small and medium-size enterprises (SMEs), through mergers and acquisitions.
- Expanding the acceptance of overseas human resources (implementation of the Career Development Program for Foreign Students from Asia, etc.)
- Implementing an action program to accelerate the examination of medical equipment
- Promoting the deregulation of air services, the further internationalization of Haneda Airport and 24-hour operations of international airports in metropolitan regions.
- Reconsidering effective corporate tax rates
- Comprehensive consideration of desirable regulations on foreign enterprises
- Publicizing reports on anti-takeover defenses

(C) Positive public relations activities

- Top sales by governors or mayors, workshops on investment in Japan

(ii) Enticing foreign tourists to visit Japan

In order to increase the number of annual foreign visitors to Japan to 10 million, the government and private sectors have cooperated in the “Visit Japan Campaign” to publicize Japan’s attractiveness overseas and support the development of attractive Japan travel plans. Specific campaign measures follow:
(1) The campaign is implemented for 12 countries/regions\(^{19}\) from which many visitors come to Japan.
(2) Improving foreigners’ awareness of Japan (Using overseas television commercials to advertise Japan’s attractive points, etc.)
(3) Attracting foreign tourists (invitation of foreign travel agents to Japan, joint advertisement of Japan travel plans, etc.)

In addition, we have been (i) developing arrangements for the acceptance of foreign tourists (promoting foreign-language labels for public transportation systems, etc.) and (ii) sponsoring/inviting international conferences.

(iii) Encouraging SWFs to invest in Japan

The Ministry of Economy, Trade and Industry sent a mission to the Middle East in March in order to introduce the region’s funds to Japan. While some Middle East countries are planning to invest their funds in Asia as well as Western countries, some Japanese venture companies and funds lack risk money but possess technologies for commercialization. In a bid to match their business plans, METI and the Japan External Trade Organization (JETRO) sent a delegation of government and private sector representatives to the United Arab Emirates and Saudi Arabia to open a forum on investment in Japan. Such face-to-face business-making opportunities are important and can contribute to building win-win Japanese-Middle East relations that allow Japan to secure resources and Middle East countries to diversify their industries.

Abu Dhabi Investment Forum\(^{20}\) (Tokyo, June 1, 2009)

(iv) Exploiting ¥1,500 trillion in household financial assets

Since risk money supply required for Japanese-owned companies’ growth has not been sufficient, it is effective for Japan to not only introduce foreign funds but also to pour household financial assets, a promising risk money supply source, into industrial operations. Japan’s household financial assets total some ¥1,500 trillion, half of which is accounted for by cash and deposits. The portion for equity shares and other securities in Japan is smaller than in countries like the U.S.

\(^{19}\) The 12 are the United States, Taiwan, China, South Korea, Hong Kong, Australia, Canada, Britain, Germany, France, Singapore and Thailand.

\(^{20}\) The Japan Cooperation Center for the Middle East (JCCME) sponsored the Abu Dhabi Investment Forum to solicit Abu Dhabi investment in Japan (and provided the photo).
Figure 3-1-2-4 Breakdown of household financial assets (2006)

Source: Flow-of-funds statistics of each country, etc.

In order to allow the Japanese economy to sustain growth even amid the falling birthrate and aging population, Japan’s financial and capital markets are required to give household financial assets appropriate investment opportunities and provide enterprises and other entities at home and abroad with growth funds appropriately.

As international competition between markets are growing fiercer, Japan’s financial and capital markets are urgently required to enhance their competitiveness and improve their attractiveness in order to meet the needs of domestic and foreign users and fulfill their role sufficiently. Attractive markets are expected to allow Japan’s financial services industry to generate higher added values and contribute to sustaining economic growth.

In order to increase the competitiveness of its financial and capital markets, Japan should (i) build reliable and vigorous markets, (ii) develop a business climate prompting the financial services industry to improve its vitality and competitiveness, (iii) realize a better regulatory environment and (iv) create a peripheral environment for markets. The nation should proceed with comprehensive efforts to implement these measures.

(v) Agriculture-commerce-industry cooperation

Although Japan’s calorie-based food self-sufficiency rate is limited to 40% due to wheat and feed grain imports, the quality of Japan’s agriculture, forestry and fishery products and foods has been rated highly. Demand has been expanding for these Japanese products, treated as luxury foods. The global Japanese food boom has also been supporting the expansion. Although productivity in Japan’s agriculture, forestry and fisheries industries had long been rated lower than in other Japanese industries, including manufacturing, the way is being paved for agriculture, forestry and fisheries to become growth industries.

Traditionally, Japan’s agriculture, forestry and fisheries have been considered as core regional industries that exert spillover effects on the food industry and on manufacturers and installers of relevant equipment. In some areas, however, these primary industries have failed to take advantage of
their strengths for developing sales channels and meeting consumer needs. Therefore, agriculture, forestry and fisheries workers and commercial and industrial enterprises should combine their business resources to develop new products and services, increase their productivity and improve their business performances. It is significant that such agriculture-commerce-industry cooperation works to invigorate battered regional economies.

Based on the above recognition, METI and the Ministry of Agriculture, Forestry and Fisheries released a joint plan at the end of November 2007 to promote agriculture-commerce-industry cooperation in order to invigorate regional economies and have implemented various measures to support such cooperation.

In a bid to publicize and diffuse familiar success stories for agriculture-commerce-industry cooperation and encourage relevant enterprises to tackle such cooperation, the two ministries selected and recognized “the best 88 agriculture-commerce-industry cooperation projects” for a report compiling these successful agriculture-commerce-industry cooperation stories in an easy-to-understand manner in April 2008.

In May 2008, the Agriculture-Commerce-Industry Cooperation Promotion Act and the Revised Act on the Promotion of Establishment of New Business Facilities, etc. were enacted to provide legal support for such cooperation. The agriculture-commerce-industry cooperation promotion act provides that small and medium-size enterprises and agriculture, forestry and fisheries workers shall be allowed to receive loans, loan guarantees, tax breaks for equipment acquisitions, subsidies and the like for their certified joint projects to develop new products or services. Since the first certification of projects under the agriculture-commerce-industry cooperation promotion act in September 2008, 190 projects throughout Japan were certified as subject to the act by the end of March 2009.

As for budgetary measures for such cooperation, METI and MAFF earmarked a total of ¥33 billion in the FY2009 budget to support the development and commercialization of new products using agricultural, forestry and fisheries products and wide-area cooperation among antenna shops and other retailers.

In addition to such domestic efforts, we should aggressively publicize the attractiveness of Japan’s agricultural, forestry and fisheries products, including foods overseas, to expand demand for these products. In this respect, METI has deployed overseas coordinators at various points of the world to enhance the collection and provision of overseas market information and support for matching between sellers and buyers of these Japanese products. In a bid to establish the Japan Brand, METI has also created a nationwide secretariat to strategically support the development of overseas sales channels. The secretariat, including export strategy producers, has implemented the strategic promotion of information and public relations operations, participation in overseas trade fairs and matching between Japanese sellers and overseas buyers.

The agriculture-commerce-industry cooperation introduces the wisdom of manufacturers and distributors to the agriculture, forestry and fisheries industries in order to contribute to publicizing the attractive points of Japan’s agriculture, forestry and fisheries overseas and to invigorate regional economies in Japan.
Column 28 Government-private cooperation in developing sales channels for Japanese products in Thailand

Saijo is an industrial city located in the eastern part of Ehime Prefecture, boasting of the largest shipments of manufactured products (about $880 billion\(^{21}\)) in Shikoku Island. Its coastal industrial park accommodates the facilities of major enterprises, such as Asahi Breweries Ltd., Kuraray Co., Imabari Shipbuilding Co. and Nisshin Steel Co. Most of the secondary industry workers in Saijo are employed by SME subcontractors for large steel and machinery makers.

Mayor Ito (third from left) at the opening ceremony for the Shikoku Fair.

Business conditions for SME manufacturers supporting the regional postwar industrial structure have deteriorated persistently while shipments of manufactured products increased smoothly under the wave of economic globalization in the 1990s. In a bid to create new regional jobs, the Saijo municipality has paid attention to the presence of abundant primary industry products and come up with a “food processing and distribution complex initiative” to combine the primary, secondary and tertiary industries into a sixth industry to generate new added values for the region.

As part of the food processing and distribution complex initiative, Saijo has launched a project to develop Thai sales channels for its local products. The project is designed to develop direct channels for exporting goods from Shikoku to overseas markets, instead of indirect channels for exporting these products via major Japanese cities to the disadvantage of rural cities in terms of costs. The project thus focuses on the creation of local enterprises that can work as trading companies. Although farmers and food manufacturers usually develop export channels independently, Saijo has created new business opportunities by forming a food export industry cluster using the Saijo Industry & Information Center for Support (SICS) as a third sector industrial support organization and local enterprises’ trading functions.

Saijo has been developing Thai sales channels over the past three years. In January 2008, the city’s Mayor Kotaro Ito visited Thailand to take leadership in sales promotion. In a rare bid to emphasize the merit of scale, Saijo has promoted campaigns of local products under the title of “Shikoku Japan” without using the city name.

In April 2009, to mark the third birthday of the project, Saijo goods were loaded on the first containers for regular exports to Thailand at the Ehime international distribution terminal in

\(^{21}\) A preliminary figure for 2007
Matsuyama, Ehime Prefecture. We would like to pay attention to the future of the new regional revitalization measure for which the government and private sectors have joined hands without being bound by local government boundaries.

(vi) Plant factories

As representative agriculture-commerce-industry cooperation projects, new agricultural production systems called “plant factories” have recently attracted attention. Plant factories can produce high-quality vegetables stably and systematically, irrespective of seasonal changes, with artificial controls on the plant growth environment (including light, temperature, humidity, carbon dioxide density and nutrient fluids). These plant factories can meet consumer needs for safe, secure domestic foods and create new jobs for young and aged people.

METI and MAFF created a working group on plant factories at their research panel on agriculture-commerce-industry cooperation and compiled a report in April 2009 to specify problems and support measures for the diffusion and expansion of plant factories. The report called for promoting the expansion of sales channels for foods from plant factories, the research and development of infrastructure technologies and the development of the relevant business environment through the flexible enforcement of laws and regulations to triple the number of plant factories in Japan and cut vegetable production costs at plant factories by 30% in three years.

From the medium- to long-term viewpoint, food supply is expected to grow tighter globally, with water and other indispensable resources for agricultural production decreasing. Plant factories that fully depend on artificial lighting feature very efficient use of water resources and can be used for agricultural production in regions that are not suitable for farming. Therefore, demand for such plant factories is expected to grow in the Middle East and Southeast Asia where demand for fresh vegetables has increased along with the improvement of living standards. Based on this situation, the report made a proposal for exporting plant factories.

22 The photo was provided by Angel Farm Kitayama.
(b) Exploring external demand

As for external demand, Japan should shift away from the excessive dependence of the three major sectors of transportation, electrical and general machines on the U.S. market, as reviewed in Chapter 2, Section 1, and pursue three new frontiers: the exploration of emerging markets; domestic demand-oriented industries’ exploration of foreign markets; and the exploration of new markets through the creation of new industries. The specific details are as follows:

(1) Exploration of emerging markets: Japan should explore markets not only in Western industrial countries but also in emerging economies. Particularly, East Asian emerging economies are promising as the bases for production, consumption and innovation. Japan should introduce the energy of these growth markets as the driving power into its economy.

(2) Domestic demand-oriented industries’ exploration of foreign markets: Services and contents industries and SMEs, which have not necessarily been positive about exporting their products, should aggressively explore foreign markets. For SMEs trying to participate and expand sales channels in Asian and other growing foreign markets, METI will cooperate with relevant organizations in enhancing JETRO support for participation in overseas trade fairs and assistance regarding information, human resources development and fund-raising operations and in developing the environment for their smooth business operations after their expansion into these markets.

(3) Exploration of new markets through the creation of new industries: Japan should create new domestic demand-oriented industries, such as plant factories and nursing care robot production, and explore both domestic and foreign markets for them.

(c) Improving trading gains

Earlier resources price spikes weighed on Japan’s economic recovery by causing an outflow of income. Changes in terms of trade since 2000 have been estimated to have caused some ¥21 trillion (4% of Japan’s GDP) in trading losses in FY2007. Since trading losses result from rising import prices and falling export prices, Japan should increase values added to traditional goods and services for exports (through branding and qualitative improvement) and curb imports of resources.

(B) Development of a resilient economic structure responding to changes

As national economies have been integrated into the world market through globalization, financial crises and other incidents on opposite shores have begun to directly affect our lives. These direct effects have grown greater as national economies have grown more interdependent. At the same time, Japanese-owned companies through their overseas expansion have faced risks that they had never anticipated in Japan.
Major losses that Japanese-owned companies and society have incurred over the recent years
- Global recession
- Foreign exchange losses on a higher yen
- Energy and food price spikes
- Price-cutting races (deflationary economy)
- New influenza
- Food safety problems (including imported frozen dumplings containing toxic substances)
- Losses due to copyright infringements
- Pirate attacks in the waters off Somalia
- Great Hanshin-Awaji Earthquake, Niigata Chuetsu Earthquake, etc.

The U.S. Council on Competitiveness (COC), known for the Young Report\(^{23,24}\) and the Palmisano Report,\(^{25}\) sponsored a “Resilience Summit” in June 2007 to discuss how to create an economy that is invulnerable to damage. Based on discussion at the summit, the COC published a report titled, “Transform. The Resilient Economy: Integrating Competitiveness and Security,” in July 2007, concluding, “What we learned (from the shock of 9/11) is that the challenge is not security: it is resilience.” It also states, “The national objective is not just homeland protection, but economic resilience: the ability to mitigate and recover quickly from disruption.” As indicated by this statement, the report suggests that the way a crisis is tackled and the ability to do so are important. (This apparently indicates that it is important to increase social immunity.)

“Resilience”\(^{26}\) here means the capability to adapt to a fast-changing economic environment and evolve, covering risk intelligence, flexibility and agility. The report cites the Wal-Mart supply chain as a superbly resilient enterprise. In the region affected by Hurricane Katrina, the report says, Wal-Mart was able to bring 66% of its stores back into operation within 48 hours and 93 percent within seven days. Even before the tropical cyclone in the Atlantic Ocean had grown into Hurricane Katrina,

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\(^{23}\) The Young Report is officially titled, “Global Competition the New Reality,” and was compiled in 1985 by the President’s Commission on Industrial Competitiveness that was created by the Reagan Administration. It was named after then Hewlett-Packard Co. President J. A. Young, who chaired the commission. The commission made the report in a bid to improve the industrial competitiveness of the United States, proposing expanded tax breaks for research and development, the elimination of Antitrust Act barriers against joint research deals, the enhancement of intellectual property rights protection, the elimination of budget deficits, and effective talks among government, industry and labor sectors, etc. The report has greatly influenced later U.S. science, technology and innovation policies.

\(^{24}\) The COC was created in 1986 in response to the Young Report preparation. Specifically, the Young Report was made by the above President’s Commission on Industrial Competitiveness before the COC’s creation.

\(^{25}\) “The Palmisano Report” refers to a report titled “Innovate America: Thriving in a World of Challenges and Change,” which was released at the National Innovation Initiative Summit that the COC sponsored in December 2004. More than 400 industry, academia, government and labor leaders took 15 months to develop the report, which concluded that nothing other than innovation would provide competitive edges in the 21st century, when many countries would have adopted market economy principles and would be able to compete with the United States in cost and quality.

\(^{26}\) Resilience is the capability of complex systems to survive, adapt, evolve and grow in the face of turbulent change.
Following the “Transform” report, the COC released “Prepare” in October 2008, just after the Lehman Brothers Shock, concluding: “Rapid globalization is altering our world in fundamental ways, and we are more connected and more interdependent than ever before... While we may not be able to predict the future with great accuracy, one thing is certain: risk management as usual will not be enough to secure competitiveness or security—for either companies or countries... The next new revolution in business will be in risk management and resilience.” This approach is apparently applicable to food security, energy security and other areas of the Japanese economy.

Not only in the U.S. but also in various other parts of the world, organizations have tackled risk management. In January 2009, the World Economic Forum (WEF) published “Global Risks 2009.” The annual Global Risks Report has been published since 2006. The Global Risks 2009 is the fourth one. The report maps the risks facing the world economy, based on each risk’s anticipated loss and feasibility. Particularly dangerous risks include “2 Oil and gas price spike,” “4 Slowing Chinese economy (GDP growth slowing to 6%),” “5 Fiscal crises,” “6 Asset price collapse,” “7 Retrenchment from globalization (developed),” “29 Pandemic (of avian influenza, etc.),” and “31 Chronic disease.”

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27 According to the “Transform” report, Wal-Mart’s excellent information capabilities became well known after its launch of a satellite for its own logistics in 1987. Wal-Mart’s advanced worldwide supply chain management was introduced by a TV program titled, “NHK Special Doji 3-ten document” (broadcast by Japan Broadcasting Corp. on October 26, 2006).

28 The Japanese language version was prepared by Marsh Japan Inc., Marsh Broker Japan Inc. and Swiss Re Japan.

29 The Japanese Risks Report has been published since 2006. The Global Risks 2009 is the fourth one.
Figure 3-1-2-5 Global risks landscape 2009

Based on an assessment of risks over a ten-year time horizon by the Global Risk Network. Key: Boxes indicate change since last year’s assessment.

**Economic**
1. Food price volatility
2. Oil and gas price spike
3. Major fall in the dollar
4. Slowing Chinese economy (6%)
5. Fiscal crises
6. Asset price collapse
7. Retrenchment from globalization (developed)
8. Retrenchment from globalization (emerging)
9. Regulation cost
10. Underinvestment in infrastructure

**Geopolitical**
11. International terrorism
12. Collapse of NPT
13. US/Iran conflict
14. US/DPRK conflict
15. Afghanistan instability
16. Transnational crime and corruption
17. Israel-Palestine conflict
18. Violence in Iraq
19. Global governance gaps

**Environment**
20. Extreme weather related to climate change
21. Droughts and desertification
22. Loss of freshwater
23. NatCat: Cyclone
24. NatCat: Earthquake
25. NatCat: Inland flooding
26. NatCat: Coastal flooding
27. Air pollution
28. Biodiversity loss

**Societal**
29. Pandemics
30. Infectious diseases
31. Chronic diseases
32. Liability regimes
33. Migration

**Technological**
34. CII breakdown
35. Emergence of nanotechnology risks
36. Data fraud/loss

Source: Global Risks 2009 (WORLD ECONOMIC FORUM)
In Japan, when auto parts maker Riken Corp. suspended its operations following the Niigata Chuetsu-oki Earthquake in July 2007, automakers and other relevant firms throughout Japan helped the component maker resume production in only one week. This indicates a resilient aspect of Japanese-owned companies and society.\(^{30}\)

Enterprises have steadily developed their respective business continuity plans,\(^{31}\) making progress in their risk management. The government itself is required to work out its own Business Continuity Planning (BCP), the BCP for the entire Japanese economy and various risk management plans, and to make agile responses to risks.

**Figure 3-2-2-6 Risk management process\(^{32}\)**

Preparations such as BCP development are very effective for enhancing an entire society’s risk management capabilities. But insurance systems are similarly effective. Individuals can avoid bankruptcy even in the event of a traffic accident because they are required to purchase automobile liability insurance. Healthcare, nursing care, unemployment, industrial injury and other insurance systems allow an entire society to cover risks that individuals or companies cannot take. In addition to these public insurance systems, insurance products should be developed to cover various risks facing individuals.

**Column 29 Economic impacts of new influenza**

Economic impacts of the new influenza strain that is currently spreading cannot be computed

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\(^{30}\) Japan’s capabilities indicated by Riken’s “miracle restoration” from the disaster have been called “Japanese power” by writer Kazuma Yamane.

\(^{31}\) Factors behind Riken’s quick restoration from the disaster also include its preparation of a Business Continuity Plan (BCP) and the daily transfer of operation data to a data center in Saitama Prefecture, and anti-seismic reinforcement of facilities after the previous major earthquake hit the region three years earlier.

\(^{32}\) Prepared from materials at Tokio Marine & Nichido Risk Consulting Co.
accurately at present, but the World Bank made the following estimates of economic impacts of a
worldwide avian influenza pandemic for the initial year:\textsuperscript{33}

Mild scenario: Lowering GDP growth by 0.7 percentage points (1.4 million deaths)
Moderately severe scenario: Lowering GDP growth by 2.0 percentage points (14.2 million deaths)
Severe scenario: Lowering GDP growth by 4.8 percentage points (71.1 million deaths)

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
 & Mild & Moderate & Severe \\
\hline
World & -0.7 & -2.0 & -4.8 \\
High-income & -0.7 & -2.0 & -4.7 \\
Developing & -0.6 & -2.1 & -5.3 \\
East Asia & -0.8 & -3.5 & -8.7 \\
Europe and Central Asia & -2.1 & -4.8 & -9.9 \\
Middle East and North Africa & -0.7 & -2.8 & -7.0 \\
South Asia & -0.6 & -2.1 & -4.9 \\
Deaths (millions) & 1.4 & 14.2 & 71.1 \\
\hline
\end{tabular}
\caption{Possible economic impacts of avian flu pandemic}
\end{table}

Of the total impacts, mortality is estimated to account for 12%, illness and absenteeism for 28%
and efforts to avoid infection for 60%. Among these factors, the efforts to avoid infection that would
cause global economic activity declines would have the largest impact. Such efforts are expected to
include: (i) reducing air travel in order to avoid infection in the enclosed space of a plane, (ii) avoiding
travel to infected destinations and (iii) reducing consumption of services such as restaurant dining,
tourism, mass transport, and nonessential retail shopping. Economic losses are estimated at $2 trillion
for the moderately severe scenario (lowering GDP growth by 3.1 percentage points) and $3.13 trillion
for the severe scenario (lowering GDP growth by 4.8 percentage points).

Since the new flu virus is attenuated, deaths are expected to be less than estimated. But efforts to
avoid infection upon a pandemic in Japan are expected to be the same as estimated for an avian flu
pandemic.

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure29_2.png}
\caption{Economic impacts of an avian flu pandemic}
\end{figure}

\textsuperscript{33} “Evaluating the Economic Consequences of Avian Influenza,” Andrew Burns, Dominique van der
Mensbrugghe, Hans Timmer (2008)
(C) Seeking to become a country that can solve global problems

Japan can use its human resources, goods, money, skills and knowledge to solve various problems throughout the world. Japan should develop a sustainable mechanism to solve problems in a manner to benefit both itself and other countries. The mechanism would be “a win-win problem-solving business model” to benefit Japan while solving global problems.

Conceivable details of the model are as follows:
(1) Overseas diffusion of technologies: Japan should diffuse photovoltaic generation, eco-friendly automobiles, energy-saving equipment, water treatment and other advanced technologies overseas to solve global problems.
(2) Provision of funds: Japan should provide official development assistance and other official funds for infrastructure and resources development in developing countries to solve their financial bottlenecks.
(3) Becoming a model country for the world: By becoming a model country for the world with a zero-emission, safe, vigorous society with longevity, Japan should accumulate know-how for solving domestic public problems and contribute to solving problems in foreign countries.

Figure 3-1-2-7 Per GDP carbon dioxide emissions (2005)


<<Policy case>> Next-generation Energy Parks

The Next-generation Energy Parks are designed to provide information at home and overseas in an easy-to-understand manner about features and technologies regarding photovoltaic power generation and other new energy resources that Japan boasts to the world, as well as next-generation energy sources, such as fuel cells and methane hydrates, which are found at the bottom of waters close to Japan. Photovoltaic power generation, wind power generation and other new energy equipment, and energy experience systems are installed at these parks. They also feature equipment and exhibitions regarding woody biomass and other energy resources exploiting regional characteristics.

Oil-producing countries anticipate a future depletion of oil and other energy resources and are very eager to develop and introduce technologies for advanced fossil resource uses and new energy sources. Emerging economies, such as those in Asia, are deeply interested in Japan’s energy technologies for
reducing the load of the growing energy demand on the environment. In order to introduce Japan’s next-generation energy technologies to these countries, METI and other relevant central government agencies have cooperated with local governments and energy-related companies to prepare and distribute foreign-language brochures about the Next-generation Energy Parks and invite visiting foreign dignitaries and ambassadors stationed in Tokyo to these parks.

A total of 13 Next-generation Energy Parks were approved in FY2007 and 2008. Over the next three years, 40 to 50 more will be established. Regional communities should develop such parks that would take advantage of local resources and characteristics, be boasted by local residents and serve as next-generation energy information bases.

Next-generation Energy Parks

<<Policy case>> Developing an Asian resources cycle

Asian countries face air, water and soil pollution, industrial wastes from factories, urban garbage and other environmental challenges accompanying their economic development. Some of them are willing to proactively introduce Japan’s waste treatment, recycling systems and technologies to solve these environmental problems.

Japan should provide proactive help and contributions to such efforts of Asian countries in order to develop an Asian resources cycle system. In this respect, it is important for Japan to provide a package of technologies, institutional systems and mechanisms.

To this end, Japan will continue to support Asian countries’ development of bilateral policy talks and of recycling systems through the Economic Research Institute for ASEAN and East Asia (ERIA). Japan will also diffuse Japanese technologies and experiences through recycling-oriented city cooperation. Such cooperation should support the expansion into Asian countries of Japanese-owned companies related to recycling and develop appropriate resource cycle systems in Asian countries to make contributions to improving the business environment for Japanese manufacturers.
“Paro” robots heal people all over the world

The Paro is a mental commitment robot in the shape of a seal developed by Japan’s National Institute of Advanced Industrial Science and Technology. It was certified by Guinness World Records as the world’s “most therapeutic robot” in 2002 and filmed overseas in 2006, attracting attention in various areas. At present, nursing care facilities for elderly people and hospitals in Sweden, Italy, France and the United States, as well as Japan, are studying robot therapy using the Paro. Reports have said the Paro would have good effects on people with Alzheimer disease and other patients. In 2008, Denmark decided to introduce 1,000 Paro robots for facilities for elderly people. Japanese high technology and artisan skills are healing people all over the world.

Paro

(3) “All-Japan” efforts are required

Although the implementation of external economic policy from the three viewpoints is basically a government role, not only the government but also other various economic units engage in moving the economy. In this respect, discussions have been held on how the government should be.

(A) Efficient government

As modern society has grown more sophisticated and complicated, the problems we face have also become sophisticated and complicated. Adult diseases are difficult to cure with surgery alone. In order to solve public problems involving various factors, all relevant parties should mobilize all available resources under a common recognition. What is required here is not a big or small government but

34 A mental commitment robot is designed to coexist with humans, pay attention to people’s subjective evaluation of the robot as cute or pleasant, and approach people on a physiological level to cheer them up or heal them through interactions.
35 “That is, catchphrases such as ‘shifting from the public sector to the private sector’ and a dichotomous mode of thinking such as ‘big government or small government’ will not alone provide the vision we seek. When government grew too large, the vitality of society drained away. Many industrialized nations thus aimed at smaller government, fostering vitality by having individuals and companies operate freely. However, not everything will turn out well by simply entrusting it to the free market. The subprime loan problem and the global recession illustrate this fact. Now, one of the roles being asked of the government is to lay down impartial and transparent rules and to guide economic development. Another role of the government is to create a society in which everyone can participate and bring about one that gives people peace of mind.” (from Prime Minister Taro Aso’s Policy Speech on January 29, 2009)
an efficient government that can solve problems.\textsuperscript{36} While society should diversify and mature, administration should grow more efficient and effective.

In response to the latest world economic crisis, many countries have implemented large-scale fiscal stimulus packages. But these packages are emergency measures to tackle the global supply/demand gap as the present serious disease. Fiscal stimuli should not continue to be implemented. Over the medium to long term, governments should achieve a primary budget surplus to secure the sustainability of public finance. Rather than measures that depend on their financial sizes governments should adopt measures that depend on their quality, or on whether they can effectively solve present public problems.

In order to secure high-quality policies, governments should study excellent overseas policies and adopt them as benchmarks while seeking to provide globally top-level administrative services in terms of cost-benefit performance. They should not only learn from excellent precedents but also create some international benchmarks to measure relative quality levels of specific policies. Based on such benchmarks as the World Bank’s “Doing Business” indicators of relative business convenience for foreign-owned companies in specific countries and international competitiveness indicators given by the Switzerland-based International Institute for Management Development, governments should develop comprehensive benchmarks meeting policy objectives. The Japan Project-Industry Council has developed the JADEX international competitiveness index for enhancing economic relations between Japan and the rest of Asia and has been studying how to improve the index.

(B) Each actor’s role in solving public problems

The problem-solving process consists of (i) finding a problem, (ii) defining the problem (setting the goal), (iii) planning and implementing solutions, and (iv) measuring effects and preventing similar problems. The government cannot or should not do everything. Enterprises play a key role in solving public problems through their business operations and corporate social responsibility. Citizens can also contribute to finding solutions through consumption, financial contributions and volunteer activities. Universities and other research organizations can solve public problems through technology development operations. Media organizations are important for mobilizing resources for finding and solving problems. They can provide means of communication that are a universal remedy for solving public problems. The word “government” reportedly originated from the Greek word of κυβερνάω meaning steering. The government’s original job is to steer, not row. If various actors in society try to solve public problems, the government may focus on steering and operate efficiently.\textsuperscript{37}

Regarding the “promotion of innovation” as discussed in Chapter 2, for example, the government

\textsuperscript{36} An approach giving priority to solutions to problems and achievements has been widely introduced as “new public management” in the United States, Britain and other countries. The NPM is a new management approach for the public sector modeled after business management in the private sector, featuring a shift from process management to achievement management, a high priority given to customers, decentralization, a competition and market approach to improve efficiency, an emphasis on prevention, etc. "Administrative Revolution,” by D. Osborn and T. Gaebler, et al.

\textsuperscript{37} Japan Broadcasting Corp., better known as NHK, has broadcast a TV program titled, “Solving Difficult Problems with Citizen Power,” introducing various cases where citizens try to solve local problems.
itself may not implement innovation. Enterprises and citizens undertake innovation. What the government does is to pave the way for innovation or build a social mechanism in which innovation can be achieved most easily in the world. Government actions are necessary conditions (minimum requirements) for the promotion of innovation, but they are not conditions sufficient to allow goals to be achieved.

- Innovation is not just confined to technical revolution. It creates new values and brings about drastic social changes by incorporating new concepts and systems that are completely different from conventional ones. To that end, a mere extension of conventional ideas or systems is insufficient, and what is most important is to create a society where the capacity of the people, who are the foundation of all, can be employed to the maximum. This requires not only the efforts of the government but also endeavors of the private sector. It also involves a radical change in the values of each individual. Therefore, the policies concerning the creation and promotion of innovation have to be drastically shifted from the conventional “industrial promotion type” or “government-led type” by the policy initiatives to the “infrastructure creation type,” which supports the ambitious and challenging efforts of individuals with diverse thoughts.
- The international competition over innovation is virtually a competition of how fast and effectively the seeds of innovation (many of which are the outcomes of science and technology) can be applied to society or how to establish a social framework that can promote the fruition of the seeds.

(Excerpts from “Innovation 25,” Cabinet Decision, June 1, 2007)

The government should take due measures and other social actors should play their respective roles and demonstrate their respective potentials; then, the social problem of innovation shortages would be solved. “It is important for the government to share with the people a vision of the future we need to attain for Japan and exert concerted efforts for the task (Innovation 25).”
Sophisticated management approaches are required to solve various public problems, just as medicine is required to cure diseases. Any easily imitated approach may solve a problem at hand but may make other problems worse or cause new problems. We must analyze success and failure stories if we are to solve public problems, and promptly establish and systemize public problem-solving management approaches, and quickly create solutions that can be sent to people tackling present problems.

“One for all, all for one.” It is difficult for the government alone to solve public problems. Each member of the Japanese society must consider how the industry, private, academic, press and public sectors should be united to make “all-Japan” efforts.

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**Example promotion of innovation**

**“Expansion of domestic demand” and “solution to social problems” by innovation**

Examples: Shinkansen, convenience stores, parcel delivery, Internet, cell-phone, etc.

<table>
<thead>
<tr>
<th>Citizens</th>
<th>Enterprises</th>
<th>Universities</th>
<th>Media</th>
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<tbody>
<tr>
<td>-Being concerned about innovation</td>
<td>-Developing and providing new products and services</td>
<td>-Carrying out research and development</td>
<td>-Being concerned about innovation</td>
</tr>
<tr>
<td>-Indicating sophisticated and diversified needs</td>
<td>-Indicating sophisticated and diversified needs</td>
<td>-Promoting technology exchanges between enterprises and others</td>
<td>-Reporting new goods and services, best practices of innovation, and other matters widely to raise awareness of innovation in society</td>
</tr>
<tr>
<td>-Purchasing new products and services actively</td>
<td>-Purchasing new products and services actively</td>
<td>-Supporting university ventures</td>
<td>-Providing assistance for connecting (networking) with each entity</td>
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<td>-Providing financial support to venture companies</td>
<td>-Providing financial support to venture companies</td>
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<td>-Taking the initiative in creating innovation through participating in NPO activities or being social entrepreneurs</td>
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Source: Ministry of Economy, Trade and Industry, Japan

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Column 30 Fallacy of composition and government roles

A virtue for one person may become a vice when it is conducted by all. If everyone cuts consumption to defend their own life from a recession, for example, overall private consumption will decline, which will result in further deterioration of the economy. It is the same case with protectionism. If one country restricts some imports in a bid to protect its economy, other countries may take retaliatory actions to eventually result in a substantial decline in world trade and a more serious recession. One country’s protectionist approach to defend its economy could backlash.

Market principles designed for the efficient distribution of resources are not necessarily comprehensive. The government must make up for defects in the market principles. The market principles alone cannot prevent a fallacy of composition. The government is required to play a role in avoiding a fallacy of composition. For example, Brazilian President Luiz Inacio Lula da Silva has urged the people to expand consumption and successfully led to private consumption recovery. “At a time when the economy has deteriorated, we should spend the money we have saved,” he said. “We have worked hard to this end.”

Column 31 Reviving human-centered capitalism

The latest global financial crisis has exposed the limits of financial capitalism, whereby people have taken full advantage of financial engineering to thoroughly increase capital efficiency. As far as the world pursues higher efficiency with existing solvency, financial capitalism may salvage its reputation and become the source of growth.

What is required in the world now is a new axis to counter the excess financial capitalism in which money as a means of becoming happy has become an end in itself. An example of such an axis is a human-centered economic system, or human-centered capitalism. Japan is a rare country that has accumulated corporate and social management experiences based on the human-centered capitalism. Now is the time for Japan to spread human-centered capitalism throughout the world.

Japanese employment system, consisting of long-term employment, seniority-based wages and company unions, is a kind of paternalistic corporate management system that is suitable for a catching-up or developing country. It has faced various problems, such as rising personnel costs in line with a decline in the economic growth rate. The world has not paid attention to the Japanese corporate management style since the Japanese economy stalled in the second half of the 1990s. However, we believe that at the core of this employment system is a timeless and universal business philosophy: that humans are the most important business resources and enterprises should exist not only to provide profits to share holders but to make all stakeholders happy, including corporate managers, employees, local communities, consumers and the government. Japan should give priority to the long-term development and sustainability of enterprises instead of excessively emphasizing short-term capital efficiency.

In Japan, where the birthrate is falling and the population is aging, every person is a precious
resource. Japan should tackle challenges to create the most caring society in the world, a society where everyone can demonstrate all their personal potential to develop innovation, and a society in which everyone can say “it’s good to be alive!”