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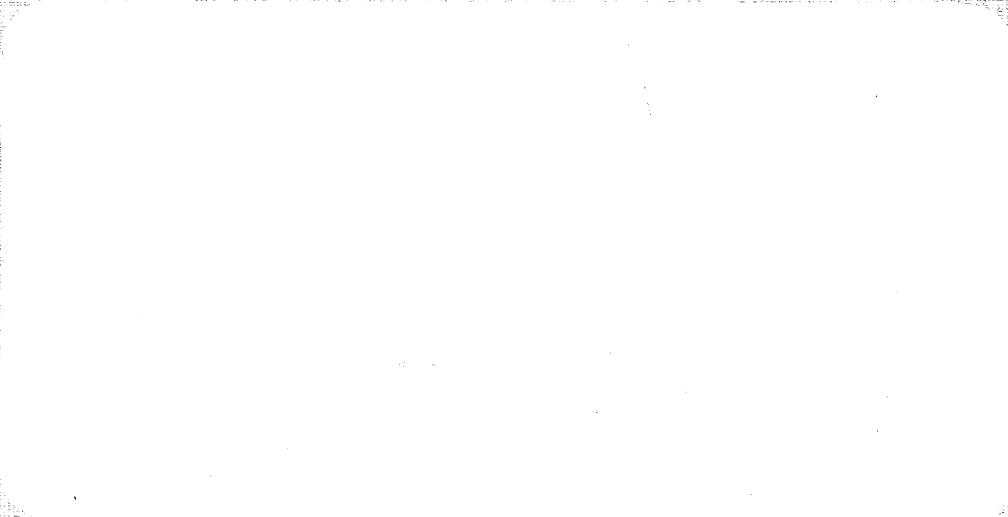
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# **Occasional Paper**



**CHUNG-HUA INSTITUTION FOR ECONOMIC RESEARCH**

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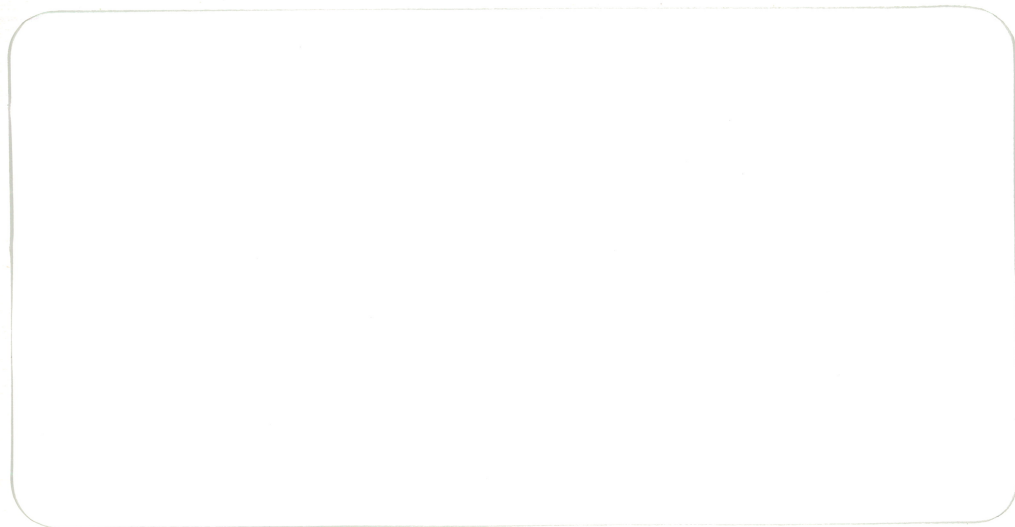


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**The Development of Small and Medium  
Sized Enterprises in Taiwan**

**Li-Min Hsueh**

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## The Development of Small and Medium Sized Enterprises in Taiwan

Li-Min Hsueh\*

### I. The Role and Contribution of Small & Medium Sized Enterprises in Taiwan's Economy

The average 9 % growth rate of GNP over the past 30 years has resulted in ranking Taiwan as one of the very successful newly industrialized economies. Small and medium sized enterprises (hereafter referred to as S-M enterprises ) in Taiwan have played a relatively more important role in the process of economic development as compared to other developing countries, e.g. Korea.

There are about three quarters of a million business establishment in Taiwan. Of these, 98.5% can be classified as small and medium sized enterprises. About 62% of all S-M enterprises are in the commerce sector, (which includes wholesale, retail and restaurants ) and about 17% are in the manufacturing sector. Table 1 shows that they produce about 50% of total output and employ more than 60% of the workers, and these proportions have been relatively stable over the years.

Table 2 and Table 3 show that S-M enterprises in Taiwan are heavily export oriented. Since 1980, more than 70% of the total sales of S-M manufacturing enterprises was for export. More than 60% of goods and services exported from Taiwan are produced by S-M enterprises.

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Table 1. Output and Employment Share of S-M Enterprises<sup>1</sup>

	1971	1976	1981	1984	1987
<b>1. Output Share of S-M Enterprises</b>					
a. manufacturing	26.7	47.1	44.8	48.2	46.9
b. commerce	89.7	84.2		80.5	
Total		44.9		47.6	
<b>2. Employment Share of S-M Enterprises</b>					
a. manufacturing	35.6	59.6	62.0		63.99 <sup>2</sup>
b. commerce	93.9	89.3			
Total		61.0			

<sup>1</sup> The definition of S-M enterprises has changed several times over the years. Since 1982, the criteria to be an S-M enterprise have been NT\$40 million of self-owned equity for manufacturing and mining industries, and NT\$40 million of total sales for other industries.

<sup>2</sup> 1986 data.

Sources: Hui-Lin Wu, et.al., *The Developing Direction of Taiwan's S-M Enterprises*. Research Report of Chung-Hua Institution for Economic Research, 1988. (in Chinese)



Table 2. Domestic and Export Sales of S-M Manufacturing

Unit: %

Item	Year	1972	1975	1980	1983	1985
Total Sales		100.0	100.0	100.0	100.0	100.0
Domestic		44.3	47.0	33.3	26.7	28.9
Export		55.7	53.0	66.7	73.7	71.1

Source: Hui-Lin Wi, et.al., *The Developing Direction of Taiwan's S-M Enterprises*, Research Report of Chung-Hua Institution for Economic Research, 1989. (in Chinese)

Table 3. Share of Export from S-M Enterprises

	1984	1985	1986	1987	1988
Amount Exported by S-M Enterprises (100 million U.S.\$)	180.45	188.00	264.09	358.99	363.53
Share of Exports from S-M Enterprises (%)	59.24	61.20	66.37	67.06	60.0

Sources: *Report of the Activities of S-M Enterprises*, various years, Medium and Small Business Administration, Ministry of Economics Affairs. (in Chinese)

The export expansion policy pursued by the government since the 1960s has been considered as the major reason which created an appropriate environment for Taiwan's rapid economic development by many economists.<sup>1</sup> Under this policy, entrepreneurs in Taiwan exploited all the opportunities for exporting goods and services by setting up numerous small factories and trading companies. Export oriented S-M enterprises are most significant in the following manufacturing industries: electronics, plastic products, shoemaking, sporting equipment, the apparel industry, fabricated metal products, machinery, and food processing.

The predominance of S-M enterprises in Taiwan's economic development has had several very positive effects. First, S-M enterprises are found mostly in labor intensive industries, so they create a lot of jobs. Table 1 shows that S-M enterprises have employed more than 60% of the total work force in Taiwan. Also, they balanced the development of urban and rural area.<sup>2</sup> Many S-M factories, mostly small ones, were set-up near villages and small towns. Rural employment in the manufacturing sector increased 13.5% in 1966-71 and 12.1% in 1971-76 as compared to 16.9% and 8% for the same respective periods, for urban employment in the manufacturing sector. This development has greatly increased the non-farm income of rural households, and has helped to slow down the migration of workers from rural areas to urban ones.

Third, the predominance of S-M enterprises has also contributed to the very even distribution of income among households. The Gini coefficient has gradually decreased from .360 in 1964 to .303 in 1980, but it has risen slightly since then. The reasons are two fold: (1) Labor income, as a percentage of domestic factor income, increased from 48.14 in 1964 to 61.03 in 1987 due to the rapid growth of labor-intensive S-M enterprises.

<sup>1</sup> For example, Ramon H. Myers, "The Economic Development of the Republic of China on Taiwan, 1965-1981," in Lawrence J. Lau edited, *Models of Development*, ICS press, San Francisco, 1986.

<sup>2</sup> This point was discussed extensively by Ramon H. Myers, *op. cit.*, p.29.



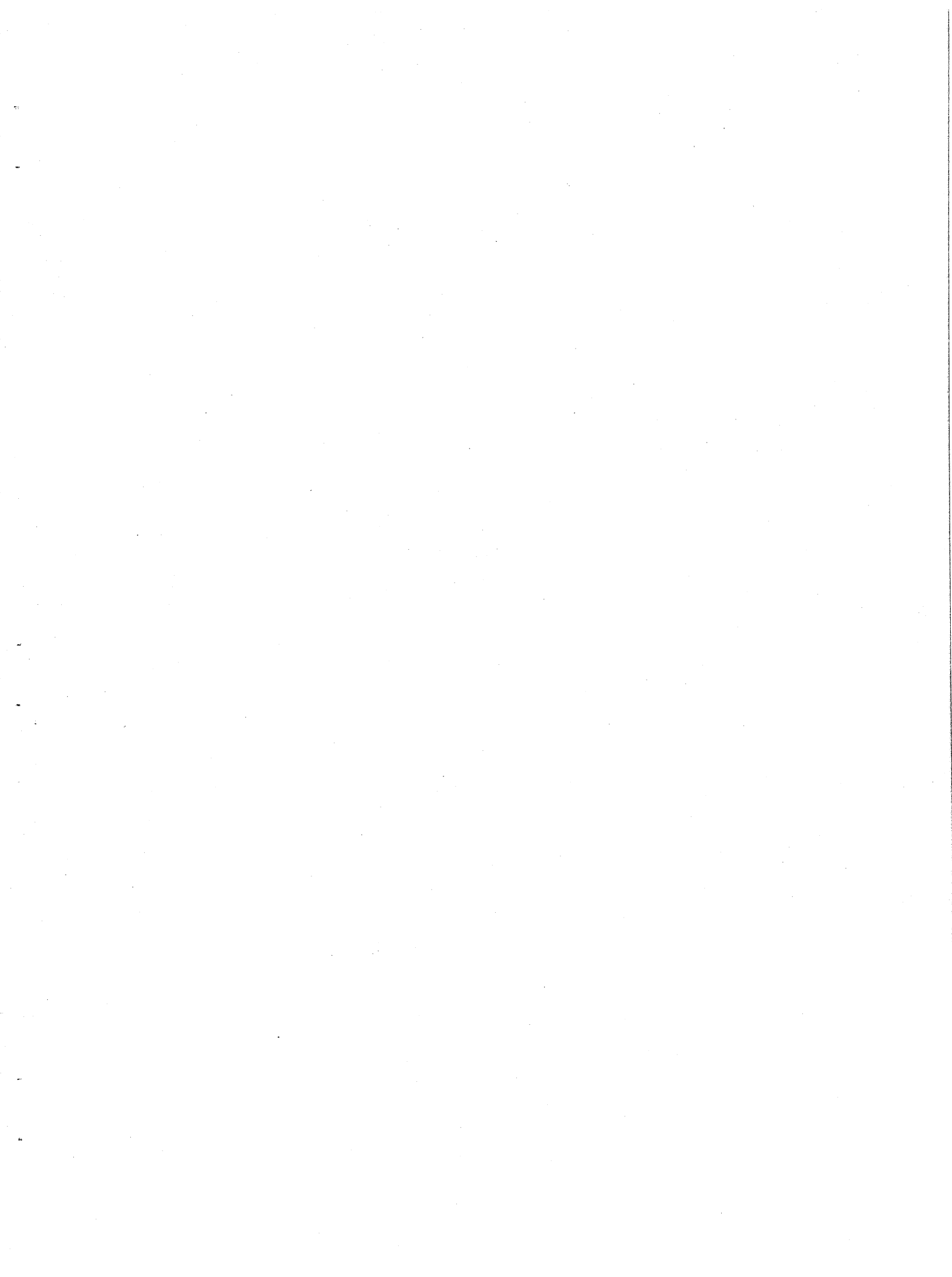
- (2) Numerous risk-taking S-M business owners who profited from the economic climate in Taiwan also prevented the concentration of wealth in only a few people.

## **II. Bottlenecks to the Further Development of S-M Enterprises**

S-M enterprises in Taiwan have been very dynamic, flexible, quick to adjust to the changing environment and good at identifying opportunities for making profits. However, now they are facing a period of structural change. Taiwan is not short of capital anymore, but rather is short of labor. In addition, since 1983, the value of the New Taiwan Dollar (NT) has appreciated 36% against U.S. Dollar. Facing the competition from other developing countries, e.g., Thailand, Malaysia, Mainland China, etc., the survival of labor-intensive S-M manufacturing enterprises has become more and more difficult. Upgrading S-M enterprises, in terms of technology, management and R&D is definitely necessary. However, there exists some bottlenecks that will make further development difficult.

### ***1. Lack of Domestic and International Marketing***

No matter whether it is for domestic or for international markets, selling products is more difficult than producing products. S-M enterprises usually do not have the ability and the economy of scale to establish marketing channels and advertise. Therefore, S-M enterprises in Taiwan have been used to specializing in export-oriented manufacturing. Export marketing has mainly depended on foreign, especially Japanese, trading companies. According to professor Tibor Scitovsky's observation, "In Taiwan, Japanese companies are believed to have handled about 60% of textile exports, some U.S. and European importers also set up offices in Taiwan





to deal directly with local manufacturers, including many small ones,<sup>3</sup> Hence, in general, local small factories produce products according to the buyers' design and under the buyers' brand name (so called original equipment manufacturing, OEM). This situation creates great uncertainty for Taiwan's S-M factories, because as soon as foreign buyers find the cost of Taiwan's products not as cheap as before, they turn to other sources. To use the producer's own brand name for exporting has been encouraged by the government for many years. In recent years, several brand names, e.g., Acer personal computers, pro-Kennex tennis racquets both of which grew from small sized firms, have been marketed internationally successfully. However, the lack of marketing ability is still a bottleneck in the development of most of Taiwan's S-M enterprises.

## 2. *Lack of Management Skills*

Most S-M enterprises in Taiwan are family businesses. In 1985, 37.15% of S-M businesses were organized as corporations; 69.78% as proprietorships and 1.12% as partnerships. However, even those organized as corporations were managed like proprietorships, which means the company's and the owner's finances were not clearly separated. Table 4 compares seven performance indicators between S-M and big industrial firms. It shows that financial security and the profitability of S-M firms were worse than those of big firms, but the turnover rates (item 3,4) were better for S-M firms. It is worth noting that profitability (item 5,6) grew much faster for big firms. The rate of business closures of S-M factories was also higher than that of the big ones. (see Table 5)

The Medium and Small Business Administration established in 1981 has launched a series of programs for upgrading the management skills of the directors of S-M enterprises, including the following areas: accounting, financial management, inventory control, quality control,

<sup>3</sup> Tibor Scitovsky, "Economic Development in Taiwan and South Korea, 1965-81," in Lawrence J. Lau edited, *op. cit.*, p.164.

Table 4. Performance Indicators of S-M and Big Industrial Firms

	S-M Firms*			Big Firms		
	1983	1985	1987	1983	1985	1987
1.Liabilities/Owner's Equity(%)	272.04	221.91	208.89	164.59	129.72	103.46
2.Owner's Equity/Fixed Asset(%)	80.48	86.65	87.53	94.92	101.12	115.83
3.Operating Revenue/Fixed Assets	5.23	5.25	5.14	2.46	2.42	2.43
4.Operating Revenue/owner's Equity	6.49	6.06	5.87	2.59	2.39	2.10
5.Net Profit/Operating Revenue(%)	1.27	1.25	1.74	4.89	4.60	10.63
6.Net Profit/Owner's Equity(%)	8.25	7.57	10.22	12.69	11.01	22.32
7.Average Revenue per Employee	914.40	959.90	1350.00	1748.50	2104.80	2426.40

S-M firms with owner's equity greater than NT\$1 million and less than NT\$40 million were included in the Survey.

Sources: *Survey Report on the Financial Status of Industrial Firms in Taiwan*, Vol.25-27, published by Bank of Taiwan.

Table 5. Rate of Factory Closures in Taiwan

	Big Factories			S-M Factories		
	No. of Factories	No. of Closures	Rate of Factories	No. of Factories	No. of Closures	Rate of Closures
1982	2021	34	1.68	40,623	974	2.40
1983	2489	43	1.73	46,205	1369	2.96
1984	2508	98	3.91	49,499	1720	3.47
1985	2652	63	2.38	55,697	2882	5.17

Sources: *Report of Activities of S-M Enterprises, 1986*, Medium and Small Business Administration, MOEA. p.105. (in Chinese)



personnel management, etc. However, due to budget limitations, all these programs can only reach a limited number of S-M enterprises. On the other hand, according to a survey conducted by the Medium and Small Business Administration in 1986, small business are relatively less interested in getting help to improve their management from government agencies or consulting firms than medium-sized firms are.

### *3. Difficulties in Upgrading Technology*

Since the cost of labor in Taiwan is not low anymore, S-M enterprises need to upgrade their production technology and become more capital-intensive and labor-saving. The difficulties faced by S-M enterprises include the lack of information concerning where to invest, a lack of R&D capability, a lack of capital, etc. In response to these difficulties, many S-M enterprises, instead of upgrading their operation in Taiwan or investing in promising new industries, have moved their labor-intensive factories to other developing countries, e.g., Thailand, Malaysia, etc.

Because S-M enterprises usually do not do any R&D, R&D spending in Taiwan is still far behind that of developed countries, e.g., in 1985, R&D spending as a percentage of GNP was 1.06 for Taiwan, 2.83 for West Germany, 2.53 for Japan and 2.72 for the United States. Among total R&D expenditure, the private sector accounted for less than 50%. To supplement the deficiency of private R&D, the government has established a large scale national lab known as the Industrial Technology Research Institute (ITRI). S-M enterprises can contract ITRI to solve a specific technical problem or, going the other way, ITRI can transfer the technology they develop to S-M enterprises. ITRI has made a significant contribution to the development of the high-tech electronics industry in Taiwan.

### *4. Difficulties in Obtaining Loans*

Because Taiwan currently has a substantial capital surplus, getting a loan should not be a problem. However, many S-M enterprises do not have a sound accounting system which makes

makes the reliability of their financial statements unacceptable to banks and other financial institutions. On the other hand, the banking industry has been highly regulated by the government, so the loan policy of most banks has been very conservative and rigid. Hence, having difficulties getting a loan from formal financial institutions has been a long existing problem for S-M enterprises in Taiwan. Table 6 shows that although the share loaned to S-M enterprises from all banks increased over years; in 1986 the share was only 36.43%. S-M enterprise usually have to pay much higher interest rates to raise funds from relatives, friends and underground money lenders. In response to this situation, the government has set up a public owned bank that specializes in loaning money to S-M enterprises, known as the Taiwan Medium and Small Business Bank. Besides, there are seven private S-M business banks which serve in various local areas. The share of loans to S-M enterprises from these eight banks as a whole was 80.34% in 1985 and 76.91% in 1986.<sup>4</sup> The government also set up a credit guarantee fund in 1974 to facilitate the process of S-M enterprises applying for loans. In 1986, 10.59% of all loans from banks to S-M enterprises was guaranteed by the guarantee fund which increased from 6.46% in 1982. Around 40 thousand S-M enterprises have been helped through the guarantee fund since its establishment. Special funds have been available from time to time for S-M enterprises, e.g., a fund for purchasing pollution control equipments, a fund for automation, a venture capital fund for strategic industries, etc.

The problem of getting loans for S-M enterprises can be further eased when the liberalization of the banking system in Taiwan is put into effect in the near future, which mainly means that new private banks can enter the market.

<sup>4</sup> Under government regulation, medium and small business bank has to lend at least 70 % of loans to S-M enterprises.



Table 6. Loans from All Banks to S-M Enterprises

Month, Year	Share of Loans to S-M Enterprises(%)
Dec. 1972	22.71
Dec. 1975	21.64
June 1978	31.10
June 1981	31.80
June 1984	35.24
June 1986	36.43

Source: Same as Table 3. p.65.

### *5. Challenges from Liberalization and Internationalization*

S-M enterprises in the commercial sector, e.g., small grocery stores, restaurants and bakeries have been facing severe challenges in recent years from modern supermarkets and multi-national chain stores, e.g., Seven-Eleven convenient stores, McDonald's fast food restaurants, etc. The commercial sector in Taiwan has been very conventional and not very efficient before these international firms were allowed to come in. The modernization of the commercial sector has been moving very fast in recent years which has benefited consumers greatly. However, it also threatens the survival of traditional small shops.

### **III. Concluding Remarks**

The export-oriented S-M manufacturing firms have been very active and have played important roles in Taiwan's economy in the past 30 years. Many of them have grown into big business now. The smallness of their size has the advantage of flexibility, allows for quick responses and saves on overhead costs. However, this smallness makes them very fragile financially. They also lack of economy of scale in information gathering, marketing and doing R&D. Now that the government's economic policy is moving towards further liberalization and internationalization and the structure of Taiwan's economy is rapidly changing which is signified by the rapid growth of high-tech industries and the fast expansion of modern service industries, room for the traditional S-M enterprises to increase in number and prosper is getting smaller. S-M enterprises have to upgrade their management and technology in order to grow in size and to be able to survive in this transition period. Government agencies coordinated by the Medium and Small Business Administration have initiated many programs to help them improve. However, only those entrepreneurs who have the foresight to take advantage of the changing environment and are willing to take risks will prosper in the future.



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