

White Paper on International Trade 2002

Part II : No survival without strength. But...

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In Part I, we went on a historical fact-finding mission.

The next issue is how to read those facts. At first glance, two contradictory but equally valid interpretations would appear to pertain.

The development of East Asia represents a major chance for Japan. Possessed of the most advanced economic structure in East Asia, Japan is well placed to build partnerships with emerging East Asian economic clusters in terms of both geographical location and also stage of development. By forming attractive economic clusters which emphasize and utilize the benefits of diversity and developing flexible partnerships with East Asian economic clusters, the various regions of Japan will be able to pursue their own development courses independently of the state framework. Further, given that Japan is in the process of becoming a mature creditor nation, undue stress should not be placed on any short-term shrinking of the current account surplus. As a major creditor, Japan will be able to use its capital strength for the development of the neighboring region.

At the same time, East Asian development also presents Japan with a huge challenge. Competition is indisputably intensifying among East Asian states, economic clusters and companies, which will draw attention in Japan to domestic hollowing-out and other issues. While Japan's population again seems to be concentrating in Tokyo, Tokyo's metamorphosis into a truly international city would in fact benefit other areas in Japan. A number of obstacles will, however, need to be overcome to this end, including the delineation of a clear state vision. While Japan may have become a major creditor nation, it has not reached the level of the United Kingdom at the height of its powers, or of Switzerland today.

Trapped in a state of occlusion, Japan is currently unable to adequately exploit the opportunity offered by East Asian growth. To break free of this situation, we have to recognize that there is no alternative but to buckle down to the tasks at hand. Above all, we need to boost our capacity to build and implement the mechanisms to transform the merits of diversity and other keys to innovation into an actual harvest. This principle must be thoroughly internalized, and then acted on. In other words, we will need to push ahead with industrial structural adjustment, implementing systemic reforms and aiming at region-specific development.

It should again be recognized that Japan is basically blessed with prime conditions, and whether or not we exploit these is completely up to us.

What Should We Do? – Institutions and Clusters

In the latter half of the *White Paper*, Chapter III focuses on the importance of ensuring a flexible labor market and identifies key issues in regard to structural adjustment measures, particularly safeguards. Chapter IV looks at particularly important points – namely, the activation of innovation and efforts integrating external and domestic economic measures. Analyses are made with particular attention to both institutions and clusters for the following reasons.

Economic growth is determined by physical capital formation, human capital formation, the creation of innovation and various other elements. The enormous impact which institutions exert on all of these elements has become well recognized in recent years. Institutions have become a hot topic of discussion, generating a number of suggestions. At the same time, the new economic geog-

raphy must also be borne in mind, with changes in transport costs in the broad sense (distance costs) and economies of scale interacting to produce new industrial and economic maps of the world. Even where there is no disparity in institutions and economic policies, the power of clusters generated by links among broad-ranging economic activities divides the world into the affluent, industrialized center and the non-industrialized and poor periphery. Over time, numerous functions such as falling transaction costs and growing manufacturing demand operate to boost the competitiveness of new areas on the edge of the center, to which industry then shifts to gain benefit from the cluster effect. Accordingly, a development pattern emerges whereby following the initial cluster phase, countries belonging to the center expand outward. Even where information technology made further leaps forward, or the cost of transporting goods fell, given the complexity of information, the significance of communication to creativity, and the way in which knowledge workers seek amenities, it seems certain that economic clusters will continue to have enormous significance. Institutions and clusters are not opposing forces; rather, the latter bolsters the strength of the former.

Chapters III and IV are outlined below.

Chapter III. Facilitation of Industrial Structural Adjustment

Section 1. Boosting Labor Market Flexibility

1. Importance of Facilitating Labor Mobility

As globalization advances, Japan's sustained growth will hinge on upgrading the industrial structure. This process will comprise two elements: (1)

promoting innovation and aiming to create new industries; and (2) responding to change with flexible structural adjustment. A particularly important point in regard to the latter will be the degree to which the inter-industry movement of workers can be facilitated.

Looking back over the employment-related structural adjustment conducted by other countries, two main approaches can be discerned. One is the Anglo-Saxon approach, which focuses on promoting freedom of movement in the labor market. The other is the continental European approach, characterized by strict dismissal regulations and the payment of high unemployment benefits. (Figure 1) As for the effect of these countries' respective labor policies, those nations adopting the Anglo-Saxon approach witnessed a substantial drop in structural unemployment in the 1990s. Even those countries taking the continental European route and previously noted for the rigidity of their labor markets are now changing their employment policies in response to the shift to proactive labor policies conducted in the European Union.

In those countries adopting the Anglo-Saxon-style policies, different approaches have been taken to boosting

labor market liquidity. In the United States, restructuring has created more variable personnel costs, while the United Kingdom has introduced more flexible working hours, relaxed dismissal regulations, and gradually eliminated regulations protecting women. Both these countries and nations taking the continental European approach are not only increasing the flexibility of their labor markets, but are also working to boost the quality of employment by, for example, improving education levels and re-educating workers.

2. Issues of Employment Adjustment in Japan

Since the collapse of the bubble economy, a demand shortage and employment mismatches have seen Japan's employment situation deteriorate significantly. Recent years have brought signs of change in traditional employment systems, including a review of the lifetime employment practices and a growing number of part-time and contract employees. In order for the Japanese economy to break free of the current straitened employment situation and stage a self-sustained recovery led by private demand, it will be important to (1) promote the reduction and elimination of

employment mismatches (promotion of smooth labor shifts, response to diversifying employment modes, development of highly-specialist personnel) and (2) build safety nets to reduce the risks accompanying unemployment.

Section 2. Safeguards as a Means of Facilitating Structural Adjustment

1. Safeguard-Facilitated Adjustment

During industrial structural adjustment phases, when imports rise more quickly than expected, international rules allow the institution of safeguards on certain conditions. Safeguard measures temporarily alleviate the social pain accompanying import surges, such as bankruptcies, unemployment and a corresponding slump in production, and provide industry with a grace period in which to carry through structural adjustment. At the same time, instituting safeguards generally means higher prices and fewer choices for consumers, user companies and other economic agents, and has the additional demerit of impacting negatively on a country's gross domestic product (GDP). (Table 1)

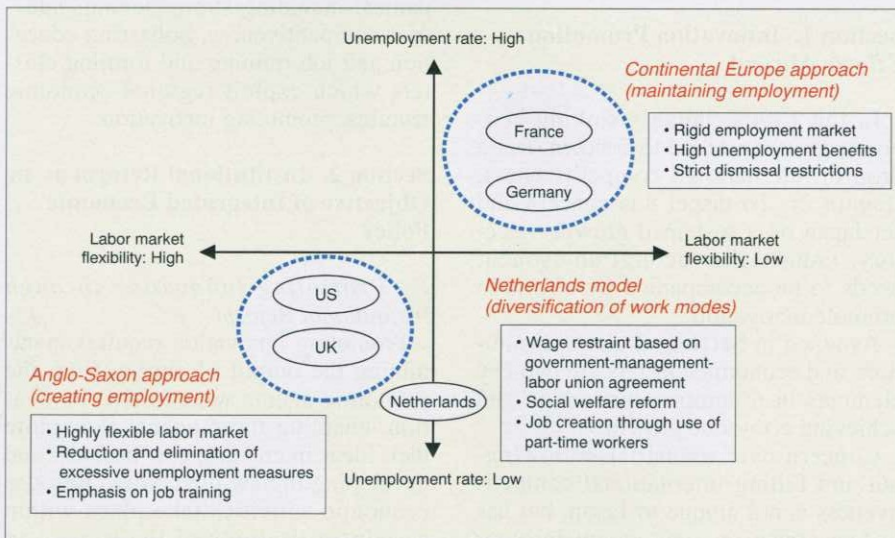
To avoid these safeguard side-effects, (1) the various economic agents participating in the market need to constantly work to gather information on market trends at home and abroad, boosting the predictability of import trends; while (2) early structural adjustment needs to be achieved through employment adjustment measures and efforts to spur innovation, avoiding as far as possible situations where safeguard measures have to be imposed.

2. Measures to Facilitate Adjustment during Safeguard Imposition Period

To minimize the cost shouldered by consumers and user companies when safeguards are instituted, structural adjustment needs to be advanced as swiftly as possible in the relevant industries.

Moreover, safeguard imposition does not in itself guarantee structural adjustment. As with the protection of the U.S. steel industry, particularly where safeguard measures are accompanied

Figure 1 European and U.S. approaches to employment adjustment



Source: Compiled by the Ministry of Economy, Trade and Industry (METI)

Table 1 Impact on U.S. macro economy of safeguard goods

	Ad valorem tariff rate (Specific product, %)	Domestic price level (All products, %)	Domestic final demand (All products, US\$ million)	Domestic production value (All products, US\$ million)	GDP (US\$ million)	Per capita GDP (US\$)
Cotton and synthetic underwear (Dominican Republic)	111.8%	0.1068%	-7,139	-11,731	-6,777	-25.3
Cotton and synthetic underwear (El Salvador)	13.7%	0.0045%	-303	-498	-288	-1.1
Cotton and synthetic underwear (Turkey)	16.8%	0.0014%	-91	-150	-87	-0.3
Cotton and synthetic underwear (Colombia)	10.1%	0.0013%	-84	-139	-80	-0.3
Cotton and synthetic skirts (Guatemala)	21.9%	0.0026%	-172	-282	-163	-0.6
Cotton and synthetic skirts (El Salvador)	82.2%	0.0064%	-431	-708	-409	-1.5
Chemical compound fiber spun yarn (Thailand)	17.2%	0.0005%	-31	-50	-29	-0.1

Note: 1. Analyzed using 1997 U.S. inter-industry relations table.

2. The ad valorem tariff rate was derived by converting the impact of quantitative regulations to the tariff equivalent. For per capita GDP, the GDP decrease was divided by the 1997 population (268 million). The case involving Costa Rican cotton and synthetic underwear was excluded because WTO materials do not contain data on specific quantitative restrictions. Safeguard measures against Honduras in regard to cotton and synthetic underwear were also excluded because an estimate of the ad valorem tariff rate corresponding to the quantitative restrictions (derived by subtracting the import volume when quantitative restrictions were in place from the import volume where there were no quantitative restrictions) produced a negative figure.

Source: Compiled by METI

by other permanent protection measures, the effectiveness of the sunset nature of safeguards is reduced in terms of encouraging self-initiated reform, and, further, the necessary industrial structural adjustment is in some cases actually delayed.

To ensure structural adjustment during the safeguard imposition period, it is therefore vital that safeguards function as sunset measures, and that various structural adjustment support measures are introduced appropriately to complement industry efforts. In some countries, various measures have been designed to accompany the institution of safeguard measures to ensure that the relevant industries do undertake structural adjustment. For example, complementary support programs such as management counseling are implemented where necessary to boost the competitiveness of companies in the industries in question. The extension of relief measures is also limited to those corporate executives and workers who have expressed the intention of

undertaking structural adjustment.

Chapter IV. Institution-Building Issues Facing 21st Century Japan and the Formation of Attractive Economic Clusters

Section 1. Innovation Promotion Efforts Abroad

In the 1990s, Japan's sinking economic growth rate led to concern over a drop in international competitiveness. (Figure 2) To dispel this concern and set Japan on a sustained growth trajectory, industrial structural adjustment needs to be accompanied by efforts to promote innovation.

As noted in Sections 2 and 3, institutions and economic clusters are two key elements in promoting innovation and achieving economic growth.

Concern over industrial hollowing-out and falling international competitiveness is not unique to Japan, but has in fact arisen to some extent in other developed countries too. As in Japan,

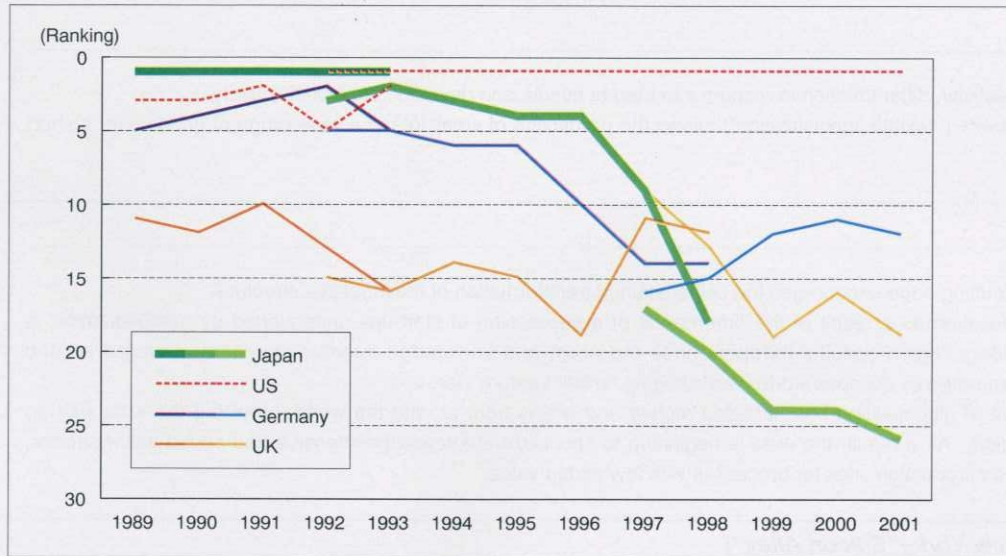
international competitiveness became an issue in these countries as they were facing economic recession and rising unemployment. A way forward was sought through autonomous efforts by the states, local governments and companies, including strengthening industrial competitiveness, bolstering education and job training and forming clusters which exploit regional economic features, promoting innovation.

Section 2. Institutional Reform as an Objective of Integrated Economic Policy

1. Promoting Innovation through Institutional Reform

Promoting innovation requires maximizing the output of energy from the economic agents which drive innovation, enabling these agents to explore their ideas in creating new business and developing in new directions. Because economic activities take place within certain institutions of the society in which economic agents operate, the

Figure 2 International competitiveness rankings of major developed nations



Note: Because evaluation standards have changed, there is no strict statistical continuity.
Source: Compiled from *The World Competitiveness Yearbook* (IMD)

conduciveness of these institutions to business creation and new directions impacts on the progress of innovation.

Based on this perspective, a series of regulatory reforms have been conducted as a means of creating new demand and new industries (Figure 3), while in recent years, the government has gone beyond removing barriers through regulatory reform to address instead the rules on which corporate activities are based – such as commercial law, bankruptcy-related laws and other corporate law, labor laws and pension systems – to bring these into an innovation-friendly form.

Promoting innovation and revitalizing the economy through these domestic institutional reforms is one of the goals of economic structural reform.

2. Multi-Level Development of Integrated Economic Policy

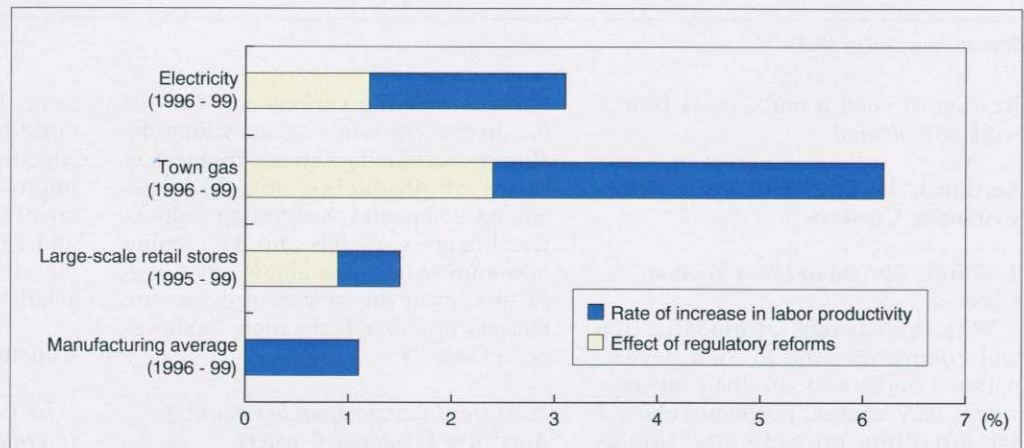
Responding to the cross-border flow of the various elements of the economy – goods, money, people and information – which has char-

acterized the modern world, companies have been planning their corporate strategy and optimizing their management resource allocation from a global perspective. Countries too have been working to harmonize domestic and international systems and remove barriers to ensure that cross-border corpo-

rate activities are not impeded. These efforts have evolved in recent years from traditional border measures such as the elimination of tariffs and import restrictions toward regulatory and corporate law reform, as well as various other domestic institutional reforms designed to encourage innovation.

Japan too is pursuing an integrated economic policy whereby domestic economic structural reform is developed in parallel with external economic policy. The concrete framework for promoting this policy embraces a number of levels, including multilateral institutions such as the World Trade Organization (WTO), regional agreements such as free trade agreements and economic partnership agreements among multiple countries, and bilateral agreements such as the Japan-Singapore Economic Partnership Agreement. To ensure that Japan reaps maximum benefit from free trade and links this to economic revitalization, the strategic and flexible uti-

Figure 3 Rate of increase in labor productivity (annual rate)



Notes: 1. Regulatory reforms undertaken in the various industries in the mid-1990s were as follows:

- (1) Electricity: Entry into force of 1995 amendment of Electric Utility Law
- (2) Town gas: Entry into force of 1995 amendment of Gas Utility Industry Law
- (3) Large-scale retail stores: 1994 introduction of flexibility in operation of the Large-Scale Retail Store Law

2. The effect of regulatory reform in the case of electricity and town gas indicates the contribution of payroll reduction efforts, which proceeded at a faster pace than in the early 1990s. In the case of large-scale retail stores, the same effect is gauged by the amount by which the increase in the labor productivity of these stores between fiscal 1995 and fiscal 1999 outstripped that of other retail stores.

Source: Compiled by METI base on Cabinet Office Policy Generalization Official (2001)

Table 2 Features of main economic clusters abroad

<p>Textile cluster in Italy</p> <ul style="list-style-type: none"> • Strengths comprise high degree of creativity, differentiation in response to market needs, and development of individuality. • A cluster making use of a flexible network (“flexible specialization”) allows the production of small lots of a wide range of goods over a short cycle.
<p>Silicon Valley</p> <ul style="list-style-type: none"> • Innovation which is constantly on the cutting edge encourages the self-sustained transformation of the industrial structure. • Silicon Valley has seen vigorous innovation as a result of the emergence of a succession of start-ups underpinned by modularization, a failure-tolerant culture which considers region-specific independence the norm and knowledge-intensive clusters centered around universities, with the virtuous cycle generated by success stories encouraging further venture start-ups. • Positioning Silicon Valley in the midst of globalization has attracted money and brains from around the world, providing the area with an advantage in the innovation competition. As a result, the area is beginning to specialize in knowledge-intensive and added-value sectors, while foreign clusters are being used as production sites for processes with low added value.
<p>Multimedia industry cluster in New York (“Silicon Alley”)</p> <ul style="list-style-type: none"> • Synergy created between urban revitalization and creation of new industries. • Cluster is flourishing due to the presence of related industries, New York’s business infrastructure cluster, the concentration of personnel with creative talents and the presence of the amenities to exercise these.
<p>Formation of R&D hubs in East Asia</p> <ul style="list-style-type: none"> • Spurred by the emergence of China as a production site, East Asia is also vigorously engaged in developing R&D-oriented clusters. • These clusters are characterized by active government involvement in institution design and close collaboration among government, industry and academia. • China is also working on the formation of R&D hubs such as Zhongguancun on the outskirts of Beijing.

Source: Compiled by METI

lization of such a multi-level framework will be vital.

Section 3. Formation of Attractive Economic Clusters

1. Efforts Abroad to Form Economic Clusters

With the advance of globalization and companies able to look beyond national borders to site their business where they choose, economic clusters are attracting growing attention as innovation matrices.

A number of experiments are being undertaken around the world toward the creation of attractive economic clusters. The merits of economic clusters lie in facilitating face-to-face exchange among companies and indi-

viduals, with the various activities of the diverse economic agents within the cluster maximizing the environment in terms of producing new linkages among companies, generating innovative business models and developing new knowledge. The aim is accordingly to exploit the merits of economic clusters to create innovation “hous-es.” (Table 2)

2. Issues Facing Japan in Creating Attractive Economic Clusters

With East Asia not only spawning numerous production hubs but also engaged in a string of reforms toward the formation of research and development (R&D) bases, the merits of Japan’s economic clusters too will need to be increased in order to spur innova-

tion. Key elements will include: (1) building university-centered knowledge-intensive networks (Table 3); (2) improving urban amenities to attract creative human resources (Figure 4); and (3) developing technology and industries which exploit regional characteristics.

Conclusion

In Part II of the *White Paper on International Trade 2002*, we sketch a course for Japan over the coming years. The great military strategist Sun Tzu, epitome of the profound wisdom of the East, once said that when you know your enemy and know yourself, you will win every battle. The implication is that when you reflect on yourself,

Table 3 R&D evaluation of Japan and other countries in the IMD World Competitiveness Yearbook

	Japan's ranking	1st	2nd	3rd
1. Gross R&D expenditure	2nd	United States	Japan	Germany
2. Gross R&D expenditure (per capita)	2nd	Switzerland	Japan	Sweden
3. Industrial R&D costs	2nd	United States	Japan	Germany
4. Industrial R&D costs (per capita)	2nd	Switzerland	Japan	Sweden
5. R&D personnel	1st	Japan	Russia	China
6. Ratio of R&D personnel to population	4th	Finland	Iceland	Sweden
7. Quality of basic research	16th	United States	Finland	Israel
8. Legal environment for technology development and application	21st	Finland	Israel	Singapore
9. Science education in compulsory education	30th	Singapore	Hungary	Taiwan
10. Harmonization of education with market economy	46th	Finland	Ireland	Singapore
11. Quality of university education	49th	Israel	Finland	Ireland
12. Number of outstanding engineers	16th	India	Slovakia	Israel
13. University-industry collaboration	32nd	Finland	Israel	United States
14. Technological tie-ups between companies	8th	Finland	Sweden	Israel
15. Number of patents registered	1st	Japan	United States	South Korea
16. Protection of patent rights and copyrights	18th	United States	Switzerland	New Zealand

Note: There is no data for the United States in regard to 5 and 6.

Source: Compiled by METI based on *The World Competitiveness Yearbook* (IMD)

understand what is happening around you, and plan and execute your strategy accordingly, no obstacle will arise. The first step is of course to be able to absorb this lesson, but if we were to do

so, we would then have to consider the ends to which we should put the strength which Japan has acquired. Do we use this only for ourselves?

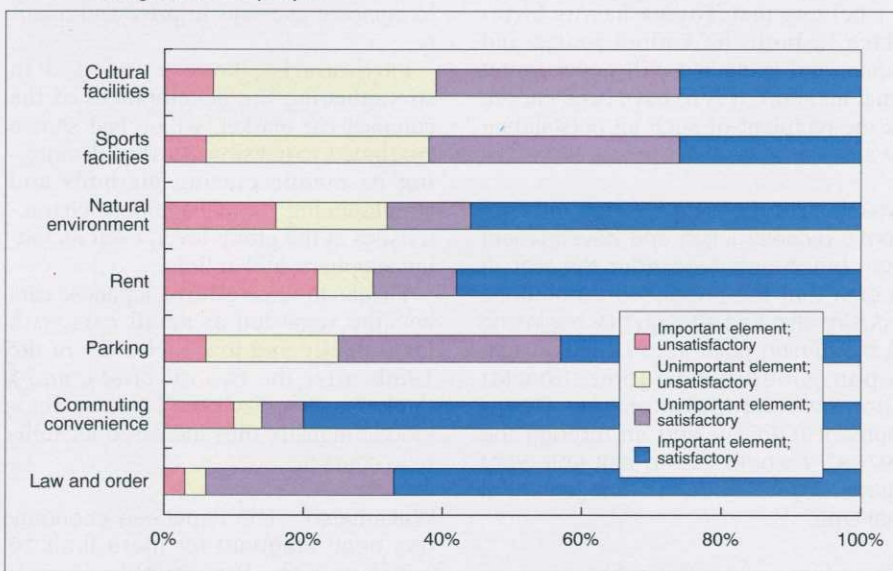
Here we should note the words of

American novelist Raymond Chandler; "If I wasn't hard, I wouldn't be alive. If I couldn't ever be gentle, I wouldn't deserve to be alive." (*Playback*, 1958)

We would hope to see a revitalized Japan become a force in East Asia's economic growth, and also use its strength to overcome the environmental, energy and population issues which may press increasingly heavily on the region in the years ahead. In doing so, the key agent will not be Japan as such, but rather regions, companies and individuals within Japan, and collaborations among these. We must maintain our efforts to enable Japan to become a sound surface on which these key players can exert their strength to the full.

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Figure 4 Questionnaire survey on metropolitan living environment from the perspective of foreign business people



Source: Compiled by the Ministry of Land, Infrastructure and Transport (2001a)

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