

Key Strategy Issues (Vol. 296)

Japan's "lost 20 years" was actually a "20-year model conversion" - The real reason for record-high earnings in Japan -

(1) Earnings in Japan rebound to an all-time high

A business model conversion was essential for Abenomics to be enough

Japanese companies reported fiscal 2013 earnings that were generally higher than the previous record high of fiscal 2008. Return on equity as well has recovered to about the previous peak. Obviously, the long-term slump in Japan's corporate earning power has made a complete recovery. It goes without saying that the primary reason for this rebound is the shift in the underlying trend toward a weaker yen. The cynical view of this performance is that higher earnings are a one-time event caused by external events. But this is merely a one-sided interpretation. Admittedly, earnings benefited from the yen's decline from ¥83.1 to ¥100.2 (20.6%) against the U.S. dollar and from ¥107.1 to ¥134.4 (25.5%) against the euro. However, higher earnings were not caused by the weaker yen alone.

The primary cause of today's strong earnings is the successful conversion of value creation models by Japanese companies. Furthermore, this model conversion equates to a change in the value creation pattern of the entire Japanese economy. In the postwar years, Japan consistently used a model of exporting unemployment (the value exploitation model). Now, the country has shifted to the job exporting model (the value provision model). Making this conversion possible were world's largest scale cost-cutting restructuring along with consistent R&D investments. Without this model conversion, Japanese companies along with the Japanese economy would have probably remained mired in a long-term decline.

Shifting to a different value creation model was an essential condition for achieving the revival of the Japanese economy. Only because this revival had been largely completed were the reflationary policies of Abenomics able to function as a sufficient condition. Japan has finally ended strong-yen deflation and achieved an economic recovery. Some people think this was not because of Abenomics. They think these accomplishments were instead the result of good timing because the economy was overdue for a rebound. But this is only half of truth.

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Figure 1: Profits of Japanese companies

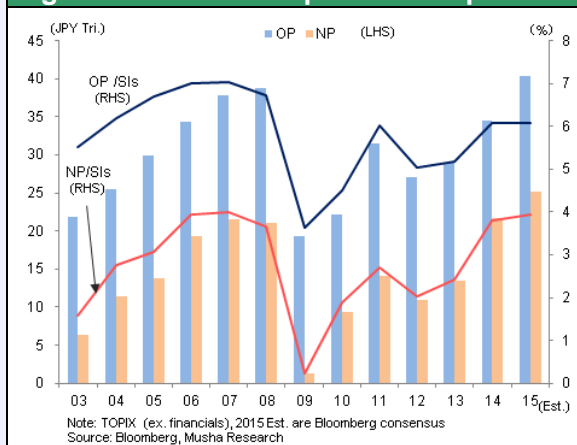
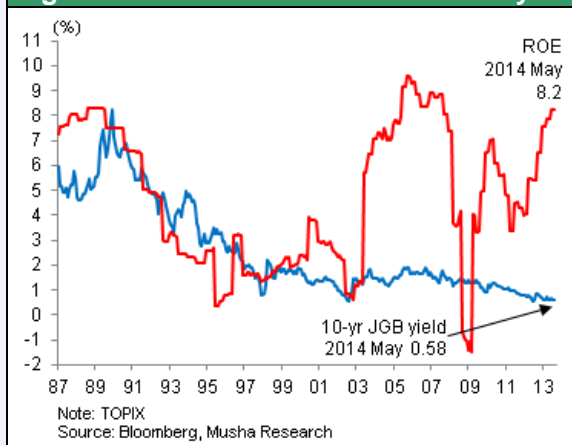


Figure 2: ROE of JP co. and 10Y JGB yield



(2) The demise of the exporting unemployment model and price superiority model

Japan was the Frankenstein of value exploitation

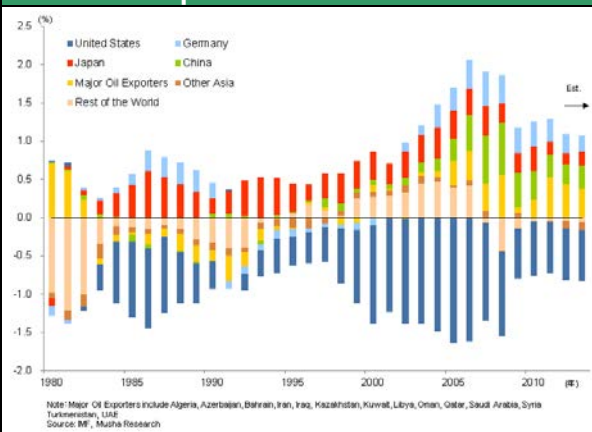
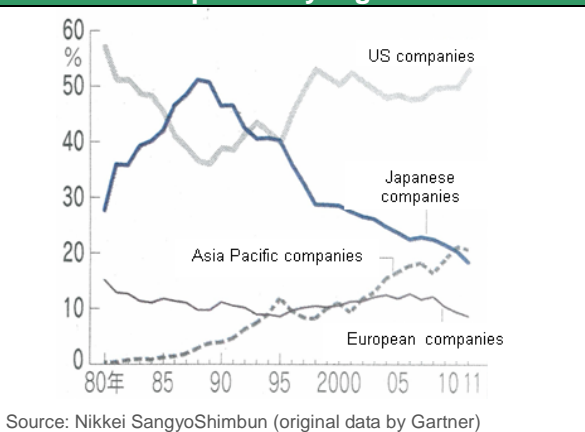
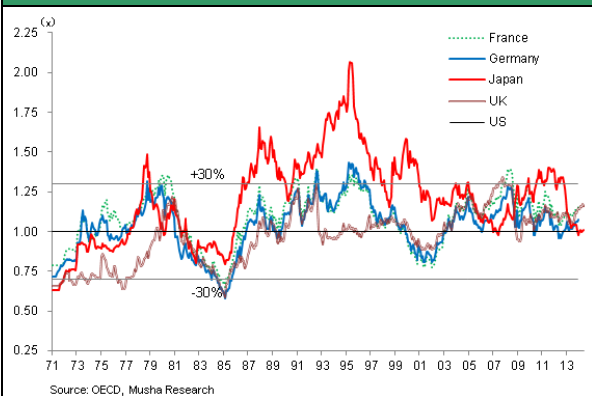
By 1990, Japan's business model (the Japanese value creation model) had reached a dead end. Japan faced mounting criticism because of the immense volume of exports backed by its overwhelming competitive edge. Japanese companies sincerely did their best by cutting costs and capturing market share. But these actions ended up earning Japan a reputation as a veritable Frankenstein that was destroying the global order of business. As you can see in Figure 3, it appears that the global imbalance was caused solely by Japan's massive current account surplus. Japan itself lacked balance. The country lacked wisdom (values and military and political power regarding the global order) but ranked first in the world in terms of strength (competitive and economic power and the trade surplus). There were questions about Japan's very existence. In the book *The Japan That Can Say No* by Shintaro Ishihara and Akio Morita, the authors say that "the United States would be unable to maintain its military superiority without Japanese semiconductor chips because they are vital to the precision of U.S. defense technologies for missiles and other weapons." Figure 4 shows that Japan surpassed the United States in 1990 with a share of more than 50% of the global semiconductor market. The U.S. semiconductor industry was on the verge of annihilation. When the first Gulf War started, Japan used its power due to the lack of wisdom by making a contribution of \$13 billion, the world's largest. But Japan could not provide any military support (no boots on the ground) due to restrictions imposed by the constitution. When Kuwait published an enormous advertisement thanking countries of the world, Japan was not among the many countries that were named.

Criticism of Japan led to the extreme appreciation of the yen. As you can see in Figure 5, the yen was far overvalued in terms of purchasing power parity in relation to other major currencies between 1985 and 2000. A veritably destructive competitive edge resulted in the yen's abnormal strength. This in turn created immense difficulties for Japan's economy and companies. Benefits of hard work by Japanese companies made them more competitive and captured global market share. But the stronger yen and trade friction then caused earnings to fall. In sum, this was a period when it was difficult to be rewarded for hard work.

Japan's value creation model when hard work was not rewarded

In 1992, Akio Morita, who was then chairman of Sony and vice chairman of Keidanren, wrote an article in *Bungeishunju* (a well-known magazine in Japan) in which he stated that Japanese-style management may no longer be viable. He told everything about the hopelessness of the current situation. The article said that Japanese companies are competing fiercely against each other in Japan with everyone doing the same thing. Capturing market share was vital to success. So companies lowered prices and then cut earnings and costs at the expense of efficiency in order to survive with the lower prices. Efficiency was sacrificed in many ways: long working hours; a low share of income for labor; low dividend payout ratios; demands on parts suppliers; little interest in corporate social responsibility; and inadequate measures to protect the environment and conserve resources. On the other hand, European and U.S. companies were in the process of targeting only their respective strategic markets. With fewer companies in each sector, competition was not as heated. Selling prices incorporated suitable profit margins and the necessary costs. From the standpoint of European and U.S. companies, Japanese companies continued to compete worldwide by using the same peculiar methods and management philosophies as they did within Japan. These companies finally could no longer put up with this behavior of Japanese companies.

Other countries want Japanese companies to compete fairly by following the same rules that European and U.S. companies use. They also want Japanese companies to set prices that adequately reflect the actions that were taken at the expense of efficiency. However, this is merely the ideal. Under the current circumstances, if one company enacts sweeping reforms, it will quickly become difficult for that company to survive. For the time being, companies should probably start by doing only what they can. For example, companies can consider actions involving flex holidays for consecutive days off, recruiting systems that do not stress academic background, and a reduction in the frequency of model changes for products.

Figure 3: Strong Japan's current-account surplus**Figure 4: Sales share of the semiconductor companies by region****Figure 5: Super-strong yen – The deviation from purchasing power parity of the major currencies**

Japan's export ratio appears to be low, but exports support value creation

Japan's very low ratio of exports to GDP masked the country's business model of exporting unemployment. Figure 6 shows that Japan's export ratio of between 10% and 15% has been much lower than in other countries. Figure 7 shows that manufacturing, the primary source of exports, accounted for less than 30% of Japan's economy as of 1990. However, the manufacturing sector has consistently provided critical support for value creation by various companies. In 1990, half of all earnings of listed companies in Japan were at manufacturers that earned profits from exports. Furthermore, export-oriented manufacturers consistently accounted for half of the total market capitalization of listed companies in Japan (Figure 8). At that time, there was a gap between value creation and demand creation. This fundamental contradiction surfaced in the form of a massive current account surplus.

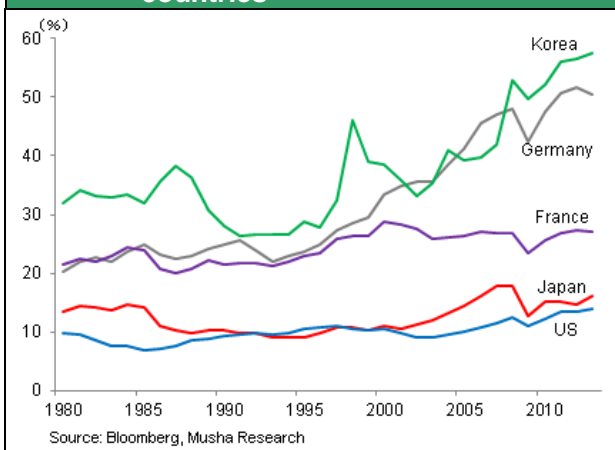
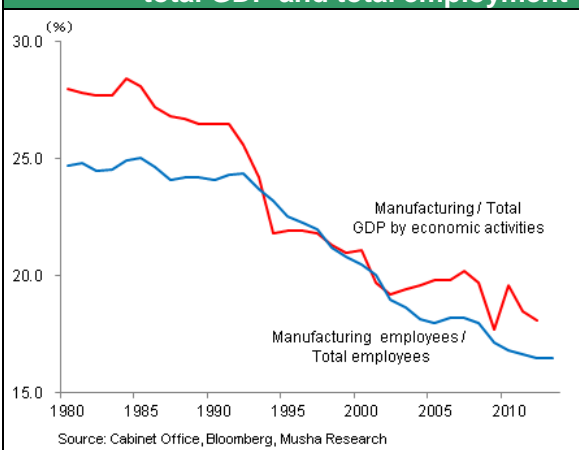
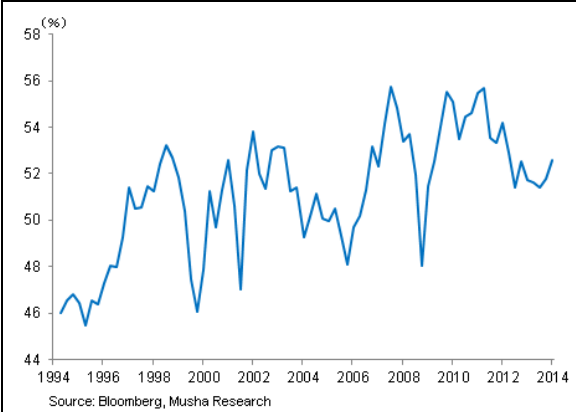
Figure 6: Export to GDP ratio in major countries**Figure 7: Percentage of manufacturing to total GDP and total employment**

Figure 8: Manufacturing MV / TOIX MV

(3) Completion of the switch to the job creation model and superior quality-exclusive technology model

Fast growth in overseas investments drives the model conversion

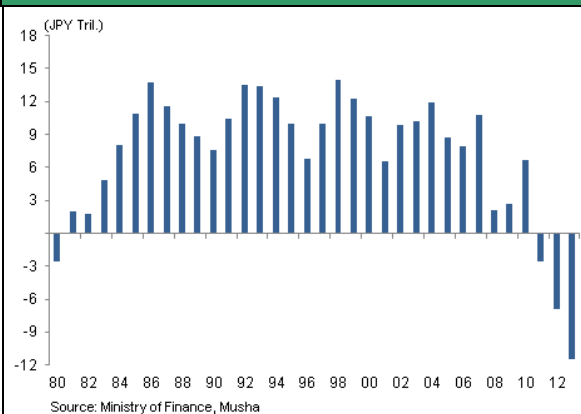
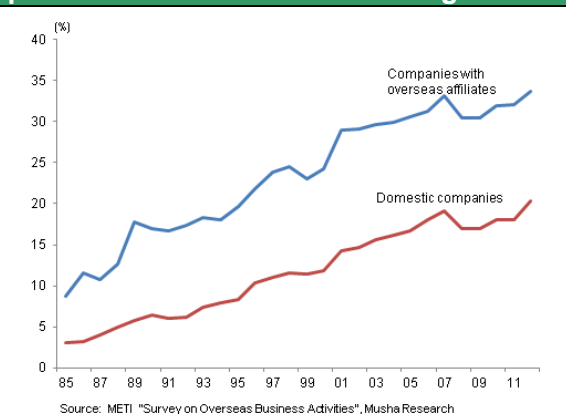
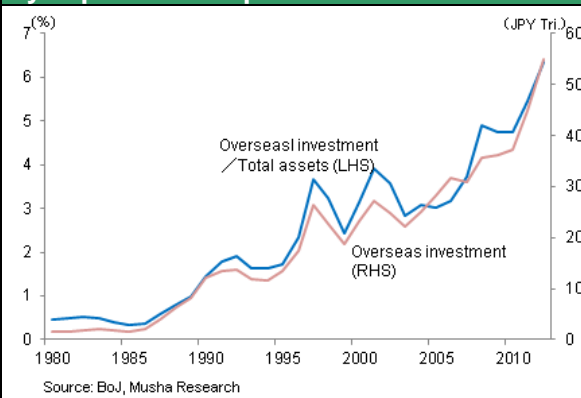
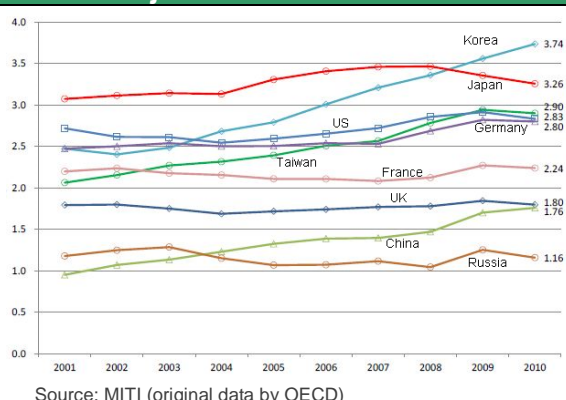
In 1990, Japan reached the peak of its exporting unemployment business model and price competition business model. Japan's business models have undergone enormous changes during the ensuing 20 years. While Japan's manufacturing sector was hollowed out, Japanese companies constructed many factories in other countries. Moving manufacturing overseas transformed Japan from a country with the world's largest trade surplus into a country with a large trade deficit (Figure 9).

As you can see in Figure 10, offshore production has increased to 30% of total output by Japanese manufacturers. In terms of sales and added value, manufacturing in Japan still appears to be superior because of the high cost of operating in Japan (where companies develop technologies and have their "mother factories"). However, most of the jobs are probably at factories outside Japan. In the basic survey of overseas business activities by the Ministry of Economy, Trade and Industry, companies that returned the questionnaire alone had 5.58 million employees (including 4.36 million in the manufacturing sector) outside Japan in fiscal 2012. This was twice as high as 20 years ago. Large manufacturers have far more employees in other countries than in Japan. Moreover, net income at overseas subsidiaries doubled over the prior decade from ¥3.2 trillion in fiscal 2003 to ¥6.4 trillion in fiscal 2012.

Figure 11 shows the sharp increase in the balance of overseas investments by Japanese companies during the past 20 years based on the Bank of Japan flow of funds accounts. Over this period, there was no growth at all in Japan's nominal GDP because of deflation. Total assets of Japanese companies were flat as well during this period. Rapid growth occurred only in cash and overseas assets. Overseas assets surged from 1.5% of total assets in 1990 to 6.3% in 2012. This demonstrates that Japanese companies have completed their conversions to business models centered on income from overseas manufacturing.

Uninterrupted technology development investments despite difficulties

Japanese companies preserved their basic technological superiority during this difficult period. Figure 12 compares R&D expenditures with the GDPs of major countries. You can see that Japan maintained the world's highest level of technology development investments even during the country's economic slump. Japan was unable to compete based on cost with Korea, Taiwan and China, where companies were using existing products and technologies. Furthermore, companies in Korea and Taiwan that were pursuing Japanese companies are now facing competition from Chinese companies. In response, Japanese companies shifted their core businesses to sectors where they have exclusive technologies, and thus encounter little or no competition. In the high-tech category, Japanese companies are no longer suppliers of TVs, PCs and other products that have become commodities. Manufacturers in Japan now specialize in high-tech products like basic materials, components and equipment and advanced technologies in fields like human-machine interfaces and systems. These high-tech products and technologies are responsible for Japan's record-high earnings.

Figure 9: Significant increase of Japan's trade deficit**Figure 10: Increase in overseas production ratio in manufacturing****Figure 11: Increase in overseas investment by Japanese companies****Figure 12: Gross domestic expenditure on R&D in major countries**

The successful U.S. model conversion of the 1980s and 1990s

Among other industrialized countries, the United States achieved an enormous transformation of its business model between about 1980 and 2000. In a big-government (Keynesian economics, modified capitalism) environment, value creation at U.S. companies had stopped growing amid inflation linked to a destructive wage-price cycle. U.S. companies also encountered a competition crisis caused by the emergence of Japanese companies. The 1984 Young Report and other research showed that U.S. companies had to restructure their operations and change their business models. Under the laissez-faire policies of President Reagan, U.S. companies established new models for creating value. Initiatives included restructuring their domestic operations (holding down unit labor cost), moving factories to other countries, shifting emphasis to high-tech industries, and dominating targeted markets (Intel, Microsoft, etc.). Transformation of the value creation model is the true reason for the revitalization of the United States, which has been the world's only economic superpower since about 1995. I explained these events in my book *America, the Revitalization of Capitalism* (1993, Toyo Keizai Shinposha). Japan's situation today is reminiscent of the United States of the early 1990s with respect to the conversion of the value creation model.

(4) The world's biggest streamlining and lower real wages changed Japan's model

Workers and household budgets were sacrificed

Japanese companies did an excellent job of switching their business models during the 20 years of economic stagnation. Companies completed the change to the models of exporting jobs and relying on superior quality and exclusive technologies. How was this accomplished? The answer is that companies were able to invest in model conversions year after year by shifting the associated burdens to workers and the service sector. Consequently, Japan's "lost 20 years" was actually a time of sacrifices for workers, households and the service sector.

A comparison of unit labor cost in major countries is shown in Figure 13. As unit labor cost climbed in other countries, there was a significant decline at Japanese companies. This demonstrates that Japanese companies achieved more progress with streamlining than anywhere else in the world. The resulting surplus earnings made it possible to make model-conversion investments even as selling prices steadily declined because of the yen's strength and deflation.

Falling compensation pushed up productivity

Figure 14 shows Japan's physical productivity, value-added productivity and worker compensation since 2000. Obviously, there are big discrepancies among these three statistics. Physical productivity is higher, which signifies that workers are creating more value. But at the same time, value-added productivity (nominal income that companies earn) is down. The difference between these two figures is the decline in selling prices caused by the yen's strength and deflation. Income shifted from sellers to buyers as a result. Compensation of workers fell even more than the downturn in value-added productivity. In other words, workers were forced to accept lower wages as labor's share of income dropped. But there was more. Real wages fell as well, which forced workers to accept a lower standard of living. This was extremely unfair. On the other hand, the extra profits that companies earned from these sacrifices funded the model conversion. Consequently, the sacrifices of workers were not for nothing.

Figure 13: Significant reduction of ULC in Japan

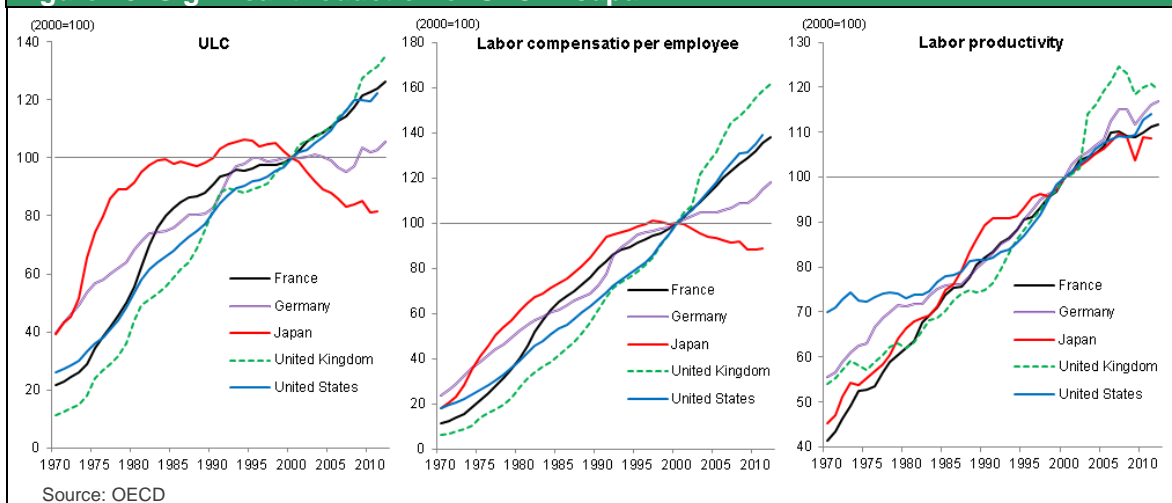


Figure 14: Prolonged abnormal wage restraint in Japan

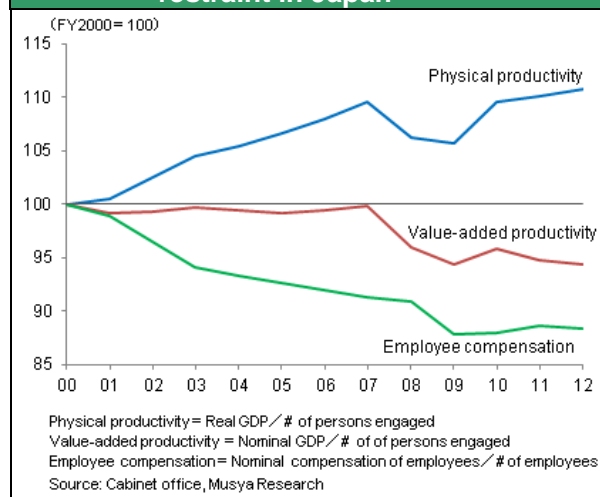
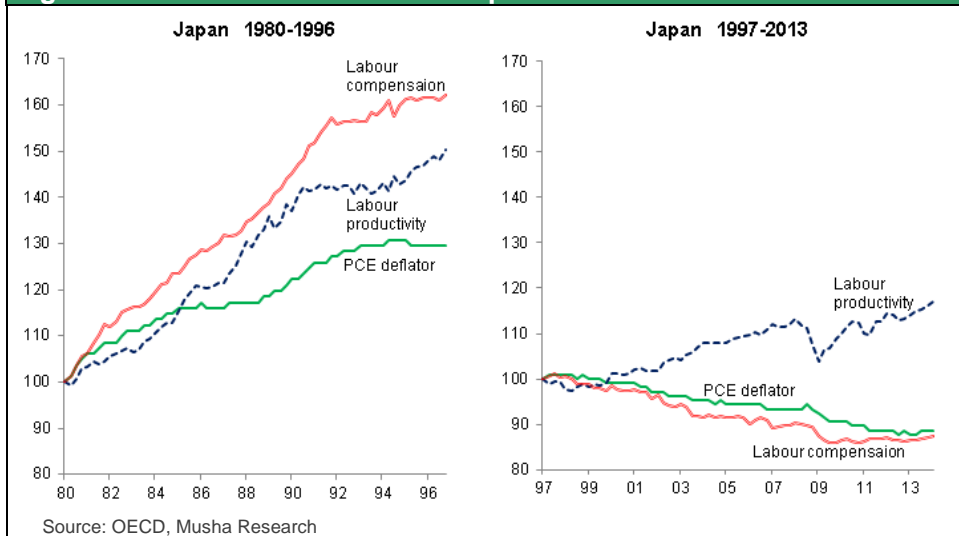
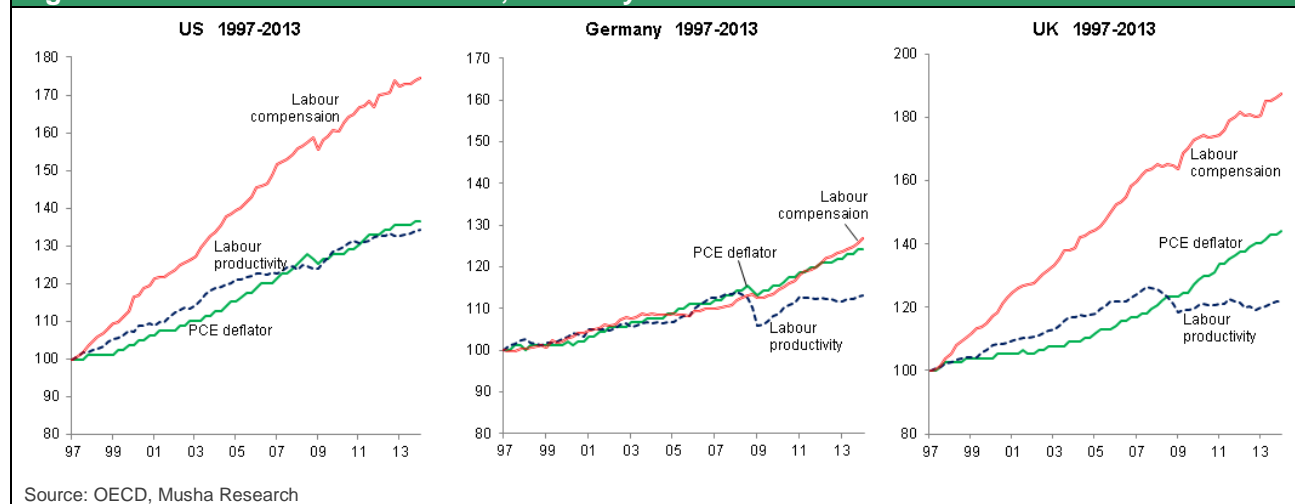


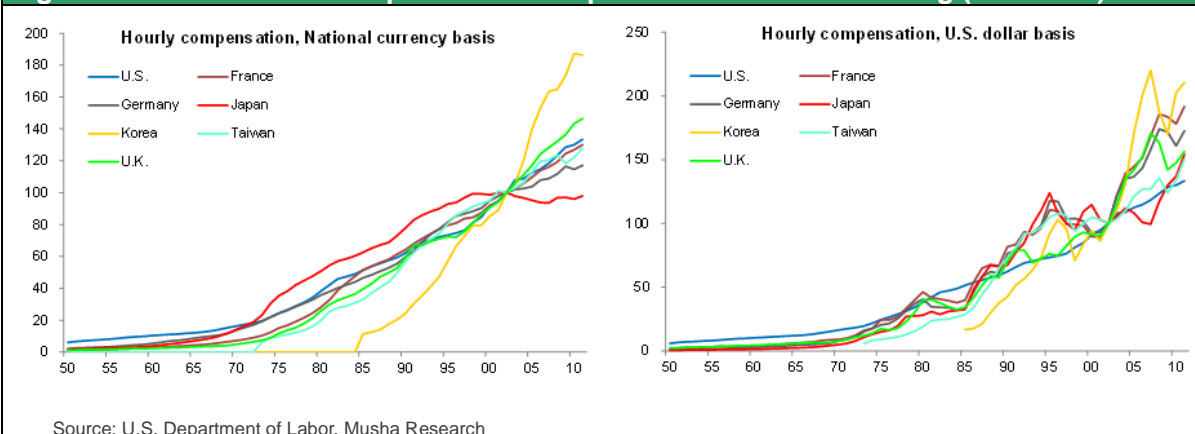
Figure 15 shows productivity, wages and prices in Japan before 1997, when there was no deflation, and afterward as deflation took hold. A big shift occurred in the structure of income distributions when deflation started. In 1997, just before deflation began, higher wages led to higher productivity and then higher prices in all countries of the world (Figure 16), including Japan. After 1997, deflation completely reversed the income distribution structure in Japan: higher productivity led to lower prices and then lower wages. The sacrifice of workers is obvious.

Figure 15: Income distribution in Japan – before and after 1997**Figure 16: Income distribution in US, Germany and UK**

Japanese-style governance aided the model conversion

These events illustrate the positive side of corporate governance in Japan, which differs from generally accepted governance standards. Governance in Japan often has the negative aspects of lacking openness and limiting a company's internal democracy. Furthermore, Japanese-style governance tends to place priority on a company's inner circle at the expense of distributions to shareholders. Nevertheless, most companies in Japan were able to convert their business models and avoid bankruptcy during the "lost 20 years." The reason may be that the distinctive governance systems of these companies functioned effectively.

Without Japanese-style governance, companies would have paid workers' in line with their productivity, increased dividends and raised other outflows of funds. Converting business models would probably have been impossible. Look at the difference between Fuji Film and Kodak. Fuji Film did not seek to maximize its ROE, instead accumulating large amounts of equity and cash on its balance sheet. Overseas investors criticized the company as a symbol of the problems of Japanese-style financial management and governance. When the switch to digital technology ended the market for photographic film, Kodak declared bankruptcy. But Fuji Film successfully established a new business model. Making this possible were the funds generated by Japanese-style governance.

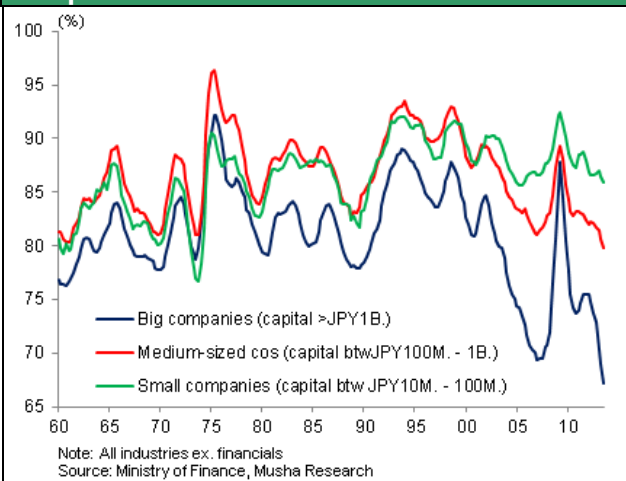
Figure 17: International comparison of compensation in manufacturing (2002=100)

(5) The benefits of the model conversion are emerging: Higher earnings, wages, dividends and stock repurchases

Deflation has ended. Having created new models, Japanese companies are now earning adequate profits. As a result, Japanese companies no longer require the financial cushion (surplus equity, cash and other sources of liquidity) that was needed to fund the model conversions and cope with a series of financial crises. Now companies are in a position to increase emphasis on outflows like wages, dividends and stock repurchases. Growth in real wages will probably trigger the start of full-scale expansion of domestic demand. Unit selling prices of Japanese companies will climb because of the weaker yen and inflation. Companies in Japan will benefit from both the volume effect of rising domestic demand the price effect due to the end of deflation. The result will be even more growth in earnings. As you can see in Figure 18, Japanese companies have significantly lowered their break-even point in terms of sales. That means we can expect to see a big improvement in profit margins as sales grow. Companies have announced very conservative forecasts for sales and earnings in the fiscal year ending in March 2015. Substantial upward revisions are likely to occur as the success of Abenomics produces a variety of reforms.

I expect to see many Japanese companies distribute earnings to shareholders through dividends and stock repurchases. These actions will significantly improve the ROE, which is generally lower than at companies in other countries. Symbolizing this shift is the recent announcement by Amada, a typical Japanese company with regard to retaining liquidity. Amada has changed its stance and plans to distribute all earnings in the next two fiscal years to shareholders. Amada has established an adequate foundation for business operations (for both global operations and developing technologies and products). Completing work on this infrastructure is what allowed the company to shift to prioritizing shareholder distributions and ROE. Many more Japanese companies will probably take similar actions.

We are on the verge of a significant increase in the value of Japanese stocks. Prices of stocks have already factored in the reality of Abenomics. Now we are about to advance to the stage where prices factor in the long-term growth in earnings that will result from the conversion of business models. Reforms to Japan's Government Pension Investment Fund were the first step in what is likely to be a massive movement of money from low-return instruments like bank deposits and bonds to higher-return assets with risk. This is why I believe that a Japanese stock market rally of an unprecedented magnitude is about to begin.

Figure 18: Break-even point of Japanese companies

Additional information

I am reposting **Key Strategy Issues (Vol. 288) of February 25, 2010** titled **Perspectives on deflation in Japan – 2, How the “lost 20 years” made Japan even stronger**

Perspectives on deflation in Japan – 2

How the “lost 20 years” made Japan even stronger

Although it may appear to be a counterintuitive statement, Japan’s “lost 20 years” was not necessarily a meaningless period of stagnation. In fact, these two difficult decades were a period when Japan fulfilled the two conditions needed for economic growth. Japan, and particularly Japanese companies, skillfully responded to the “lost 20 years” to produce two enormous benefits. First is an unprecedented progress in cutting costs, boosting efficiency, restructuring operations and holding down wages. Second is the globalization of Japan’s companies as they became citizens of the world. Once deflation fueled by a strong yen winds down, Japan will be positioned to capitalize on these two benefits gained from 20 years of hard work. I believe that Japanese companies will stage a dramatic recovery in earnings once the yen weakens to about ¥110 to the dollar.

During the past two decades, Japan’s purchasing power parity fell from ¥200 to ¥100 in relation to the dollar. What this means is that Japan cut costs more than any other country in the world. Statistics show that Japan’s unit labor cost plummeted over the past 20 years. These lower expenses will make Japanese companies extremely competitive in the years ahead.

In the past, many companies in Japan responded to a strong yen by adopting an extremely inward-looking stance. But this time, Japanese companies responded by making operations more global. Furthermore, despite the challenges of the past 20 years, Japanese companies took full advantage of their technological superiority. Many products incorporate high-tech materials, components and devices that are virtual “black boxes.”

Japan was penalized with a strong yen for its success at becoming extremely competitive. But if the yen weakens to a level that matches its purchasing power parity (¥115 to the dollar in 2009), we should see a strong rebound in corporate earnings. Looking at the yen-dollar exchange rate, the yen’s appreciation that followed the 2008 Lehman shock is just now coming to an end. We now stand on the verge of a switch to a weaker yen as the U.S. economy recovers and the Fed starts raising interest rates. This may very well start a virtuous cycle as a weaker yen stops deflation, and the end of deflation allows Japan to increase its economic growth rate.

(1) The first benefit of deflation fueled by a strong yen:

The elimination of Japan’s high-cost structure

Deflation with a strong yen made Japan stronger

There is no doubt that it was a painful 20 years for Japan. But I think we should call this period the “20 years of being put to the test” rather than the “lost 20 years.” Consequently, we should instead view this as a time when Japan, and particularly Japanese companies, passed this test with high marks and gained two valuable benefits. The first benefit was unprecedented progress in cost cutting, efficiency, restructuring, wage reductions and deregulation. The second benefit was the further globalization of Japanese companies, making them citizens of the world.

Elimination of Japan’s high-cost structure

A comparison of Japan in the early 1990s and today clearly reveals the benefits of cost cutting. We can see the difference by looking at a Daiwa Research Institute (DRI) report in 1993 concerning the relationship between deregulation and the elimination of price differentials between Japan and other countries. (At the time, I was working at DRI and was in charge of this report. For more information, please refer to This is How Deregulation Will Change the Business World, which was produced by DRI in 1993 and published by Nippon Jitsugyo.) In 1993, the yen staged a strong rally that took the exchange rate to ¥107 to the dollar. But purchasing power parity was ¥190 to the dollar, creating a price gap of about 100% with other countries. The objective of DRI was to use comparisons with other countries to determine the status and causes of Japan’s high prices. Finding a way to eliminate this price differential was the central theme. DRI planned to accomplish this by comparing the causes of price gaps for 21 major products with overseas cost structures. In 1993, Tokyo was the world’s most expensive city, as you can see in Figure 2. A study by 21 analysts of the causes of the price differential between Japan and other countries revealed three major factors. First was the unusually high cost of labor (denominated in dollars) because of the yen’s remarkable strength. Second was the high cost structure of Japanese companies (distribution expenses throughout the economy are high, resulting in high selling, general and administrative expenses and other indirect expenses for Japanese companies). Third was regulations in Japan and the widespread practice of companies to ignore efficiency (Figure 3).

Figure 1 : Causes for high prices in Japan > Remedy > Status after 18 years

Causes for high prices in 1993 Japan	Remedy	Status after 18 years
① High labor cost due to strong yen	⇒ Improvement of productivity	◎
② High cost structure of Japanese industry	⇒ Restructuring and logistics reform	◎
③ Regulation and business practices in Japan not pursuing effectiveness	⇒ Deregulation and encouraging competition	○

Source: Daiwa Institute of Research, Musha Research

Consequently, the obvious prescription for Japan in response to the yen's appreciation in 1993 was the following three actions: (1) absorb the high cost of labor by raising labor productivity; (2) restructure companies and boost efficiency, reform Japan's merchandise distribution system; and (3) use deregulation and measures to promote competition to lower market prices. At that time, DRI, where I was working, the Japanese government, opinion leaders and the media all agreed that the above three initiatives were needed.

Figure 2 : Domestic-Overseas Price Differential and Parity Rate by Items in 1993

		(x JPY)		
		At survey point (JPY107/USD1)	Purchasing power parity (JPY190/USD1)	Parity rate (Rate for ¥=)
Food	Beer	2.5 x	1.4 x	1USD=JPY225 (Note)
	Wheat (production cost)	11.0	6.1	JPY1180
	Butter	5.0	2.8	JPY540
	Non fat dried milk	2.4	1.4	JPY260
Non-durable consumer goods	Men's apparel	1.8	1.0	JPY195
	Wood free paper	1.4	0.75	JPY160
	Medicines (for doctors)	0.4	0.25	JPY50
	Petroleum products (gasoline)	3.1	1.70	JPY700 (Note)
	(kelosene)	1.7	0.97	JPY250 (Note)
	(average of all the oil types)			JPY370 (Note)
Durable goods	Automobiles	1.2	0.65	JPY135
	Audio visual	1.1	0.63	JPY120
Industrial materials	Chemical (ethelene)	1.3	0.73	JPY160
	(polyethylene)	1.8	1.01	JPY220
	Steel (hot coil)	1.6	0.93	JPY145 (Note)
	Copper (refining margin)	1.1	0.61	JPY120~130
	Tunker	1.1	0.86	JPY150
Public utility fare	Telephone charge (long distance call)	2.8	1.5	JPY290
	Electric utility	2.7	1.5	JPY290
	Trucking	2.2	1.2	JPY240
	Air fare (domestic)	1.5	1.0	JPY195
Construction	Building construction cost	1.6~1.9	0.9~1.0	JPY170~190 (Note)
	Housing price	2.2~2.7	1.2~1.5	JPY240~260 (Note)
	Cement	1.6	0.86	JPY165

(Note) Parity rate is basically calculated based on a domestic cost basis.
Parity rate for beer and petroleum product is without tax basis.

(Note) Parity rate for steel is manufacturers' total cost basis.
Building construction and housing price are based on the same specification.

Source: Daiwa Institute of Research

Figure 3 : Factor analysis for high prices in Japan

		Producers cost				Logistics cost (Productivity)	Tax and System
		Productivity	Wage level	Material cost	Indirect cost		
Food	Beer	△		△	○	◎	○
	Wheat	◎		○	△		○
	Dairy product	○		◎			○
Consumer goods	Textile		○			◎	
	Paper	△		◎	△	○	
	Pharmaceuticals					◎	
	Petroleum product				△	◎	○
	Automobiles		◎	△	△	○	
	Consumer electronics		◎		○	△	
Industrial materials	Chemicals			◎	○		○
	Steel		◎		○	△	
	Copper		○	◎			○
	Shipbuilding		◎	○	△		
Infrastructure and Logistics	Telecommunications	◎	○		△		○
	Electricity		△	○	◎		○
	Trucking	◎					○
	Air transportation		◎				○
	Logistics	◎			○		○
Construction	Building	○			◎	△	○
	Housing	○		△	△	◎	○
	Cement		△	○	△	◎	

(Note) ◎ Most serious high cost factor, ○ Serious high cost factor, △ Nonnegligible high cost factor
Source: Daiwa Institute of Research

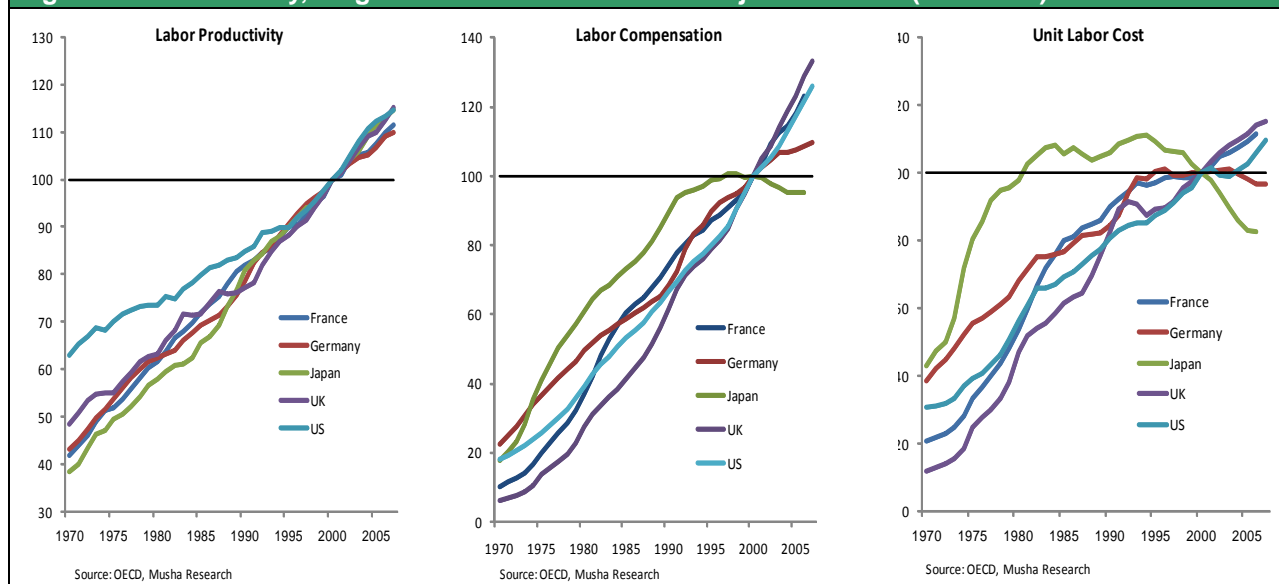
Japan's high prices have been eliminated

Let's look back on these three initiatives now that 18 years have gone by. Japan's purchasing power parity, an indication of macroeconomic trends, has increased steadily. As I explained in my previous report, parity has climbed from ¥200 to the dollar in the early 1990s to ¥115 in 2009. This is a difference of almost 100% in relation to the dollar. Obviously, there has been a big improvement in Japan's high prices and high-cost structure. Looking at individual items, the gap of 50% to more than 100% that existed between Japanese and U.S. utility rates in 1993 has disappeared. Moreover, Japan now has lower prices for airline tickets, subway tickets and telephone bills. The more than 100% difference in electricity rates is almost gone. For food products, the Japan-U.S. price differential was anywhere from two to 11 times in 1993. Wheat has dropped from 11 times to 30% and beer from 150% to 20%. Significantly, the price of a Big Mac, which is widely used as a benchmark for food price differences, is now 15% lower in Japan than in the U.S. (Washington D. C.). Even apparel is cheap compared with the U.S. thanks to UNIQLO and other low-price retailers (recent data for Japan are mainly from 'International Price Levels (Comparison with Prices in Japan)' by the Japan Center for International Finance, September 29, 2009).

The decline in the unit labor cost

So exactly how were these price reductions achieved? Let's look at each of the three actions listed above. For action (1), Japan was highly successful at absorbing the high cost of labor by improving productivity and lowering wages. As Figure 4 shows, Japan raised productivity above the levels in other major countries while making big cuts in wages. The result was the only significant drop in unit labor cost among the world's industrialized countries.

Figure 4 : Productivity, Wages and Unit Labor Cost in Major Countries (2000=100)



Remarkable progress in distribution system reforms

For action (2) as well, Japan has done extremely well. There have been substantial reductions in selling, general and administrative and other indirect expenses. Japan also made remarkable progress in improving how merchandise is distributed. Wholesalers and other intermediaries in the distribution system were eliminated. Symbolizing this progress was the rapid growth of a new business model called specialty store of private label apparel (SPA). U.S. retailer GAP was the first company to use this business model. But SPA really took hold in Japan. Until the late 1980s, manufacturers controlled Japan's supply chain. Next, the manufacturer-wholesaler model, in which wholesalers are in control, took hold in the apparel industry. Today, the highly efficient UNIQLO-Nitori model (SPA, retailer-wholesaler), which controls upstream activities to achieve highly efficient distribution, is gaining momentum. UNIQLO is a retailer that is also involved in developing and manufacturing products. There are no intermediaries. Nitori, a retailer of furniture, interior goods and household products, uses the same framework.

Companies using the Internet to sell products directly to customers are growing rapidly. Rakuten is an outstanding illustration. Another noteworthy trend in retailing is the emergence of convenience stores. These retailers captured a large share of the retailing market by greatly simplifying distribution channels. Consequently, Japan was able to achieve a big improvement in distribution efficiency thanks to the emergence of these three sources of distribution reforms: SPA, Internet sales and convenience stores.

Progress in deregulation, too

Japan has been making progress with deregulation and administrative reform, although more work remains. Deregulation and policies to encourage competition are responsible for the big reduction in the price gap in utility rates that I mentioned earlier. In its Structural Reform Evaluation Report 6 in December 2006, the Cabinet Office used indexes to show progress in deregulation covering all industries. As Figure 5 shows, the improvements were clearly evident. This report also includes an estimate of how much deregulation contributed to the improvement in productivity (Figure 6). Although this estimate may be too high, there is no doubt that reforms played a major role in raising productivity in sectors other than manufacturing.

Figure 5 : Regulation indices by sector

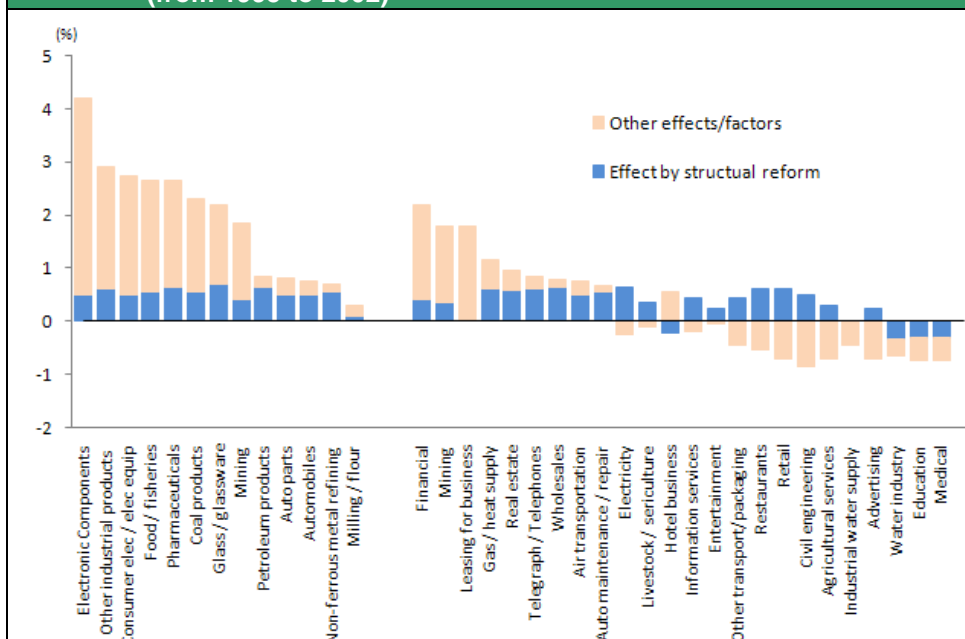
By sector	1995	1999	2002	2005
Manufacturing	1	0.322	0.261	0.227
Non-manufacturing	1	0.611	0.460	0.326
Agriculture/Fishery	1	0.923	0.768	0.805
Mining	1	0.659	0.718	0.723
Construction/Civil engineering	1	0.550	0.775	0.849
Electricity	1	0.388	0.285	0.277
Gas/Heat supply	1	0.531	0.439	0.388
Water industry	1	1.012	1.265	0.992
Industrial water supply/Waste treatment	1	0.861	1.198	1.318
Wholesale	1	0.235	0.234	0.225
Retail	1	0.274	0.296	0.287
Finance/Insurance	1	0.831	0.709	0.427
Real estate	1	0.505	0.554	0.558
Railroad	1	0.466	0.445	0.218
Road transport	1	0.321	0.209	0.184
Water transport	1	0.525	0.392	0.332
Air transport	1	0.874	0.686	0.727
Other transport/Packaging	1	0.671	0.566	0.502
Telegraph/Telephone	1	0.662	0.121	0.073
Other public services	1	1.122	1.061	0.864
Other services to business	1	0.566	0.414	0.275
Other services to persons	1	0.474	0.448	0.376
Total industry	1	0.483	0.447	0.394

Note:

1. Regulation indices are 1 as of 1995/3/31 (as of 3/31 for each year).
2. Indices for manufacturing and non-manufacturing are value-weighted average of regulation index for each sector with its added-value share.

Source: Cabinet Office "Report 6, Evaluation on structural reform", Musha Research

Figure 6 : Effect by structural reform on annual productivity growth (from 1995 to 2002)



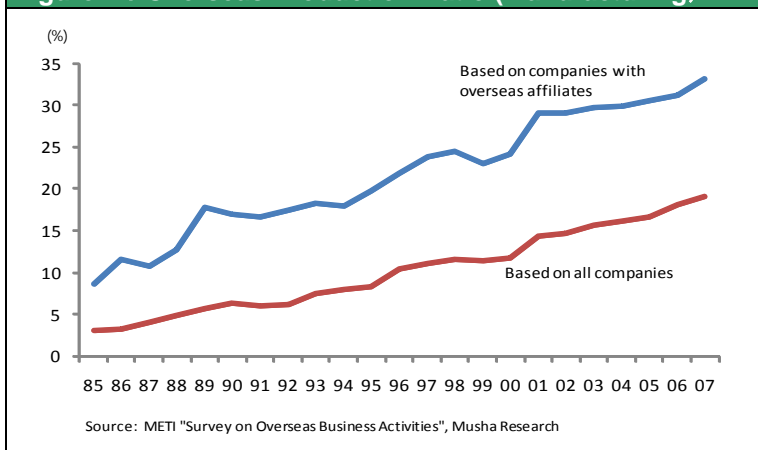
Source: Cabinet Office "Report 6, Evaluation on structural reform", Musha Research

(2) The second benefit of deflation fueled by a strong yen: Globalization of companies and maintenance of technological superiority

The globalization of Japanese companies continues

My next subject is globalization, which is another way in which Japan benefited from 20 years of deflation linked to the yen's strength. During this period, while rapidly making their operations more global, Japanese companies significantly raised overseas production ratios by making big overseas investments. Early in the 1990s, the theory that Japan is unique sparked a heated debate. People criticized Japan for producing highly competitive products at domestic factories while shutting out foreign investments. Japan was viewed as a fortress country that took away jobs by exporting massive quantities of these competitive goods and destroying industries in other countries. Table 7 shows that overseas factories accounted for less than 10% of production by Japanese companies at that time. This was far less than the overseas production ratios of the U.S. and European countries. By 2008, however, Japan's overseas production ratio stood at 33%, which is about the same as in other major countries. Expanding overseas activities has enabled Japan to create rather than steal jobs in other countries. Japan's overseas production ratio is estimated at more than 50% based on comparisons using the number of jobs, which is a more accurate reflection of production volume, instead of income (value added). At this point, Japanese companies have probably completed work on their global infrastructures.

Figure 7 : Overseas Production Ratio (Manufacturing)



As I have just explained, Japan made remarkable progress concerning two weaknesses that existed 20 years ago: a high-cost structure and a reclusive stance. Furthermore, while making these improvements, Japan still has a large number of products that are superior in terms of technology and quality (the emergence of companies in Korea and other countries has eroded Japan's competitive edge in some product categories). Japanese companies preserved their superiority by giving priority to investments for developing technologies. This was done even while companies greatly reduced unit labor costs during the difficult period of deflation and a strong yen.

Technological superiority gives Japan a big advantage in new high-tech fields

The superiority of technologies and quality at Japanese manufacturers is most evident in high-tech components, materials and devices. Companies in Japan are not the most competitive suppliers of high-tech finished products like LCD televisions, cell phones and computers. But Japan has an overwhelming lead in supplying components and materials, which incorporate even more valuable key technologies. There are many examples: silicon, glass and back sheets for solar cells, semiconductor encapsulation materials, lithium-ion batteries for electric and hybrid automobiles, photoresist used to fabricate semiconductors, motors, and electronic components. Showa Shell Sekiyu has started making solar cells. Tokuyama, Shin-Etsu Chemical, SUMCO, Japan Solar Silicon and other companies have all announced plans to increase output of silicon for solar cells. Only Japan is able to produce high-tech materials, components and devices originating from semiconductor technologies entirely at domestic factories. Synergies resulting from this strength give Japan a valuable competitive advantage.

Standardizing production processes for solar cells and lithium-ion batteries is difficult because technologies in these two fields are still in a relatively early stage of development. This prevents latecomer countries to the high-tech sector, from catching up for the time being. Consequently, Japan is very likely to retain its technological superiority. Japan also has a big competitive edge in the field of environmental products using technologies derived from semiconductors and other sophisticated devices. For example, Japan has a virtual monopoly in the supply of pure water systems, reverse osmosis membranes for desalinization, waste water recycling systems and other water treatment equipment, and carbon fiber used to make wind turbine blades. Infrastructure projects are another illustration of Japan's superiority. Vietnam's decision to use Japan's high-speed rail technology is one example. In addition, Japan has considerable expertise in nuclear power, which is attracting renewed attention as a source of clean energy.

Figure 8 : List of Japanese companies that dominate global markets

Company	Code	Dominance
TORAY INDUSTRIES	3402	World's largest manufacturer of PAN-based carbon fiber
TOMOEKAWA	3878	World's largest manufacturer of toner and adhesive tape for semiconductor processing
NIPPON KODOSHI	3891	Has market share in Japan of more than 95% for insulating separator sheets used in capacitors
SHOWA DENKO K K	4004	World's largest independent vendor of hard disk drives
SHIN-ETSU CHEMICAL	4063	World's largest manufacturer of PVC and semiconductor wafers
ISE CHEMICALS	4107	World's second-largest manufacturer of iodine
TOKYO OHKA KOGYO	4186	World's largest manufacturer of photoresist used to produce semiconductors and flat panel displays (LCD, plasma, etc.)
SUMITOMO BAKELITE	4203	World's largest manufacturer of semiconductor device encapsulation materials
ZEON	4205	World's largest manufacturer of specialty synthetic rubber
TAIYO INK MFG	4626	World's largest manufacturer of solder resist for printed wiring boards
DIC	4631	Acquired foreign companies to become the world's largest manufacturer of ink
JAPAN PURE CHEMICAL	4973	Supplies the world's largest variety of precious metal electroplating chemicals for electronic components
BRIDGESTONE	5108	World's largest manufacturer of tires
ASAHI GLASS	5201	One of the world's largest manufacturers of architectural and automotive glass
NIPPON SHEET GLASS	5202	One of the world's largest manufacturers of sheet glass
NGK INSULATORS	5333	World's largest manufacturer of insulators for electric power lines
NGK SPARK PLUG	5334	World's largest manufacturer of spark plugs and automotive sensors
MARUWA	5344	World's largest manufacturer of substrates for resistors
FUJIMI	5384	Accounts for 90% of the world's ultra-precision polishing compounds
SUMITOMO METAL	5405	One of the world's largest manufacturers of seamless steel pipes
DAIDO STEEL	5471	One of the world's largest steelmakers specializing in specialty steel
HITACHI METALS	5486	One of the world's largest manufacturers of magnetic materials
MITSUBI MINING &	5706	World's largest producer of neodymium magnets
FURUKAWA	5715	Has the largest share of the global market for high-purity metallic arsenic
OSAKA TITANIUM	5726	World's largest manufacturer of high-grade metallic titanium
RYOBI	5851	One of the world leaders in die casting
FUJII MACHINE MFG	6134	Has the largest share of the global market for automatic mounting machinery for electronic components and other items
DISCO	6146	World's largest manufacturer of dicing, cutting and polishing machinery for semiconductors and electronic components
NABTESCO	6268	World's largest supplier of precision devices for industrial robot joints; has 30% of the global market for power shovel traveling
SMC	6273	World's largest manufacturer of pneumatic control devices for factory automation equipment
UNION TOOL	6278	World's largest manufacturer of drills for printed circuit boards
NISSEI ASB MACHINE	6284	World's largest manufacturer of stretch-blow molding machines
TSUBAKIMOTO CHAIN	6371	World's largest manufacturer of industrial chains
JUKI	6440	World's largest manufacturer of industrial sewing machines
GLORY	6457	Supplies more than half of coin and currency processing units in Japan; the largest supplier of coin and currency units for cigarette vending machines and coin lockers
TEIKOKU PISTON RING	6463	World's largest manufacturer of cylinder liners
NTN	6472	The global leader in axle units
MINEBEA	6479	Has 60% share of the global market for miniature ball bearings
THK	6481	Has 60% share of the global market for linear motion (LM) guides
YASKAWA ELECTRIC	6506	World's largest supplier of servo motors and inverters
SHIBaura MECHATRONICS	6590	World's largest supplier of liquid crystal cleansing equipment and equipment for TAB mounting and DVD film formation and
MABUCHI MOTOR	6592	Manufactures more than half of the world's small motors
NIDEC	6594	Has 70%-80% share of the global market for HDD spindle motors
GS YUASA	6674	Largest manufacturer of automotive and motorcycle lead acid batteries in Japan and second-largest in the world
WACOM	6727	World's largest manufacturer of computer tablets for electronic pen data input
NIPPON SIGNAL	6741	Largest of Japan's big-three signal manufacturers with particular expertise in railroad and traffic signals.
PANASONIC	6752	World's largest consumer electronics manufacturer
SHARP	6753	One of the world's largest producers of solar cells
SONY	6758	World's largest manufacturer of AV equipment
HORIBA	6856	Leading producer of automobile measuring instruments with a global market share of 80%.
ADVANTEST	6857	Leading global supplier of semiconductor testing devices.
FERROTEC	6890	Leading manufacturer of vacuum seals with a global market share of 70%.
USHIO	6925	Leading global producer of industrial lamps, including halogen lamps
NIPPON CERAMIC	6929	Top-ranked manufacturer of fine ceramic-applied sensors, ranked sixth in the global market
ZUKEN	6947	Leading supplier of printed circuit board CAD/CAM systems.
JEOL	6951	Mainstay electron microscope has a global market share of 50%.
FANUC	6954	World's top manufacturer of NC machine tools and articulated robots.
HAMAMATSU PHOTONICS	6965	Largest manufacturer of photo-electric electron-multiplier tubes, with a global market share of 65%.
MURATA MANUFACTURING	6981	Leading global manufacturer specializing in ceramic capacitors.
NITTO DENKO	6988	Commands largest shares of global markets for 20 high-tech materials, including films for LDCs. Known for its strategy of
KOA	6999	Major manufacturer of fixed resistors
TOYOTA MOTOR	7203	World's largest automobile manufacturer
QWARI PRECISE PRODUCTS	7249	Leading manufacturer of synchronized rings for automobiles
AISIN SEIKI	7259	Largest global producer of ATs (automatic transmissions)
HONDA MOTOR	7267	Largest producer of motorcycles in the world
NIPPON SEIKI	7287	Top ranked manufacturer of car-use and multiuse meters. Global market share: Car use meters: 31%; Motorcycle meters: 11%
FCC	7296	World's largest manufacturer of clutches for motorcycles and vehicles
SHIMANO	7309	Leading global manufacturer of bicycle parts.
JAMCO	7408	World's largest manufacturer of galleys and lavatories for passenger planes
NAGANO KEIKI	7715	The group has the largest share of the global market for mechanical pressure gauges
TOKYO SEIMITSU	7729	Leading global supplier of precision wafer surface inspection systems
OLYMPUS	7733	Holds 70% share of the global market for endoscopes
DAINIPPON SCREEN MFG	7735	Leading global supplier of wafer cleaners
NORITSU KOKI	7744	Leading global supplier of photo processing lab systems
CITIZEN HOLDINGS	7762	One of the leading producers of watch movements in the world.
SHOEI	7839	Holds the largest share of the market for high-end helmets in the world.
YAMAHA	7951	Largest musical instruments company in the world.
SHIN-ETSU POLYMER	7970	Largest producer of buttons for mobile phones in the world.
NINTENDO	7974	Largest video game hardware producer
GLOBERIDE	7990	Largest supplier of fishing equipment; supplies everything from fishing rods and reels to bait.
MITSUBISHI	8058	Largest general trading company in the world.
NIPPON EXPRESS	9062	One the world's largest integrated logistics services firm
MITSUBI OSK LINES	9104	World's largest global operator of oil tanker and LNG vessel fleets
TOKYO ELECTRIC POWER	9501	The world's largest private sector electric power utility
TOKKI	9813	Leading global producer of organic EU panel manufacturing equipment for next generation FPDs

Source: Musha Research

Japan excels at innovation centered on people

The superiority of products made by Japanese manufacturers is easy to see. In recent years, this same commitment to quality has become increasingly evident in sectors other than manufacturing, too. Until recently, the non-manufacturing and consumer products sectors in Japan were regarded as targeting only domestic demand. Companies in these sectors did not compete overseas. But Japan's qualitative advantage in these two sectors will become increasingly evident in the years ahead. Personal income is climbing rapidly in emerging countries, particularly in Asia. Japan's reputation for quality should enable Japanese companies to sell products at prices that include a quality premium. Japanese companies, both manufacturers and others, have proven expertise in innovation centered on people. Examples of hit products include the Wii (Nintendo), Suica smart prepaid cards (JR) and HeatTech clothing (Fast Retailing). Japan's tourism industry will probably be another beneficiary of the country's reputation for high-quality services. The number of tourists is likely to grow rapidly along with the rising number of affluent people in Asia. This is particularly true for Chinese tourists, who no longer need a visa to visit Japan.

(3) Will the yen's strength end? Will deflation end?

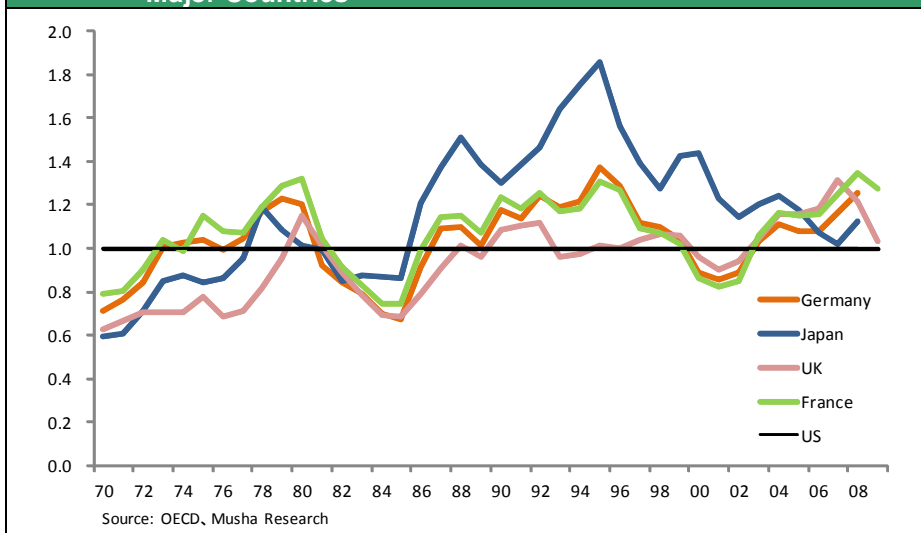
Benefits of the end of the strong yen will emerge at once and generate strong earnings growth

As I have just explained, Japan's "lost 20 years" was actually a time of progress. This was a period when Japan truly adapted to economic globalization by becoming a global citizen. Progress was made in cost-cutting and business operations, although more actions involving deregulation and administrative reforms are needed. This was also a period when Japan established a strong foundation for future growth. Once deflation linked to a strong yen reaches its end, I expect to see a strong surge in corporate earnings. This depends on the strength of the yen. The next crucial question is therefore if and when the yen's appreciation will end.

What are the forces that determine exchange rates?

From a practical standpoint, foreign exchange rates should depend on either of two factors: (1) purchasing power parity (differences in rates of inflation) and (2) differences in interest rates. Differences in rates of inflation have an immediate impact on the cost-competitiveness of traded goods. The resulting change in trade (current account) surpluses and deficits raises or lowers demand for specific currencies. Figure 9 shows exchange rate movements for major countries with mature economies. As you can see, the rates generally stay within about 30% of the purchasing power parity. Over the long term, currencies do not move far from their purchasing power parities. Exchange rates do not precisely follow purchasing power parity mainly because of differences in interest rates. Interest rate gaps between countries chiefly reflect differences in economic strength. Since these gaps affect the capital account balance, the influence of interest rates is limited mostly to short-term changes in the supply and demand of currencies.

Figure 9 : Domestic-Overseas Price Differential (PPP/current rate) in Major Countries



The unusual penalty imposed on Japan by a strong yen

Although foreign exchange rates should reflect purchasing power parity or interest rates, neither of these factors explains the unusual and prolonged strength of the yen that began in the 1990s. There were sharp increases in the yen's value against the dollar in the late 1980s and around 1994. Both times, nominal and real interest rates in Japan were not particularly high in relation to U.S. interest rates. An upturn in the yen's value was not needed from the standpoint of an interest rate gap. Furthermore, purchasing power parity of the yen was low at almost ¥200 to the dollar and the difference between the two countries' inflation rates was minimal. Nowhere is there a reason to justify the yen's climb to less than ¥100 to the dollar.

The conclusion is that the yen's appreciation that started in the 1990s was an extremely unusual phenomenon. We can even call this a penalty imposed on Japan. In the early 1990s, Japan had a huge trade surplus because of its overwhelming competitive strength and destructive effect on neighboring countries. We can say that the yen appreciated for the purpose of ending this situation. Japan became very competitive for a number of reasons. First is Japan's free ride in the early postwar years owing in large part to generous U.S. technology sharing and U.S. markets that were open to imports. Second is the long period when the exchange rate was fixed at ¥360 to the dollar. This kept the yen at a level that was far below its purchasing power parity. Third is Japan's closed markets. Overall, Japan's competitive edge was a gift from a special environment created by these three factors along with other causes. From the standpoint of long-term economic rationality, an unusual increase in the yen's value was inevitable to even things up after a free lunch.

The interest rate gap has pushed the yen higher since 2008

The enormous gap between prices in Japan and other countries (costs rising faster than dollar-denominated export prices) has finally been eliminated. Based on the 2009 GDP, purchasing power parity is ¥115 to the dollar, which is not far from the current exchange rate. In addition, the emergence of economies in Korea, China and other countries means that Japan no longer has an overwhelming competitive lead. Japan's trade surplus has dropped considerably. Although there is still a current account surplus, this surplus is negligible in relation to the surplus in China. For more than 15 years, Japan has paid the price for its free ride in earlier years. Japan no longer needs to suffer the effects of a currency that is stronger than its purchasing power parity. At last, the yen can return to a normal exchange rate that is within 30% of purchasing power parity just as for the world's other major currencies.

Taking these factors into consideration leads to the conclusion that the yen's rise from ¥110 in late 2008 to as high as ¥85 versus the dollar (30% above its purchasing power parity) was not another penalty for Japan. This time, the yen appreciated because of the difference in interest rates as the U.S. cut interest rates to almost nothing to combat the Great Recession. If this is true, we can expect to see a reversal of the yen once the U.S. economy starts recovering and interest rates rise. There has already been a hike in the U.S. discount rate and officials are talking about a strategy for ending the emergency monetary easing measures. All these developments indicate that the peak of the yen's appreciation is now behind us.

Figure 10 : Purchasing Power Parity and Market Exchange Rate (¥/\$)

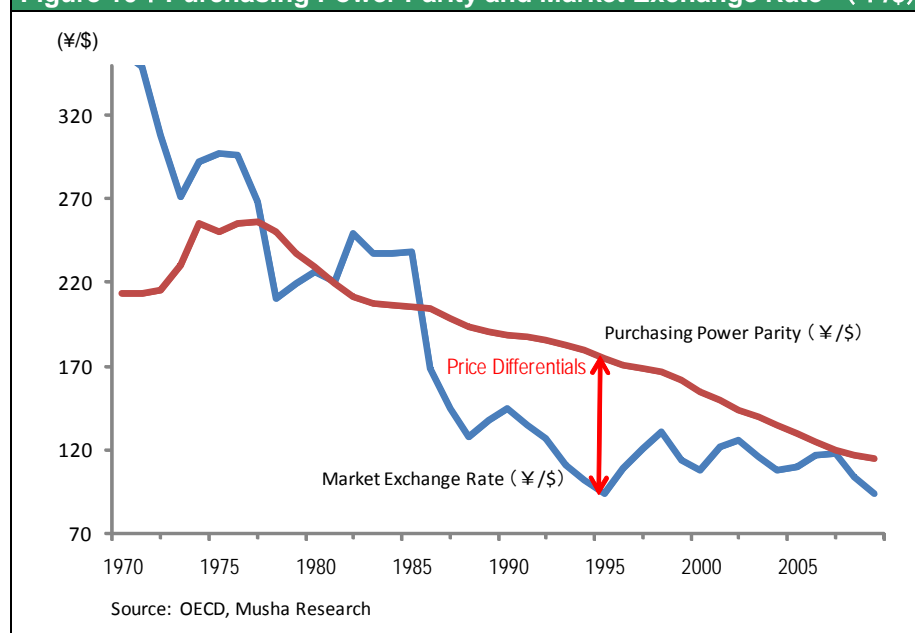
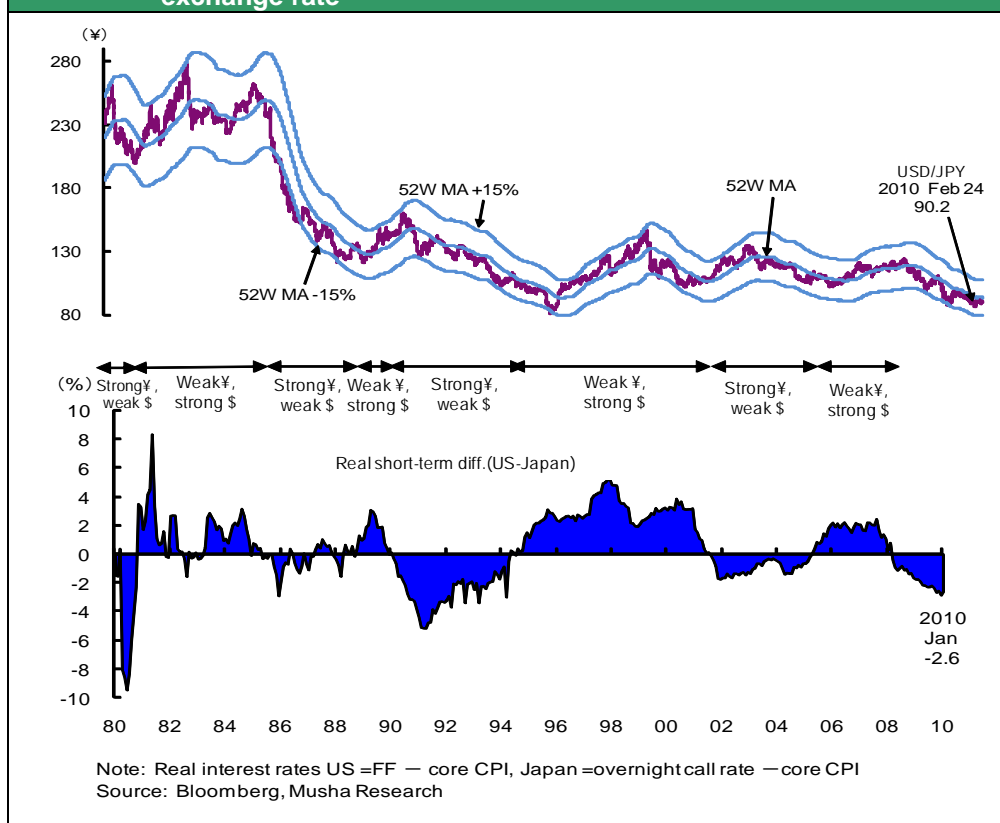
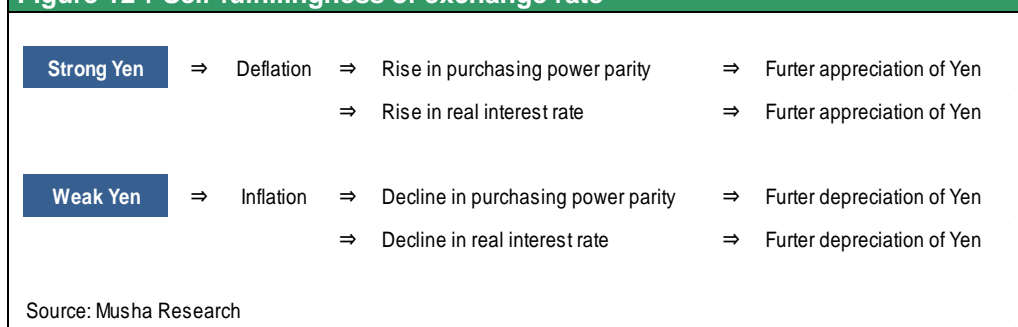


Figure 11 : US-Japan real short-term interest rate difference and JPY/USD exchange rate**Never forget the tendency of exchange rates to be a self-fulfilling prophecy**

Investors must keep in mind the tendency for exchange rates to be a self-fulfilling prophecy by spiraling in the same direction. Once the yen starts rising or falling, this movement itself becomes a cause for the exchange rate to continue moving in the same direction while gaining momentum. The result is a negative cycle in either direction. A stronger yen triggers deflation, which raises real interest rates and makes the yen even stronger. A weaker yen triggers inflation, which lowers real interest rates and makes the yen even weaker. These cycles are an undesirable phenomenon because they block the sustainability of economic growth by exaggerating exchange rate movements. Preventing this problem requires a suitable amount of intervention in foreign exchange markets. Furthermore, a decline in the yen to an appropriate level near its purchasing power parity (¥115 to the dollar in 2009) is just what the Japanese economy needs right now. Exchange rate and monetary initiatives will be required to accomplish this.

Figure 12 : Self-fulfillingness of exchange rate

(4) The demise of the hypothesis that “Japan is unique” and end of deflation

The demise of the hypothesis that Japan is unique

Looking back, Japan's problems probably originated in the early 1990s when people started speculating about whether or not Japan is unique. By the end of the 1980s, everyone in the world could see that Japanese manufacturers were so competitive that they had a destructive influence on the global economy. Japan was faced with two choices. One was to enact reforms to prevent negative impacts from this overwhelming competitive strength. For example, Japan needed to create jobs overseas and open its markets to imports. The other choice was to become less competitive. Enduring an extreme increase in the value of the yen was the price Japan had to pay to limit its competitiveness. As the yen appreciated, deflationary forces mounted. The result was a long period of stagnation that is now called “lost 20 years.” This is precisely the point that I discussed in Key Strategy Issue No. 287. Today, there is no doubt that Japan is not unique any longer.

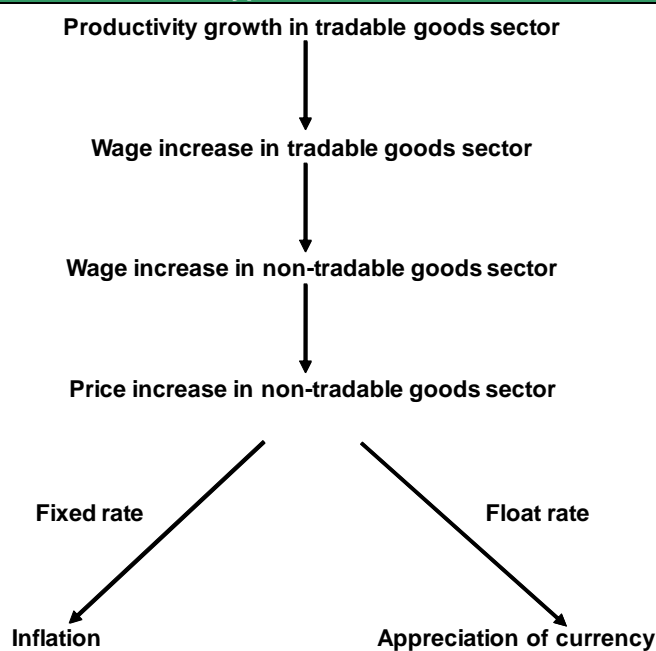
Emergence of the view that China is unique

Now we are starting to hear people say that China is unique. Fears about China gaining a destructive power over nearby countries in the near future are greater than the fears about Japan in the late 1980s. China's GDP (4.8 trillion) was about the same as Japan's in 2009 and about one-third of the U.S. GDP. At the current growth rate, China's GDP is likely to match the U.S. GDP within 10 years. Assuming nominal growth rates of 5% in the U.S. and 15% in China, the U.S. economy will expand by 27% over the next five years while China's economy doubles. Even if the yuan's value rises by 50%, China's nominal GDP will be very close to the U.S. GDP after about five years. Furthermore, growth in foreign reserves means that China's buying power is certain to become much greater than any other country. Looking at the current status of China's free-market economy, democracy, commitment to the rule of law, property rights and intellectual property rights, this powerful economic presence will undoubtedly be a disruptive influence for the entire world.

We must also remember that, even more than in Japan, China's strength is derived from a growth structure that relies on other countries for technology, capital, markets and other items. This is why China's present situation looks very much like a free ride. China must be held back and pressure applied to undergo a transformation from within. Accomplishing this demands an increase in the presence of nearby Japan in order to achieve a better balance with China. As a result, the need to exert pressure on China makes the possibility of a return of a penalty yen appreciation even smaller.

A prosperous decade for Japan after the end of deflation

I believe that a positive cycle based on the Balassa-Samuelson hypothesis will begin once we reach the end of this increase in the yen's value. In other words, we will finally see higher wages supported by strong productivity growth in Japan, too. This will quickly lead to wage increases in Japan's non-manufacturing sectors, which will create inflation in the cost of services. The result will be nominal economic growth. Higher wages will contribute to more consumption that will make the economic growth rate even stronger. This is exactly the same principle for the deflation linked to the yen's appreciation that took place during the “lost 20 years.” But this time, the principle is having the opposite effect. In this environment, we should expect to see a reappearance of inflation fueled by differences in productivity growth rates. With this type of inflation, wages and earnings can climb even in internal demand-based service industries where productivity is not improving. From the standpoint of starting this type of virtuous cycle as well, Japan must enact decisive reflation initiatives so the country can avoid the negative cycle of a stronger yen and deflation.

Figure 13 : Balassa-Samuelson hypothesis

Source: Musha Research