Surviving the Unstable Global Economy
Challenges for the Japanese Economy as Seen Through the 2015 White Paper on International Economy & Trade

By Koji Ito

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Seven years after the global financial crisis broke out in 2008, the sudden stock market nosedive in China since June this year and the ongoing Greek drama are stark reminders of the presence of massive risks that place our world under constant threat of being plunged into yet another global economic crisis. This article will consider how the Japanese economy should be prepared for the possibility of such crises in light of the Ministry of Economy, Trade and Industry's (METI) *2015 White Paper on the International Economy and Trade* published on July 3 by the Japanese government.

Sense of Urgency in Analysis of "Earning Power"

Although overseas readers may wonder what the White Paper has to do with responding to crises, the connection to the world economy through international trade is a useful means of tackling hardship when the economy is under siege. The first White Paper, issued in 1949 when the Japanese economy was still devastated in the aftermath of World War II, provided an analysis of the current state and challenges in promoting international trade as a way out of the difficulties through exports. Published annually and now in its seventh decade, the White Paper continues to carry as an undertone the sense of urgency that the Japanese economy will decline without the promotion of international trade. This sense of urgency is particularly strong in this year's White Paper, which focuses on the "earning power" of the Japanese economy.

Connective Diversity in Dealing with Crises

Part II of the White Paper divides "earning power" into "export power", "drawing power" (attracting foreign tourists and foreign businesses) and "overseas earning power" (performance of overseas affiliates of Japanese companies), and investigates the connections between the world economy and the Japanese economy from a multifaceted perspective.

Having multifaceted connections with the world economy is crucial to minimizing the impact of a crisis. This may sound like common sense, but it is not necessarily self-evident. For example, a multinational corporation that has production capacity in many countries is required to manage at least as many different risks as the number of such countries. It can be argued that it faces greater risks than a company whose production capacity is concentrated in a small number of countries.

The Great East Japan Earthquake of March 2011 provides an important lesson on this point. A study using data on businesses in the disaster areas indicate that "networks within the region contributed to sales recovery in the medium term, while networks with firms outside of the impacted area contributed to the earlier resumption of production." (Yasuyuki Todo, Kentaro Nakajima and Petr Matous, "How do supply chain networks affect the resilience of firms to natural disasters? Evidence from the Great East Japan Earthquake", *Journal of Regional Science*, March 2015, 55(2).)

This analysis studies businesses, not a national economy. However, given that the interaction between a national economy and the world economy takes place on the basis of inter-business transactions, it is crucial for a national economy to pursue diversity in connectivity with a wide range of countries and regions.

TABLE 1

Trends of volume & unit price of export items
(exports to China, category of volume+)

Exports to China (major 8 sectors)	Japan (%): Share of items (volume increased)	Japan: Share of items (2014) volume+ unit price++	volume+ unit price+	volume+ unit price±	volume+ unit price▲	Japan: Share of items (unit price increased)	Germany (%): Share of items (volume increased)	Germany: Share of items (2014) volume+ unit price++	volume+ unit price+	volume+ unit price±	volume+ unit price▲	Germany: Share of items (unit price increased)
Chemicals & plastics	58.9	3.7	37.3	13.7	4.2	72.3	81.4	17.8	29.8	18.3	15.5	60.2
Textiles & textile articles	36.3	3.2	12.2	12.1	8.8	47.8	76.5	7.8	30.3	13.4	25.0	55.7
Iron & steel products	60.1	0.6	15.2	29.9	14.5	34.7	78.8	1.8	27.4	14.0	35.6	36.4
Nonferrous metal	23.6	0.0	3.0	10.7	9.8	31.3	44.7	2.1	28.1	6.6	8.0	75.9
General machinery	48.3	2.1	12.4	8.0	25.8	49.5	70.4	2.8	24.1	7.7	35.8	40.9
Electrical machinery	50.3	4.3	6.3	14.0	25.6	33.1	77.9	4.3	28.0	11.2	34.5	43.1
Precision machinery	41.9	8.4	8.4	4.2	20.8	35.1	84.4	3.5	22.5	16.3	42.1	37.8
Transportation equipment	56.2	1.1	48.5	0.8	5.8	83.8	80.0	0.5	52.5	14.1	12.9	68.9

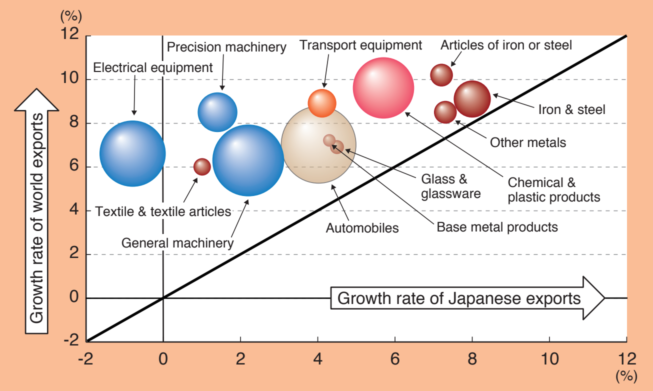
Note: The original data is from Global Trade Atlas.
Source: White Paper on International Economy and Trade 2015

"Export Power"

Let's return to the White Paper and its investigation of the three "powers". First, with regard to "export power", it issues a warning over the decline in Japan's export competitiveness through international comparisons (Part II, Chapter 1, Section 1). For example, comparing Japan and Germany with regard to exports to China, it points out that Japanese shares are lower in high-growth product categories and that Germany has more product categories in the main sectors that are seeing not only rising export volumes but also rising export unit prices *(Table 1)*. It also provides sectoral comparisons of the growth rates for world and Japanese exports, and expresses concern over the fact that Japanese

CHART 1

Growth rate of world & Japanese exports in main sectors



Notes: 1. The original data is from UNComtrade.
2. Geometrical averages of world and Japanese exports for 2000-2013. Size of bubbles indicate relative amount of Japanese exports.
Source: White Paper on International Economy and Trade 2015

exports are growing more slowly *(Chart 1)*.

However, it is possible that Japan's export power is being underestimated, given the structural changes in production and trade in Japan and Asia. Take the comparison between Japan and Germany. Japanese multinationals have been more active than their German counterparts in developing production capacity in China, ASEAN member countries, and elsewhere in Asia, shifting the focus of Japanese exports from high-value-added final goods to lower-value-added intermediate goods. There is also the possibility that Japanese exports to China contain a larger proportion of intra-firm exports to subsidiaries and other overseas affiliates. Similarly, the reason that the growth rates of Japanese exports are lower than the global rates in many sectors may be the consequence of exports being replaced by the expansion of overseas production. The gap is particularly wide in electric machinery and transport machinery, where the proportion of overseas production is notably high. It is highly likely here that exports are being replaced by overseas production. Finally, an OECD-WTO joint study on trade in value added (TiVA) shows that Japan continues to excel in an international comparison of the proportion of value added domestically in exported goods and services, suggesting that Japan maintains relatively high competitiveness in exports.

From this perspective, Japanese companies might half-intentionally reduce the value added in their exports. Thus, in accurately gauging the strength of the Japanese economy relative to the rest of the world, it is necessary to consider not only "export power" but also conjointly "overseas earning power" (as we later explain, the White Paper does such a comprehensive evaluation).

TABLE 2

Engagement of manufacturing business establishments in exports

	All business establishments	Non-exporting business establishments	Business establishments beginning exports	Business establishments ending exports	Business establishments continuing exports
Number of business establishments	214,073	204,627	1,412	1,474	6,560
Proportion (%)	100	95.6	0.7	0.7	3.1

Source: Koji Ito, Daisuke Hirano, Tadashi Yukimoto (2015)

When it comes to connective diversity, it is the disparity in export power at the firm level that deserves attention. As many empirical studies have demonstrated, in many countries the number of exporting firms is small and the bulk of exports is concentrated in a very small number of firms. A 2015 study on manufacturing business establishments in Japan with four or more employees (Koji Ito, Daisuke Hirano and Tadashi Yukimoto, "*Sekai Kinyūkikigo no Wagakuni Seizōgyō no Yusyutsudōkō: Jogyōsyo Dēta ni Yoru Bunseki* (Export Trends in the Japanese Manufacturing Sector after the Global Financial Crisis)", *RIETI Discussion Paper Series*, 2015, 15-J-037) shows that only 4.4% of the business establishments that existed in 2008 and 2010 were involved in exports in at least one of those two years *(Table 2)*. A well-known 2008 study on manufacturing businesses with 50 or more employees (Ryuhei Wakasugi, Yasuyuki Todo, Hitoshi Sato, Shuichiro Nishioka, Toshiyuki Matsuura, Banri Ito, and Ayumu Tanaka, "*Kokusaikasuru Nihonkigyō no Jitsuzō: Kigyō Reberu ni Motozuku Bunseki* (True Picture of Internationalizing Japanese Businesses: Analysis at the Corporate Level)", *RIETI Discussion Paper Series*, 2008, 08-J-046) also shows that the percentage of exporting firms had risen to 31.7% in 2005 from 24.9% in 1997, but it still meant that almost 70% of the firms were not engaged in exports. The same study showed that the export share of the top decile group remained steady between 1997 and 2005, accounting for 91.7% and 92.9% in the respective years.

When the export power of the Japanese economy is mentioned, it is almost always concerned with exporting firms, and the very limited number of top exporting firms at that. The fact that by far the majority of firms do not have the capacity to export goes ignored. How are these firms to be equipped with exporting capabilities? That is a significant topic that deserves to be addressed from the perspective of promoting the growth of Japanese firms, an area that requires an undertaking from a long-term perspective.

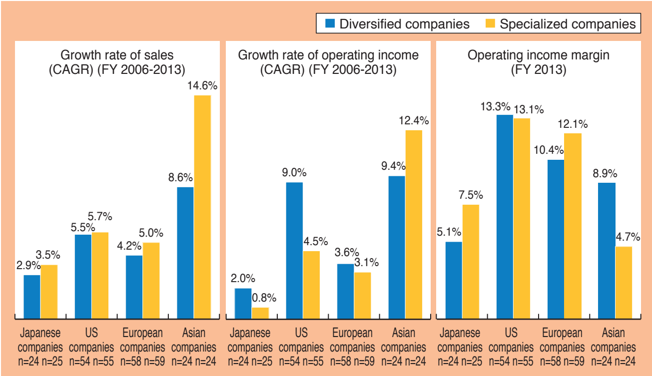
"Overseas Earning Power"

The White Paper includes a comprehensive evaluation of "export power" and "overseas earning power" through an international comparison of multinational corporations (Part II, Chapter 1, Section 3). A comparison of the business results of Japanese, US, European, and Asian multinational corporations shows that the average annual growth rates of sales and operating profits for 2006-2013 and operating profit to sales for the business year 2013 were lower for Japanese multinationals than the others *(Chart 2)*.

The White Paper also includes a comparison of the distribution of profitability according to the lines of business of the multinationals, which shows that the proportion of low-profit lines with operating profit to sales ratios below 10% (2006-2013 average) was a significantly high 91% of all business lines. (This is a stark contrast to the distribution for US multinationals, where 72% of all business lines had operating profit to sales ratios of 10% or higher.)

In other words, the overseas earning power of Japanese businesses as a whole is considerably lower in comparison to non-Japanese businesses. There are important lessons for Japanese multinationals to learn here, their management in particular. Many changes in the business environment obviously affected multinationals between 2009 and 2013, when the financial crisis triggered the transition of the world economy from stable growth to an era of turbulence. However, Japanese multinationals cannot blame

CHART 2
Relational analysis on growth rate, profitability & diversification



Notes: 1. The original data is from Deloitte Tohmatsu Consulting Co., Ltd based on "Research and Analysis on the Overseas Deployment and Methods for Risk Management of Global Companies" (a survey commissioned by METI).
2. Data is calculated based on the companies from which more than 70% of sales by operating departments can be obtained and sales can be obtained for the consecutive fiscal year period from 2006 to 2013.
3. "Herfindahl-Hirschman Index (HHI)" is calculated as the diversification index, based on data from Bloomberg L.P. The companies were divided into two groups: the upper half of the diversification index as "diversified companies" and the lower half of the diversification index as "specialized companies" in each company group by region.
4. CAGR: Compound Annual Growth Rate
Source: White Paper on International Economy and Trade 2015

TABLE 3
Evaluation of Japan (questionnaire survey)

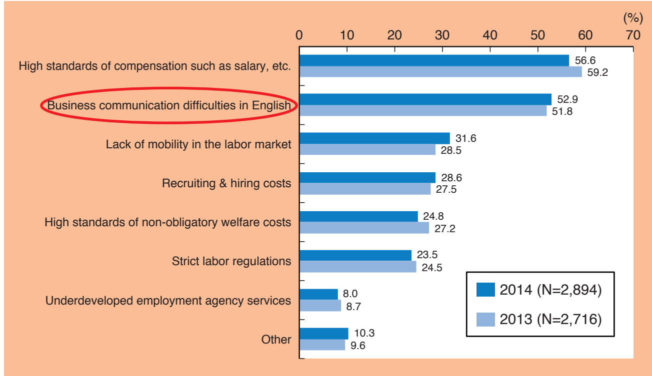
		Evaluation	Average		1	2	3	4	
Market potential (market volume, market opportunities etc.)	n=19	Positive	2.74	Not attractive	0%	26%	74%	0%	Highly attractive
Regulations on foreign companies' entry	n=20	Positive	2.50	Severe	10%	35%	50%	5%	Appropriate
Technological base (R&D, manufacturing technologies)	n=20	Positive	3.40	Low	0%	10%	40%	50%	High
Industrial clusters	n=19	Positive	2.95	Not enough	5%	21%	47%	26%	Abundant
Regulations on business practices (environmental, labor etc.)	n=20	Negative	1.95	Severe	35%	40%	20%	5%	Appropriate
Quality of workforce (skill, capabilities etc.)	n=20	Positive	3.05	Low	0%	15%	65%	20%	High
Public services provided by multinational languages	n=20	Negative	1.90	Not enough	30%	50%	20%	0%	Fully provided
Cost in general	n=20	Negative	1.90	High	35%	40%	25%	0%	Low
Regulatory/policy incentives on business	n=20	Negative	2.00	Not enough	20%	60%	20%	0%	Fully provided

Notes: 1. The original data is from Deloitte Tohmatsu Consulting Co., Ltd., "Research and Analysis on the Overseas Deployment and Methods for Risk Management of Global Companies" (survey commissioned by METI).
2. Averages were calculated by giving values for each index on a scale of 1 to 4, 1 for most negative and 4 for most positive. Averages of 2.5 or higher were given positive evaluations. Percentage points represent the proportions of the number of companies.
Source: White Paper on International Economy and Trade 2015

changes in the business environment for their poor performance when the other multinationals also went through the same changes. Given that they are maintaining a certain level of export power and are funding their R&D investments at comparable levels, it appears likely that a major difference in "management power" is a prime determinant of the disparity.

The White Paper correctly points out that Japanese businesses "are not benefitting enough from the synergy between multiple operations as the result of diversification; indeed, resources are dispersed as a result, making it difficult to provide sufficient funds for investments to effect the transition to high growth and high profits." And they "are losing competitiveness because of their failure to conduct a timely review of their businesses beyond the areas where they already enjoy a competitive advantage." Japanese business management should face up to these findings with great humility.

CHART 3
Survey of trends in business activities of foreign affiliates



Notes: 1. The original data is from METI "Survey of Trends in Business Activities of Foreign Affiliates".
2. Multiple answers (up to 3 top items).
Source: White Paper on International Economy and Trade 2015

Closing the Gap on "Drawing Power"

Even more problematic than the other two powers is "drawing power". The lack of "drawing power" has long been a major challenge for the Japanese economy. Efforts to boost tourism have finally been bearing fruit in recent years, but elsewhere there is no denying that Japan still lags behind others when it comes to "drawing power".

Japan's inbound direct investment remains low relative to the size of its economy. An international comparison of inbound direct investment outstanding as a ratio of GDP for OECD member countries as of 2013 places Japan in last place at 3%, well below the OECD average at 32%. The Japanese government has been grappling with this problem for a long time, but this international comparison indicates that there is room for further improvement.

That said, Japan is not necessarily a poor place to invest in every respect. The results of a questionnaire survey of foreign businesses that have moved into Japan that are introduced in the White Paper show that Japan is not regarded poorly as a destination for investments. Indeed, the Japanese market receives positive marks in terms of its future potential despite its negative demographics *(Table 3)*. The challenge that needs to be met consists of the lack of manpower with English-language skills and other issues that have been known for a long time but have yet to see improvement *(Chart 3)*.

There has been even less progress on the matter of extended-stay and working foreigners. Japan's percentage of foreigners in the resident population in 2011 was 1.6%, well below the OECD average *(Chart 4)*. The number of students from overseas in Japanese universities and graduate schools, the source of high-level manpower, has flattened out since 2010, according to surveys conducted by the Japan Student Services Organization (JASSO).

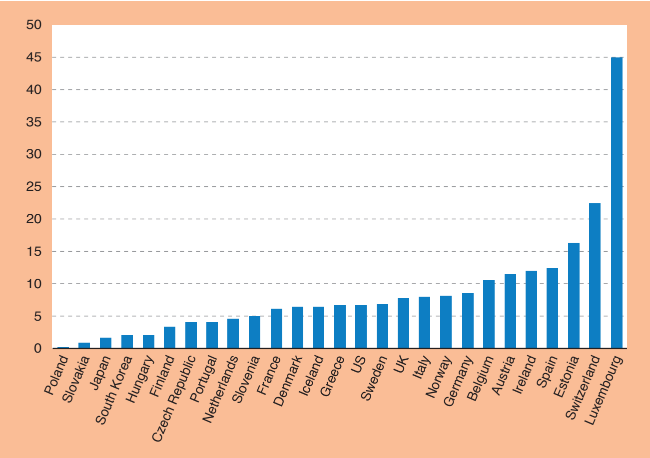
Foreign Manpower as Determinant of Japanese "Connective Power"

I believe the time has come for Japan to commence, after careful consideration, the acceptance of a continuous and steady stream of immigrants, fully mindful of the problems that come with it.

First, this will have a positive effect on Japan's troubling demographics. The Japanese population has been in decline since peaking in 2008, a trend that is forecast to accelerate going forward. We

CHART 4

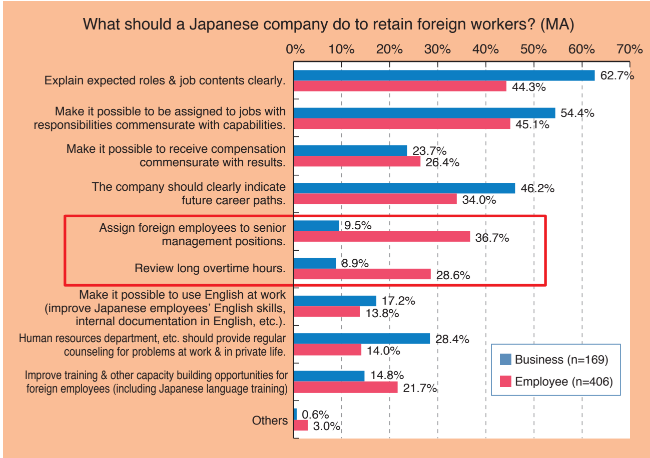
Foreign populations as % of total
(2011)



Source: OECD DATA website https://data.oecd.org/migration/foreign-population.htm#indicator-chart

CHART 5

Efforts to retain foreign employees & current situation



Note: The original data is from METI "Questionnaire Survey Concerning Hiring & Continuity".

Source: White Paper on International Economy and Trade 2015

cannot know when a global economic crisis will occur, but a shrinking (and aging) population will almost certainly result in a reduction of demand, the deterioration of non-metropolitan regions, and other serious consequences for Japan. The movement of people from abroad will act as a brake on this trajectory.

Immigration plays an important role in diversifying connections with the world economy, a challenge that we have been discussing. It helps resolve the human resources deficit in English-language skills. It also provides hope for improving the quality of management. The 2015 McKinsey & Company report *Diversity Matters*, also introduced in the White Paper, calculates the Herfindahl-Hirschman Index for the ethnic diversity of corporate management and finds that the pre-tax profits of businesses that belong to the top quartile group for diversity are 35% higher than their industrial averages. This does not demonstrate a direct causality between ethnic diversity and profits, but the report does provide a variety of plausible hypotheses regarding the effect of ethnic diversity in management, such as providing an advantage in attracting human resources and generating innovation and creativity through the diversification of problem-solving methods.

Furthermore, diversity in human resources is directly connected to innovation. It is almost universally accepted that innovation is the source of economic growth. There are various hypotheses regarding the factors leading to innovation, and one of the more convincing points is high-level human resources/human capital. If you accept that superior human resources generate innovation, then it is more desirable to have a broad source for human resources than a narrow one. Indeed there is a global competition going on to secure high-level human resources across countries. In this context, there is a great concern that the persistently low percentage of foreigners working in Japan will do great harm to its growth potential.

The inhibitory nature of Japan's immigration policy stands in stark contrast to the policies of the other major developed economies. The other members of the G7 take in large numbers of immigrants and foreign students. Britain, Germany, France, and Italy accept large numbers of immigrants and foreign students from other EU member countries as a result of the freedom of movement between EU members.

The Japanese government is also making efforts to secure foreigners as part of its growth strategy by such means as reviewing the points-based system for highly skilled foreign professionals (http://www.immi-moj.go.jp/newimmiact_3/en/index.html) and extending the training periods for foreign technical intern trainees. However, given the language, geography (isolation by sea and distance) and other disadvantages that Japan faces in attracting foreigners, there is a need to go further on the policy front.

Japanese businesses will be providing much of the employment if a large number of foreigners are going to work in Japan. This means that efforts by Japanese businesses to hire and keep foreign workers are also important. The White Paper includes findings from a questionnaire survey of businesses, students from overseas, and foreign employees that point to challenges related to uniquely Japanese employment and working customs, such as clearly describing job content, ability-based not seniority-based promotion, promotion of foreign employees to senior management positions, and reducing long overtime working hours *(Chart 5)*. The time has come for Japanese businesses to show the will to make fundamental changes to meet these challenges.

Conclusion

This article has considered the requirements for the Japanese economy to survive a crisis-filled environment. The key to the response to crises is in diversifying connections to the world economy. Although Japan has plenty of "export power", it leaves something to be desired when it comes to "overseas earning power" and is clearly deficient in "drawing power".

Nonetheless, a shortcoming is another way of saying that there is room for improvement. The situation can be greatly improved through concentrated efforts with a full awareness of the seriousness of the situation and the shortcomings. That indeed is the history of the postwar Japanese economy that has been chronicled by the White Papers over the years. JS

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