

# KOREA'S UNDERVALUED MANUFACTURING INDUSTRY

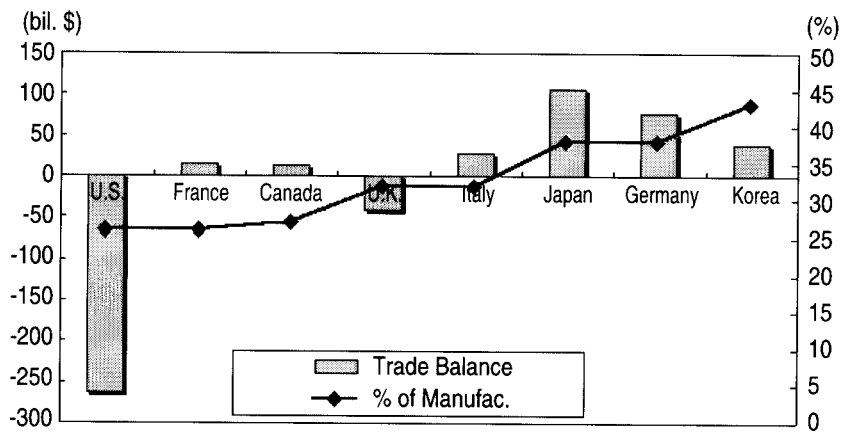
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## Manufacturing industry in Korea is still important

*Korea's relatively high share of manufacturing to GDP could be the driving factor of the current trade surplus.*

Accounting for more than 30% of GDP and more than 80% of exports, Korea's manufacturing industry is important in the domestic economy. In the G7 countries, the lower the portion of manufacturing in GDP, the higher the trade deficit (see Figure 1). Korea's relatively high share of manufacturing to GDP could be the driving factor of the current trade surplus.

**Figure.1 Relationship between Trade Balance and Percentage of Manufacturing in GDP**



Source : IMD, The World Competitiveness Yearbook, 1999.

Note : Here, manufacturing means industry and also includes construction.

Korea has the potential to be a great manufacturing power in the world. Korea's manufacturing already has internationally competitive and world-famous goods, such as semiconductors, mobile telephones, and MWO.

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Manufacturing will lead the growth of the Korean economy in 2000. The traditional leading manufacturing industries such as semiconductors, fibers, and automobiles are more likely to contribute to the Korean economy's growth than knowledge-based industries such as computers or bio-engineering.

**Table 1. Key Industries' Expected Contribution to Economic Growth in Korea (2000~2010)**

Traditional Leading Industry		Knowledge-based Industry	
Industry	Contribution to Growth	Industry	Contribution to Growth
Semiconductor	4.22 %	Applied Chemistry	1.55%
Textiles	2.89 %	Electronic Components	1.02 %
Automobiles	2.65 %	Computer	0.99 %
Steel	1.44 %	Environmental Equipment and Services	0.92 %
Petrochemical	1.44 %	S/W	0.62 %
Consumer Electronics	0.79 %	Communication	0.58 %
		Biological	0.12 %
		Aerospace	0.09 %

Source : KIET, "Middle and Long Term Vision of the Korean Economy: By Industry", 「KIET Industry Economy」, 2000.1

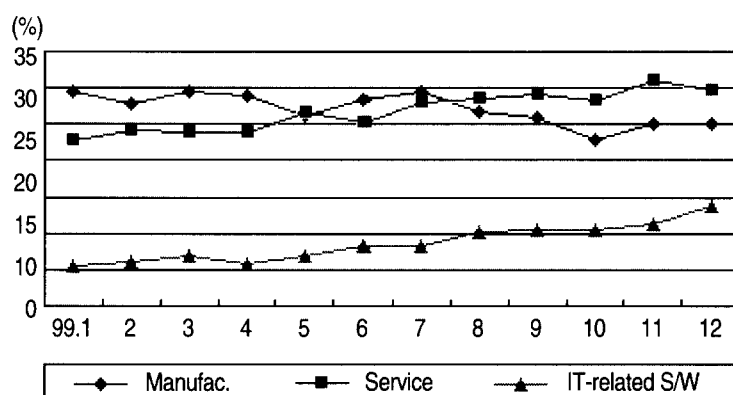
Note : contribution to growth = percentage of the industry's added value in GDP(in 2000) × average annual growth rate of the industry's added value(from 2000~2010)

### Korea's manufacturing is undervalued

Despite their importance, the market value of manufacturing enterprises is undervalued in Korea. In April 2000, the average PER of Korea's top ten manufacturing enterprises was 9.0, a figure that was dwarfed by the 197.0 PER of Korea's IT-related S/W or service enterprises. In the U.S, manufacturing firms had a PER of 28.5 while IT-related S/W or service firms had a PER of 75.0. While manufacturing was undervalued compared to IT-related S/W or service industries in both countries, the gap between the two industries was much larger in Korea than in America.

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**Figure.2 New Firms by Industry**



Source : SMBA, "Inquiry on the Trend of New Firms Founded in the Seven Big Cities in 1999", 2000.1.

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The marked manpower shortage in domestic manufacturing reflects the sector's undervaluation. While the service sector had a 5.3% shortage rate in R&D positions, the manufacturing sector had a 12.6% shortage. For technical positions, the shortage rates were 7.1% for services and 14.4% for manufacturing firms.

A related outcome was that manufacturing firms accounted for a lower share of new firms in 1999. The share of new manufacturing firms fell from 29.4% in January 1999 to 25.0% in December 1999, while the share of services firms rose from 22.7% to 29.4% in the same period.

### **Reasons for undervaluation**

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There are two main reasons for the Korean manufacturing sector's undervaluation. First, domestic manufacturing firms have tended to neglect shareholder profits. In 1999, many manufacturers held very large stock offerings on the Korea Stock Exchange, which worsened supply and demand conditions. In addition, because they did not try to improve investor relations, the stock prices of manufacturing firms failed to rise despite the industry's strong performance in 1999.

Another reason for undervaluation is that domestic manufacturers have not responded adequately to the digital revolution. Manufacturers who neglect digitalization risk losing competitiveness. Shareholders are more interested in a firm's future value than its size, and will put a low value on manufacturers who are unresponsive to digitalization.

### **Will undervaluation continue?**

*The Korean manufacturing sector's undervaluation is expected to disappear.*

The Korean manufacturing sector's undervaluation is expected to disappear for several reasons. First, because the Kosdaq boom is losing steam, the concentration of investment capital in the Kosdaq is not as severe.

Second, Korea's manufacturing firms are trying to remove the root causes of undervaluation. They are refraining from increasing paid-in-capital and are trying to gain proper appraisals for their shares through positive IR activity. And to improve worker performance, they are now offering incentives such as stock options and merit-based wages.

Third, the profitability of firms will improve as the effects of restructuring gradually appear. Interest costs will be reduced by the improved financial structure and international competitiveness will be higher as the result of business restructuring.

Finally and most importantly, manufacturing firms are trying to adjust to digitalization. They are enlarging the role of e-commerce and information technology through the entire gamut of business operations. The government is also preparing a policy to co-develop manufacturing along with the new industries. **VIP**