Striking Cold Iron

By Kojima Akira

The world's steel industries are under extremely severe adjustment pressure. Global steel overcapacity is pressuring the management of major steel companies and prompting a realignment of the steel sector at a rapid pace. Member countries of the Organization for Economic Cooperation and Development (OECD), a club of industrialized countries, have agreed to dispose of excessive steelmaking facilities through coordination in recognition of the fact that individual efforts by steelmakers would produce only limited results. As the old saying "Iron is the nation itself" attests, steel used to be the most important industry for many nations for long years. But, now the steel industry is at the turning point amidst global industrial transformation.

At the same time, as the post-Cold War world heads for capitalism and a market economy in a domino-like phenomenon, arguments are going on as to whether post-Cold War world economies tend to cause oversupply. Such arguments date back to David Ricardo's *The Principles of Political Economy and Taxation*, published in 1817, which analyzed structural overcapacity and raised the possibility that progress of mechanization leads to overcapacity and subsequently to an increase in unemployment. In his usual contentious approach, Paul Krugman, professor at the Massachusetts Institute of Technology, contends that mechanization is behind the current "global glut doctrine."

Let's examine the recent situation of the steel industries in major countries.

U.S. Steel Corp., the largest steel producer in the United States, and Bethlehem Steel Corp., a major U.S. blast furnace steelmaker, announced in early December last year that they and several other American steel companies are in preliminary talks on business consolidation, possibly a merger. A merger of U.S. Steel and Bethlehem Steel alone would create a company with annual sales of more than $10 billion. The two companies are reportedly considering a grouping of four to five companies. They have not identified the other participants in the talks, but National Steel Corp. and the LTV Corp., both major blast furnace steelmakers, are mentioned as possible partners.

Major U.S. steelmakers turned in very dismal performances in 2000, with all of them suffering losses. U.S. Steel posted sales of $6.132 billion, the highest among U.S. steelmakers, but incurred a loss of $21 million. LTV posted sales of $4.934 billion but suffered a massive loss of $719 million, while Nucor Corp. posted a loss of $310 million on sales of $4.589 billion. Bethlehem Steel recorded sales of $4.196 billion but suffered a loss of $118 million, with National Steel showing a loss of $130 million on posted sales of $2.979 billion.

LTV and Bethlehem Steel have filed for Chapter 11 Federal Bankruptcy Code, the former in December 2000 and the latter in December 2001. Counting the two companies, 26 U.S. steel producers have sought federal bankruptcy protection since 1998.

Meanwhile, the United States International Trade Commission (ITC) recommended in December 2001 that President George W. Bush invoke emergency safeguard measures under Clause 201 of the Uniform Commercial Code. Concrete measures proposed by the ITC include imposing direct quantitative import restrictions and punitive tariffs as high as 40% on imports of steel sheets. The ITC action has drawn harsh criticism from the European and Japanese governments and steel industries, which charge that the measure would virtually close the U.S. market to

Photo: THE YOMIURI SHIMBUN

Blast furnaces and factories at Kashima ironworks, Sumitomo Metal Industries, Ltd.

their products. Bush is expected to make a decision on the details of the safeguards by the middle of February this year.

The U.S. steel industry has been under increasing competitive pressure from Japanese and other Asian rivals, which are building up their competitive strength. Recognizing that their business efforts alone would have only limited effects, U.S. steelmakers have pressured Washington to introduce protective measures as a response to foreign competition so that they can survive. The U.S. protective measures have been strictly applied to Japanese steelmakers in particular. As a result, Japan's steel exports to the United States sagged to about 2 million tons in 2000 and the Japanese share of total U.S. steel imports fell to 5%.

Japanese steel companies' stock prices and financial results in 2001 plunged to the worst level in history, which prompted an industrial alignment in a bid to get out of the predicament. Nippon Steel Corp., which boasts being the largest crude steel producer together with South Korea's Pohang Iron & Steel Co., has decided to form a quadrilateral alliance with Sumitomo Metal Industries, Ltd., Kobe Steel, Ltd. and Nisshin Steel Co. The four companies are expected to consolidate their blast furnaces and other operations.

Nippon Steel has closed some facilities since the late 1970s. The 1985 Plaza Accord, which led to an abrupt appreciation in the yen's value, forced the company to speed up its restructuring. With four blast furnaces closed down in 1987, Nippon Steel has seen its work force shrink to less than 20,000 from a peak of 75,000. The restructuring was supposed to enable the company to ensure profits even if its annual crude steel production came down to 24 million tons or so. The steelmaker, however, finds itself in a more severe business environment than anticipated because of the following factors: 1) A global simultaneous recession has dampened total demand for steel, 2) large users of steel materials, such as automakers and electric appliance makers, have started global procurement to seek less costly steel materials to maintain their competitiveness, 3) subsequently, prices of steel materials plunged substantially, with steel plate for automobiles now costing ¥50,000 per ton, less than half of what it did before, 4) a global realignment of steelmakers is going on, as seen in a move to consolidate major U.S. steelmakers with U.S. Steel taking the lead, and 5) NKK Corp. and Kawasaki Steel Corp. have agreed to integrate their operations in October 2002 under a joint holding company.

Photo: THE YOMIURI SHIMBUN

Nippon Steel Vice President Kihara Makoto (left) and Kobe Steel Vice President Mitsutake Noriyoshi agreed to form an alliance

The markdown of prices of steel materials for automobiles was prompted by Nissan Motor Co. President Carlos Ghosn's Western-style procurement reform, which called for the introduction of concentration procurement aimed at having steelmakers drastically lower their prices. Nissan's move was followed by Toyota Motor Corp. and other automakers as well as electric appliance makers to maintain their competitive positions. As a result, the prices of mainstay products of Japanese steelmakers have come down to the lowest level in the world. South Korea's Pohang Iron & Steel still outperforms Japanese steelmakers in productivity but has reportedly stopped exports to Japan as lower Japanese steel prices make its marketing in Japan less profitable.

The prices of Japanese steelmakers' main products have dropped to the world's lowest level, and as a result, the price competition has deteriorated their profitability. Japanese steelmakers, now selling their products below cost, are criticized by their foreign rivals for exporting at a sacrifice.

Nippon Steel says that the purpose of its planned tie-up with other steelmakers is to complement each other in the supply of the half-finished iron products used for steelmaking.

NKK and Kawasaki Steel announced in late December last year plans to rename themselves JFE Group when they merge under a joint holding company, to be called JFE Holdings Inc., in October this year. The two steelmakers will combine their operations into five firms under JFE Holdings – JFE Steel Corp., JFE Engineering Corp., JFE Urban Development Corp., Kawasaki Microelectronics Inc. and JFE R&D Corp.

The "J" in the new company name stands for "Japan," the "F" for "Fe" (the symbol of the element for iron) and the "E" for "engineering." NKK and Kawasaki stake their survival on the tie-up.

Gone are the days when steel was considered the symbol of a nation, and steelmakers have now entered a warring period and are facing cutthroat competition for survival. The latest realignment has consolidated Japanese steelmakers into two groups – one formed by Nippon Steel, Sumitomo Metal and Kobe Steel, and the other by NKK and Kawasaki Steel. The former group was apparently aimed at easing the below-cost competition which makes their operations unprofitable.

The three companies' combined annual crude steel production totals 48 million tons, which will make the new merged company the world's largest steel group exceeding Arcelor, a European joint venture established in late November last year. The trilateral merger poses no problem in terms of concentration and monopoly, because competition in the Japanese steel market is so severe that even consolidation on this scale will not stop sagging steel prices.

The competitive pressure comes from both overseas competitors and domestic users. Domestic users, whether automakers or electric appliance makers, are in the midst of severe competition for survival. Overseas, Japanese steelmakers are facing a rollback from the resurrecting U.S. steelmakers. Strong steelmakers are also emerging in Asian countries.

Countries mass-producing industrial products of standard specification are increasing rapidly against the background of the domino-like global shift to a market economy after the Cold War and the subsequent explosive expansion of direct investment which transfers production bases in their entirety. In most cases, the emerging producing countries thrust into international competitive markets armed with low wages and low costs, which in turn intensify global price competition and place Japanese companies under a particularly severe business environment due to their high cost.

The Western-style concentration procurement tactics launched by Ghosn to reduce steel costs have been adopted even by Toyota Motor, which controls a large share of the global auto market. These price-cutting initiatives have made the coordination among the five major Japanese steelmakers no longer relevant and opened a new era of severe competition for market shares in the steel industry.

The competition and realignment in the Japanese steel industry has spread to other countries including the United States, which in turn has further prompted Japanese realignment. The steel sector is in the midst of sweeping regrouping worldwide. Steelmakers can no longer survive with protective trade policy alone.

Photo: The Mainichi Newspapers

NKK President Shimogaichi Yoichi (left) shakes hands with Kawasaki Steel President Emoto Kanji

Symbolic moves in this direction are U.S. government policies to encourage consolidation of U.S. steelmakers and the moves toward international coordination in the curtailment of glut facilities through talks at the OECD.

The U.S. move to invoke safeguard measures is not merely an extension of its protective trade policy. Bush reportedly recognizes that the past U.S. protective policy has emaciated the U.S. steel industry. His basic policy on steel seems to focus on industrial realignment and selection rather than on more protective measures. Washington is aiming to eliminate excess steel production capacity in the world in addition to the acceleration of domestic industrial realignment. It can be said that the OECD negotiations on coordinated reduction in excess steel facilities materialized under U.S. leadership.

The high working-level OECD steel overcapacity talks held in Paris on Dec. 18 last year with 40 countries participating produced an agreement to trim the total annual production capacity of crude steel of participating countries by a little more than 60 million tons by 2003 and by nearly 100 million tons, roughly 9% of total world production capacity, by 2010. It marked the first time that steel production facilities would be reduced on a global scale through international cooperation, a historic event for the steel industries of the world.

According to an OECD report, the current annual crude steel production capacity of the world stands at 1.070 billion tons. However, actual annual crude steel production is estimated at 840 million tons, which suggests that there is more than 200 million tons of overcapacity.

In addition to the OECD members, the 40 participants in the latest OECD Paris conference included Russia as well as China, the expansion of whose industrial production capabilities is drawing global attention. During the conference, all major steel producing countries presented steel production downsizing plans. Though the reduction plans by each country were not announced, total production capacity will be reduced by between 61 million and 65 million tons by the end of 2003, by an additional 9.5 million tons by the end of 2005, and by another 23 million tons by the end of 2010.

Japan reportedly told the conference that it would be ready to reduce its steel production capacity by 28 million tons, or 19.2%, in three to four years, including the facilities now in operation capable of producing 5 million - 6 million tons annually. The Japanese government highly evaluates the OECD accord as an effective response to counter the current overproduction which aggravates the market conditions, though the Japanese steel industry would find the accord tough to comply with. Japanese company-wise and region-wise reduction plans have not been disclosed.

There were reports that the European Union would reduce its production capacity by 13 million tons, South Korea by 10 million tons and Russia by 5 million tons. Since some countries failed to submit their reduction plans to the OECD conference, the final reduction volume would be more than what was already announced.

The coordinated reductions in overcapacity, if implemented according to the OECD accord, would be effective in improving market conditions to a certain extent. Direct protective policies, such as import restrictions, have failed to resurrect the steel industries of the countries that adopted such policies.

The coordinated reduction plan is said to be the ultimate protective measure. The current moves toward a global realignment of the steel sector, however, will go undeterred, since it is not certain whether the accord will be actually implemented and the current large overcapacity will likely remain unchanged.

While pushing for an alliance with Sumitomo Metal and Kobe Steel in Japan, Nippon Steel formed a comprehensive partnership with South Korea's Pohang Iron & Steel in 2000 and concluded tie-up accords with China's Shanghai Baoshan Iron & Steel Co. and Taiwan's China Steel Corp. in 2001. As Japanese steelmakers, including Nippon Steel, have invested in U.S. steel companies, some industrial sources anticipate that the moves toward a major realignment of the U.S. steel sector could ultimately lead to a Japan-U.S. steel alliance.

These moves in the global steel sector are reminiscent of Krugman's theory of the "global glut doctrine," which is related to the argument that not only steel, which is a traditional commodity, but also many other industrial products are becoming oversupplied. Lately, the global glut is being discussed in connection with China, which has begun to attract global attention as the "factory of the world" as it continues high growth of 7-8% by drawing vast direct investment from all over the world.

Krugman's thesis "Is Capitalism Too Productive?," carried in the September-October 1997 issue of *Foreign Affairs*, is contentious and interesting. Krugman points out that the recent argument on concerns about excess capacity is the updated version of a similar argument that took place in the 1930s and 1940s. He cites the following three phenomenon as the background of the emergence of the recent "global glut" theory.

1) Mass unemployment has reemerged in Western Europe, although not in the United States.

2) There is a widespread perception that productivity growth in the advanced countries, especially in the United States, has accelerated.

3) The spread of industry to newly emerging economies and the rapid growth in exports from those economies has fed the sense that global productive capacity is growing headlong, far too fast for demand to keep up.

According to Krugman, this argument will hold good only if it is preconditioned by three factors: 1) "Global productive capacity is growing at an exceptional, perhaps unprecedented, rate," 2) "Demand in advanced countries cannot keep up with the growth in potential supply" and 3) "The growth of newly emerging economies will contribute much more to global supply than to global demand."

He clearly makes out a case against the global glut theory by pointing out that 1) wage levels in the four Asian Newly Industrializing Economies (Taiwan, South Korea, Hong Kong and Singapore), known as the "Four Tigers," are rising rapidly in step with their economic growth and boosting demand, 2) the trade balances of the Big 10 emerging economies (Argentina, Brazil, China, India, Indonesia, Mexico, Poland, South Africa, South Korea and Turkey) are in the red, and far from the black, and 3) their supply vis-a-vis foreign countries is not in glut.

When Krugman's thesis was released, China was not yet drawing global attention as the "factory of the world." China's production and export capabilities, however, have been expanding phenomenally and its trade surplus has been surging for the past year or two. Krugman and others who reject the glut theory argue that supply follows demand under the market mechanism. They will probably be right in the long run, but a mismatch will occur between demand and supply all the time in the short and medium terms. The emergence of new "factories of the world," such as China, could substantially widen the mismatch. China is already a leading producer of household electric appliances in the world and is becoming an important factor of the world economy even in the high-tech sector such as semiconductors, desktop computers and mobile phones.

There was an inflationary bias in the world economy in the second half of the 20th century, particularly up to the 1990s. The inflation rate was high and the prices of primary products relative to industrial products were increasing, particularly in the industrialized countries. This relative price trend was reversed in the 1990s and is already taking hold. One factor is a substantial increase in the number of countries producing industrial products since the end of the Cold War.

Macroeconomic analysis is essential, and item-wise and industry-wise analysis of industrial products is similarly important.

There is no denying the possibility of global overcapacity not only in the steel sector but also in other industries, because economic activities represent a world of dynamic disequilibrium. It will be necessary to watch the evolution of the glut theory relative to the development of the real world economy.

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