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Working Paper

Impacts of the Southeast Asian Financial Crisis on the Philippine Manufacturing Sector

PIDS Discussion Paper Series, No. 1999-09

Provided in Cooperation with:

Philippine Institute for Development Studies (PIDS), Philippines

Suggested Citation: Lamberte, Mario B.; Orbeta, Aniceto Jr. C.; Cororaton, Caesar B.; Guerrero, Margarita F. (1999) : Impacts of the Southeast Asian Financial Crisis on the Philippine Manufacturing Sector, PIDS Discussion Paper Series, No. 1999-09, Philippine Institute for Development Studies (PIDS), Makati City

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Philippine Institute for Development Studies

Impacts of the Southeast Asian Financial Crisis on the Philippine Manufacturing Sector

Mario B. Lamberte et al.

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May 1999

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IMPACTS OF THE SOUTHEAST ASIAN FINANCIAL CRISIS ON THE PHILIPPINE MANUFACTURING SECTOR

11 May 1999

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The survey of sample firms, which was conducted by the National Statistics Office (NSO), and this report, which was prepared by the Philippine Institute for Development Studies (PIDS), were funded by the World Bank. The authors are grateful to Ms. Ofelia M. Templo, Assistant Director General of the National Economic and Development Authority, for providing direction to the research team. The authors are also grateful to Ms. Ma. Chelo V. Manlagnit and Ms. Hope A. Gerochi for research assistance and to Ms. Juanita E. Tolentino for secretarial assistance. This report is available at the Institute's web site: <http://www.pids.gov.ph>

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IMPACTS OF THE SOUTHEAST ASIAN FINANCIAL CRISIS ON THE PHILIPPINE INDUSTRY

1. INTRODUCTION

There already exists a plethora of studies on the sad performance of the Philippine economy in the wake of the Southeast Asian currency crisis.¹ However, most, if not all, of these studies examined the impact of the crisis from a macroeconomic perspective. Certainly, the crisis will have differential impacts on the various economic sectors or sizes of firms, which, in turn, will have different responses to the crisis. Fairly detailed and accurate knowledge of these issues can greatly help in finetuning the government policies and programs designed for staging a rapid economic recovery in the short-term. This, however, requires good firm-level survey data. This study, therefore, tries to fill up this lacuna. It attempts to analyze the impacts of the Southeast Asian financial crisis on the Philippine manufacturing sectors and their initial responses to such crisis to stay alive utilizing firm-level survey data collected from a sample of firms.

Although this study uses purely descriptive analyses, still the results it yields can provide some insights useful for policy formulation.² The survey results clearly show that the capacity utilization rate of Philippine enterprises started to decline even before the crisis struck in July 1997, and it continued to drop as the crisis deepened. This, however, varies across sectors, with the electronics sector being the hardest hit in the most recent period. Non-exporters and small firms were more adversely affected by the crisis compared to exporters and large firms. Along with the declining capacity utilization rate was the declining net profitability of firms. Although labor lay-off could not be avoided under this unfavorable circumstance, still a large proportion of firms resorted to cutting down on work hours/days to preserve some jobs.

The structure of the sources of short- and long-term funds of firms did not significantly change before and after the crisis periods. Still, firms rely to a great extent on income from sales and bank loans to finance their operations. The overall average debt-equity ratio inched up a little in 1997, but declined in the first half of 1998 as firms reduced their outstanding debt. The share of short-term debt in the total financing had not changed substantially in the last 2-1/2 years. On the whole, there seems to be no clear evidence of a supply-side credit crunch as a great majority of firms regardless of how they are classified, i.e., sector, export orientation and size, claimed to have continued access to credit during the crisis period. Also, a great majority of firms surveyed claimed

¹ For example, see Lamberte (1999) and Virtucio (1998).

² There is no attempt in this study to do crosstabulation analysis or regression analysis to test some hypotheses. The authors envision to do this in subsequent studies using the same data base.

to have not encountered any liquidity problem during the crisis period. What is worrisome though was that a great majority of the firms were pessimistic about the prospects of their business in the next six months.

The next section gives a brief description of the survey of Philippine industry and a few of the characteristics of the sample firms. The third section examines issues pertaining to the impact of the crisis on firms surveyed and their views on the causes of the crisis. The fourth section discusses issues related to the firms' main sources of funding, debt structure, transparency and policy environment. The fifth section briefly discusses the firms' assessment of the prospects of their business in the short-term. The last section makes some concluding remarks and suggests some policies.

2. DESCRIPTION OF THE SURVEY

The *Survey of Philippine Industry and the Asian Financial Crisis (SPIndAFC)* covered establishments engaged in the following manufacturing industries:

Sector Code	Description
1	Food products
2	Textiles
3	Wearing apparel and footwear
4	Chemical and rubber products
5	Electrical machinery

More detailed descriptions of each sector in terms of the 1994 *Philippine Standard Industrial Classification* are given in **Annex A**. These particular manufacturing sectors are among the top 10 contributors to manufacturing output. In addition, electrical machinery (the sector where semiconductors and electronics are included) and food products sector rank high among both import-dependent and export-oriented industries.

Standard sampling methodology for Philippine establishment surveys utilize a *List of Establishments (LE)* compiled and updated by the National Statistics Office (NSO). The sampling frame of the SPIndAFC was the 1997 updated version of the LE, which included about 3,800 establishments belonging to the five sectors covered by the survey. Food products (32%) and wearing apparel and footwear (29%) comprised 61 percent of the total number of relevant establishments. In terms of employment size, 68 percent are listed as having less than 100 workers. Over half of the establishments are located in the National Capital Region (NCR).

Based on the list, establishments were independently selected for each sector with a target of approximately equal number per sector. Number of engaged workers (ATE) was used as a stratification variable with more samples selected from establishments with more than 100 workers. A simple random sample was drawn within each stratum. **Annex B** shows the percentage distribution of establishments by sector and ATE classes in the frame and in the resulting sample selected.

The SPIndAFC questionnaire consisted of two separate forms. Form 1 was designed to elicit responses from interviews of CEOs of the enterprise to which the sample establishment belonged. Form 2 was designed as a self-accomplishing schedule for personnel officers, production managers and/or financial managers. The questionnaires were fielded from September 1998 to January 1999 by the NSO.

This report is based on the responses of 541 establishments out of a targeted number of 750. Food products, wearing apparel and footwear, and electrical machinery sectors are about equally represented in this set of respondents, with textiles and chemical products having half that number (see **Table 1**). This is due to the fact that most of the establishments for these two sectors were contacted much later and retrieval rate was thus lower.

TABLE 1. PROFILE OF RESPONDING FIRMS

	<u>By Size</u>		<u>By Export Orientation</u>		<u>By Volume of Exports</u>			<u>By Foreign Control</u>			<u>Aver. No Employees</u>	
	Large	Small	Exporters	Non Export.	Small	Medium	High	None	Some	Total		Total
SECTOR												
1- Food	59	78	51	82	24	8	19	113	13	11	384	137
2- Textiles	28	49	39	37	14	4	21	58	8	11	242	77
3- Wearing apparel	61	62	78	42	30	4	44	78	16	29	331	123
4- Chemicals	47	40	38	49	19	7	12	62	8	17	250	87
5- Electrical machinery	59	58	70	46	17	3	50	62	9	46	643	117
AGE												
New	71	105	98	77	39	2	57	96	19	61	330	176
Old	183	182	178	179	65	24	89	277	35	53	413	365
LOCATION												
NCR	113	125	105	131	34	19	52	188	22	28	429	303
Others	141	162	171	125	70	7	94	185	32	86	342	238
Total	254	287	276	256	104	26	146	373	54	114	388	

Source: Survey of Philippine Industry and the Financial Crisis, 1998

Responding firms had an average number of 388 employees in 1996. Small establishments (defined as those with employment in 1996 of less than 150) dominated the food products and textiles sectors with 57 and 64 percent shares, respectively. Wearing apparel and footwear and electrical machinery sectors are both equally represented in terms of size.

Sixty-seven (67) percent of the firms were located outside the NCR. More (65.3 percent) of the respondent firms were “old” or were established prior to 1990.

Establishments in the electrical machinery/electronics sector employed more workers than any other sector, averaging about 643 workers. Establishments of “older” firms had more employees than new ones; establishments located outside the NCR had more employees than those in the NCR.

Exporters comprised 51.9 percent of the sample respondents. For “new” firms and those located outside the NCR, there were more exporters (56 and 58 percent, respectively) than non-exporters but both groups were evenly represented in “older” firms. Among manufacturing sectors, food products and chemicals had more non-

exporters; the reverse is true for wearing apparel and footwear and the electrical machinery sectors.

About 53 percent of exporters may be considered as “high” volume exporters; that is, exports comprise more than 50 percent of sales. Except for the food products and chemicals sectors where more firms were small- or medium- volume exporters (meaning, exports comprised less than 50 percent of sales), high-volume exporters dominated for all sectors. This is most evident in the electrical machinery sector, which includes the “electronics” sector for which 71 percent were high-volume exporters.

A firm is defined to have “no foreign control” if foreign equity comprises less than 10 percent of the firm’s equity; if foreign equity accounts for at least 50 percent of equity, the firm is said to be under “total foreign control”. About 21 percent of responding firms were under total foreign control. For all sectors, a larger proportion of firms had “no foreign control”. Only 8 percent of food products sector but a higher 39.3 percent in the electrical machinery sector were under total foreign control. A larger proportion of new firms compared to old firms had large foreign equity. Because most industrial estates and technoparks are located outside the NCR, it is therefore understandable that there were more firms outside the NCR with large foreign equity.

Table 2 gives a quick look at the profile of the sample firms using 1996 data, except for those information referring to firms’ responses to the Southeast Asian financial crisis. The information contained in this table will be the main focus of discussion presented in subsequent sections of this study.

TABLE 2. PROFILE OF FIRMS												
	Borrow in Foreign		Size		Export Orientation		Foreign Control			FDI Firm		
	Yes	No	Large	Small	Exporters	Non Exp.	None	Some	Total	Yes	No	Total
Financial Indicators												
Short-Term Debt/Total Financing	0.33	0.26	0.31	0.31	0.31	0.30	0.32	0.38	0.26	0.19	0.26	0.31
Long-Term Debt/Total Financing	0.27	0.15	0.23	0.24	0.22	0.25	0.25	0.24	0.17	0.30	0.31	0.23
Debt-Equity Ratio	2.95	1.57	2.19	2.32	2.14	2.66	3.00	2.79	1.41	1.65	3.00	2.27
Firm Characteristics												
Number of Employees	485	285	711	58	608	190	283	625	692	668	267	406
Share that Export	64%	36%	65%	35%	-	-	50%	12%	38%	55%	45%	
Share that are FDI	34%	22%	40%	15%	84%	16%	5%	12%	38%	-	-	
Response to the Crisis												
Current Capacity Utilization	78%	77%	79%	76%	78%	77%	77%	84%	79%	81%	76%	78%
Share with Few Workers	69%	31%	50%	50%	47%	53%	72%	10%	18%	29%	71%	41%
Optimistic for Future Growth	59%	41%	28%	26%	31%	23%	25%	35%	30%	32%	25%	27%
Total	61%	39%	47%	53%	52%	48%	69%	10%	21%	34%	66%	
Source: Survey of Philippine Industry and the Financial Crisis, 1998												

3. ANALYSIS OF THE IMPACTS OF THE CRISIS ON FIRMS

a. Changes in Capacity Utilization and Profitability Before and After the Crisis

Capacity Utilization

The period 1996 to the first half of 1998 saw a continuous decline in capacity utilization rate in the manufacturing sectors covered in the survey. From an average high of 78 percent for all sectors in 1996, capacity utilization rate declined to an average of 69 percent in the first half of 1998 (**Figure 1a**).

The performance varies across sectors. Of the five manufacturing sectors, the wearing apparel sector attained the highest capacity utilization rate in 1996 of 82 percent, while the food and textile sectors registered the lowest capacity utilization rate of 75 percent. In the first half of 1998, the capacity utilization rates of all sectors dropped. From a high of 82 percent in 1996, the highest capacity utilization rate declined to only 71 percent (chemical sector) in the first half of 1998. Similarly, the lowest capacity utilization rate dropped from 75 percent in 1996 to 66 percent (food sector) in the same period.

The same figure also shows the *unseasonalized* percentage changes in capacity utilization of the different sectors considered. One can observe that the first half of 1997 already saw a significant decline in capacity utilization rate (-3.4 percent relative to 1996 average for all sectors), with wearing apparel and leather as the worst performer experiencing a -5.5 percent change. Food products also did poorly, reducing its capacity utilization rate by 5.1 percent during the first half of 1997.

Although the decline in capacity utilization rate continued in the second half of 1997, it was not as deep as in the first half. On the average, capacity utilization rate dropped by only 2.3 percent relative to the first half of the same year.

The results seem to suggest that the recessionary effect had taken its toll on the Philippine industrial sector during the first half of 1998. Capacity utilization rate declined on the average by 6.5 percent relative to the previous period. The worst performer was the electrical machinery sector whose capacity utilization rate shrank by 10.8 percent.

The survey results also show the difference between the capacity utilization rates of exporters and non-exporters. Results indicate that non-exporters were hit harder by the crisis compared to exporters (**Figure 1b**). For example, in 1996, exporters and non-exporters had a capacity utilization rate of 78.2 percent and 77.2, respectively. In the first half of 1998, the utilization rate of the latter was down to 65.2 percent, while that of the former decreased to 71.9 percent.

FIGURE 1a. CAPACITY UTILIZATION BY SECTOR

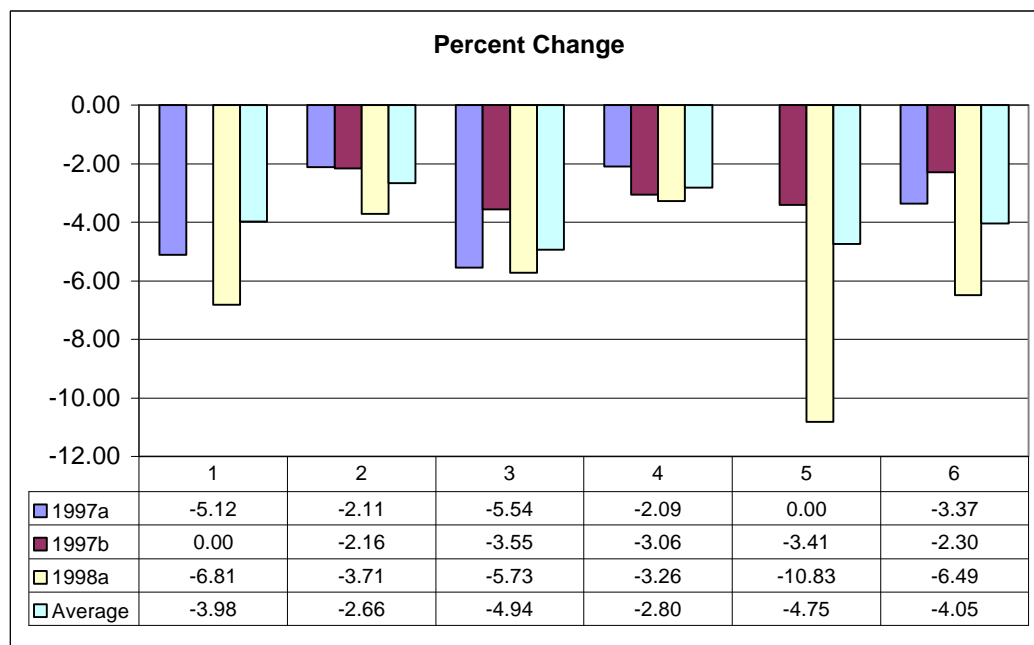
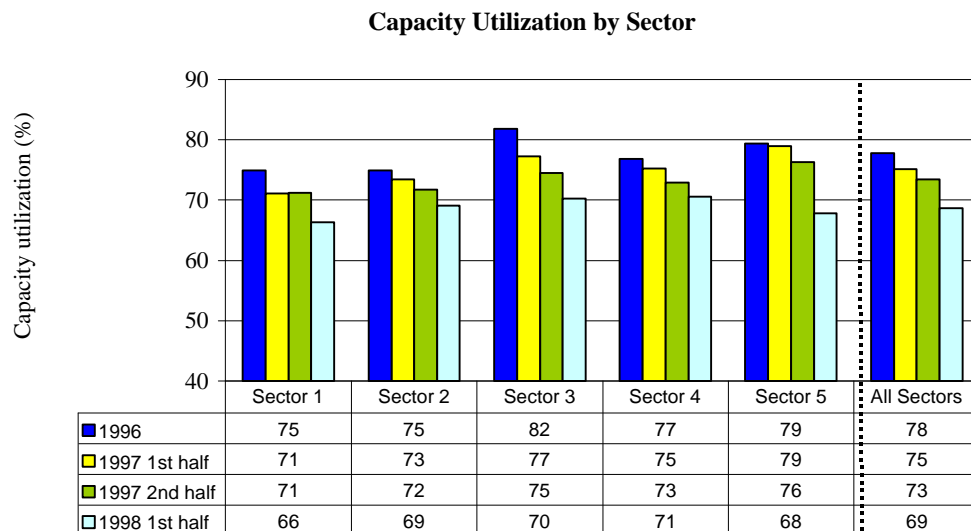


Figure 1c classifies the sample firms into large and small firms. Based on the trend, it would appear that small firms were hit harder compared to the large ones. In 1996, small firms had a capacity utilization rate of 76.3 percent. In the first half of 1998, their capacity utilization rate dropped to 65.7 percent (or a decline of 13.9 percent). The drop in capacity utilization rate of large firms was only 9.4 percent over the same period: from 79.4 percent in 1996 to 72 percent in the first half of 1998.

FIGURE 1b. CAPACITY UTILIZATION BY EXPORTERS & NON-EXPORTERS

Year	Capacity Utilization Rate					Percent Change		
	1996	1997a	1997b	1998a	1997a	1997b	1998a	Average
Exporters	78.16	76.13	75.57	71.93	-2.60	-0.73	-4.81	-2.72
Non-Exporters	77.16	74.03	70.79	65.18	-4.05	-4.39	-7.92	-5.45

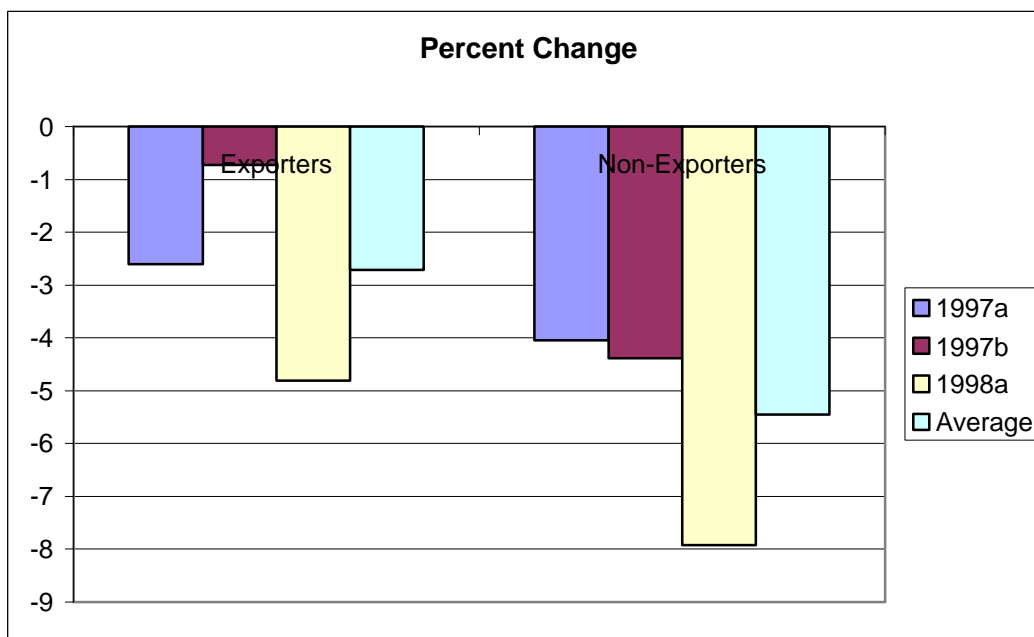
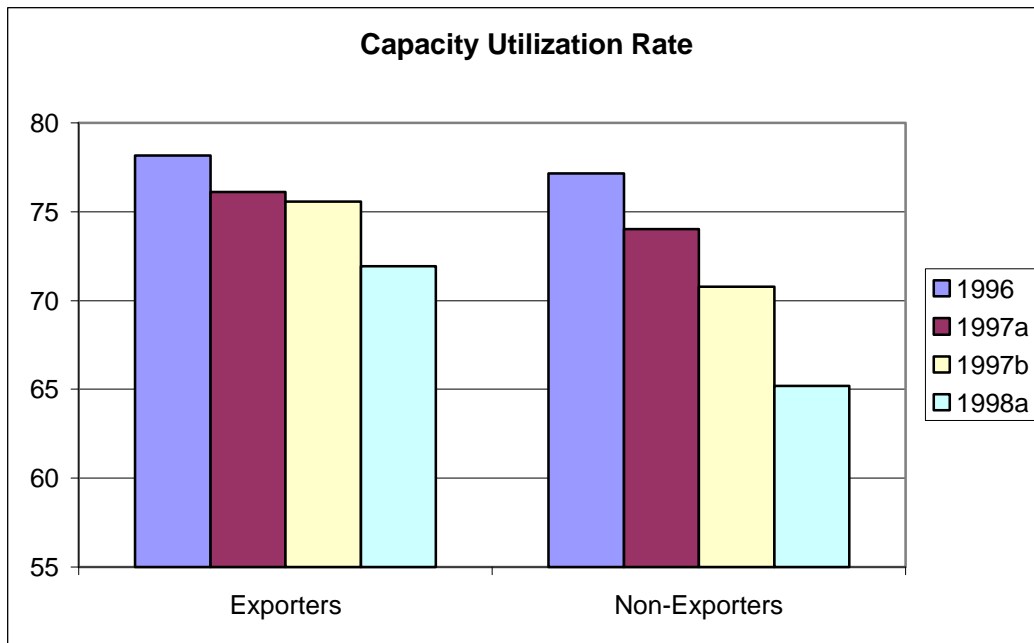
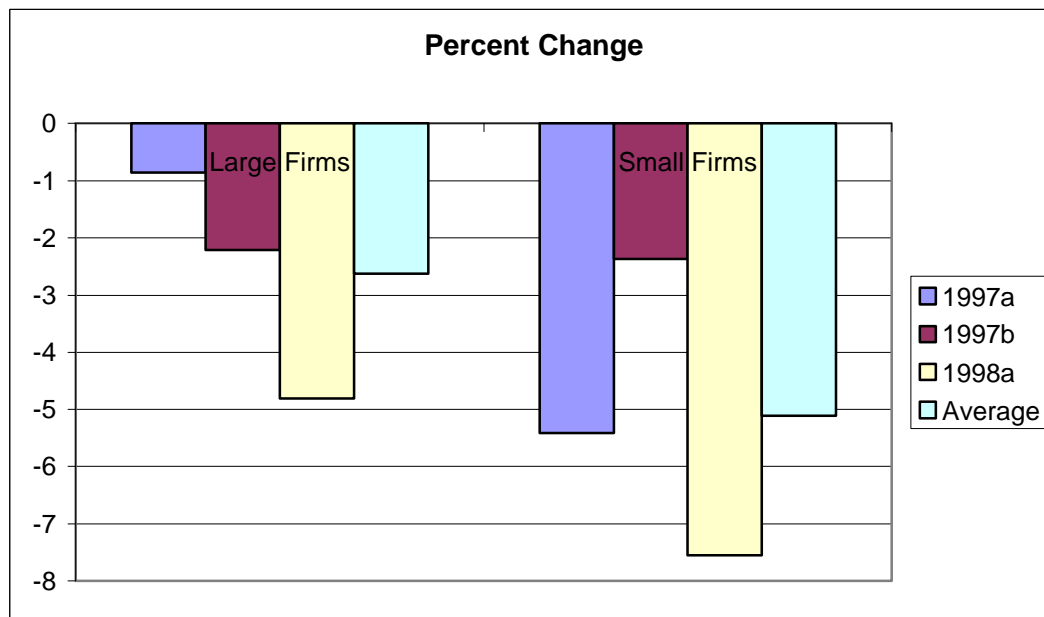
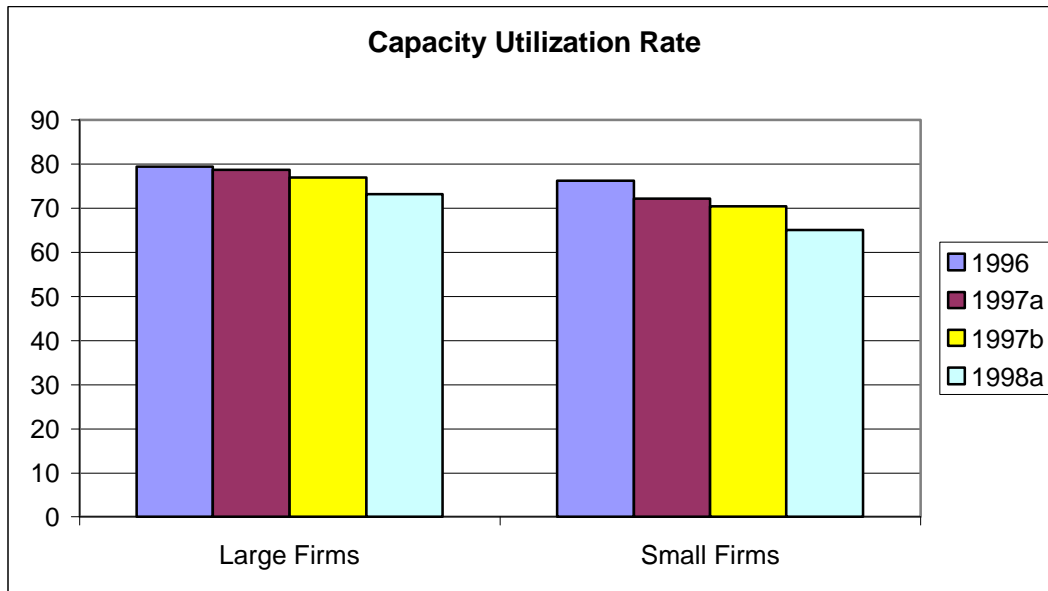


FIGURE 1c. CAPACITY UTILIZATION BY SMALL & LARGE FIRMS

Year	Capacity Utilization Rate				Percent Change			
	1996	1997a	1997b	1998a	1997a	1997b	1998a	Average
Large Firms	79.41	78.73	76.99	73.29	-0.86	-2.21	-4.81	-2.62
Small Firms	76.29	72.16	70.45	65.13	-5.42	-2.37	-7.55	-5.11



Profitability

It appears from the results that the continuous drop in the capacity utilization rate of firms translated into poor performance of firms in terms of net profitability. From a high of 12.1 percent in 1996, net profitability of the sample firms dropped dramatically to 3.5 percent in 1997 and to 2.1 percent in the first half of 1998 (**Figure 2**). This implies that the financial crisis has indeed generated substantial negative impact on firms' net profitability.

The average profitability of firms classified according to export orientation and size shows a consistently declining trend for the last 2-1/2 years. However, the differences in the net profitability between large and small firms and between exporters and non-exporters must be noted. In particular, large firms and exporters appear to have higher profitability than small firms and non-exporters throughout the period indicated. Looking at the five sectors, the food and electrical machinery sectors exhibit a consistently declining net profitability in the last 2-1/2 years, while that of the textile, wearing apparel and chemical sectors fluctuated. What is worth noting is that the food sector appears to be the most profitable among the five sectors considered, but it was not spared by the recent financial crisis.

Sectoral Performance Versus Broader Sector Performance

Table 3 presents indicators of the general macroeconomic environment in the Philippines during the period of analysis. Real GNP growth reached a peak of 7.8 percent in the third quarter of 1996. It decelerated since then until it started to contract in the second quarter of 1998. In the fourth quarter of 1998, real GNP contracted by 1.2 percent.

The overall output of the manufacturing sector started to contract in the second quarter of 1998. By the fourth quarter of 1998, it declined by 3.4 percent.

In terms of the sectors covered in the study, only wearing apparel registered an improvement in real growth in the gross value added. In particular, this sector registered a peak of 18.2 percent in the second quarter of 1998. The rest of the sectors, however, slowed down considerably, including the electronics sector. The electronics sector reached a peak of 43.6 percent in the fourth quarter of 1997. Since then its growth decelerated considerably, although it did not contract.

Based on these indicators, the survey results seem to have confirmed the general slowdown in the manufacturing sector.

FIGURE 2. NET PROFITABILITY OVER TIME

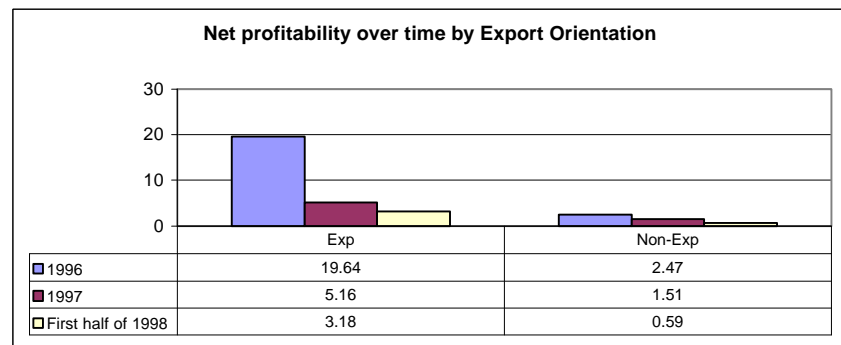
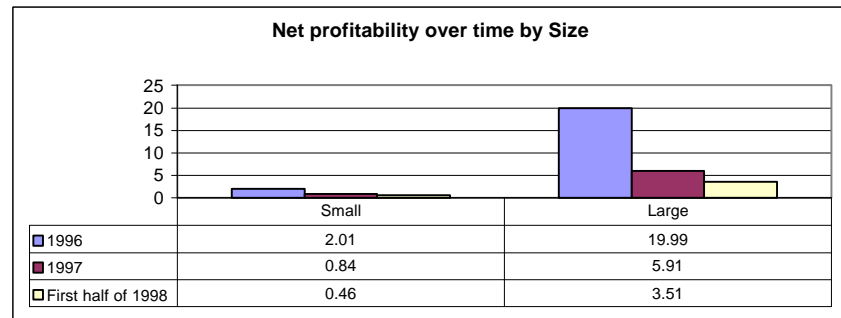
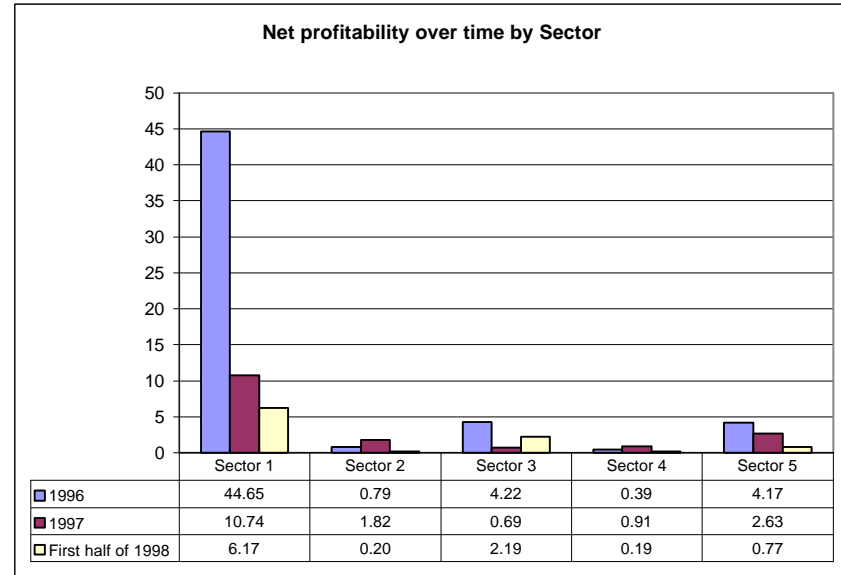
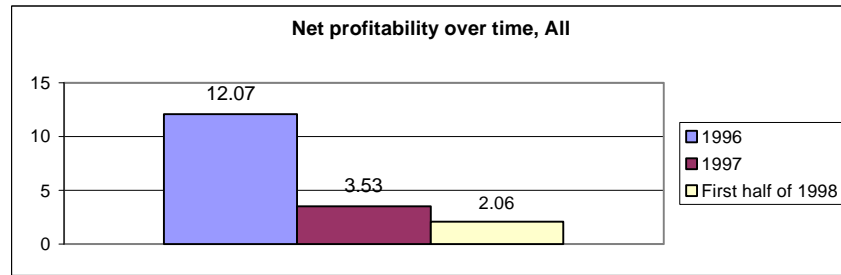


TABLE 3. MACRO-ECONOMIC VARIABLES												
Growth Rate												
	96q1	96q2	96q3	96q4	97q1	97q2	97q3	97q4	98q1	98q2	98q3	98q4
Gross_National_Product	7.3	8.7	7.8	5.1	5.4	5.3	5.2	5.3	2.0	(0.3)	(0.0)	(1.2)
Gross_Domestic_Product	5.3	6.1	6.9	4.9	5.5	5.6	4.9	4.8	1.6	(0.8)	(0.7)	(1.9)
Agriculture_Fishery_and_Forestry	2.9	6.8	7.9	(0.5)	4.9	1.8	0.4	4.1	(3.8)	(11.5)	(3.1)	(7.8)
Industry_Sector	5.8	5.5	7.0	6.5	5.1	7.6	6.4	5.6	1.6	(0.2)	(3.5)	(4.4)
Mining_and_Quarrying	4.6	(19.2)	(3.3)	3.1	(13.1)	(1.0)	1.8	23.9	17.5	5.7	0.3	(16.0)
Manufacturing	4.9	6.2	6.3	4.9	2.3	5.3	4.3	4.7	2.0	(0.9)	(1.5)	(3.4)
Food	3.3	10.1	5.2	7.8	3.4	2.7	(0.6)	(1.9)	5.7	0.9	1.5	
Textiles	(3.1)	(6.1)	7.4	(8.0)	(14.1)	(6.8)	(0.1)	4.6	(4.1)	(8.5)	(8.8)	
Wearing apparel, leather	4.3	(4.7)	(4.5)	(23.3)	(14.0)	4.3	6.2	7.9	5.3	18.2	9.1	
Chemicals, rubber, plastic	(2.1)	6.5	11.0	6.6	10.2	2.7	10.0	6.1	(5.6)	(2.1)	(0.3)	
Electronics	14.9	17.9	14.3	12.3	21.8	20.6	33.7	46.3	21.9	7.3	7.9	
Construction	7.6	9.3	12.8	13.8	21.3	18.5	18.1	7.6	(5.0)	(1.8)	(15.6)	(10.0)
Service_Sector	6.1	6.3	6.5	6.7	6.1	5.7	5.6	4.6	4.5	3.6	2.7	3.3
Export ¹	12.9	11.3	5.3	8.7	8.6	15.2	17.6	14.5	13.4	3.7	3.7	
Garments	11.6	(7.2)	(12.9)	(6.4)	(13.9)	(5.8)	9.9	(9.6)	(0.1)	8.5	(8.2)	
Semiconductors	25.4	14.3	(2.5)	3.5	3.6	21.1	43.6	41.9	25.4	15.1	1.6	
Inflation Rate	11.6	10.5	7.0	4.8	4.8	4.5	4.8	6.0	7.0	8.0	10.4	10.6
91- Treasury Bill Rate ²	13.0	12.8	11.5	11.5	10.1	10.5	15.3	17.7	16.6	14.0	13.8	13.4
¹ Chemicals only ² In Real Peso Value Note: Details for Mfg: 1985 constant prices 91-TBills: End of period was used. Inflation rate was computed using the average consumer price index ³ Level of T-bills												

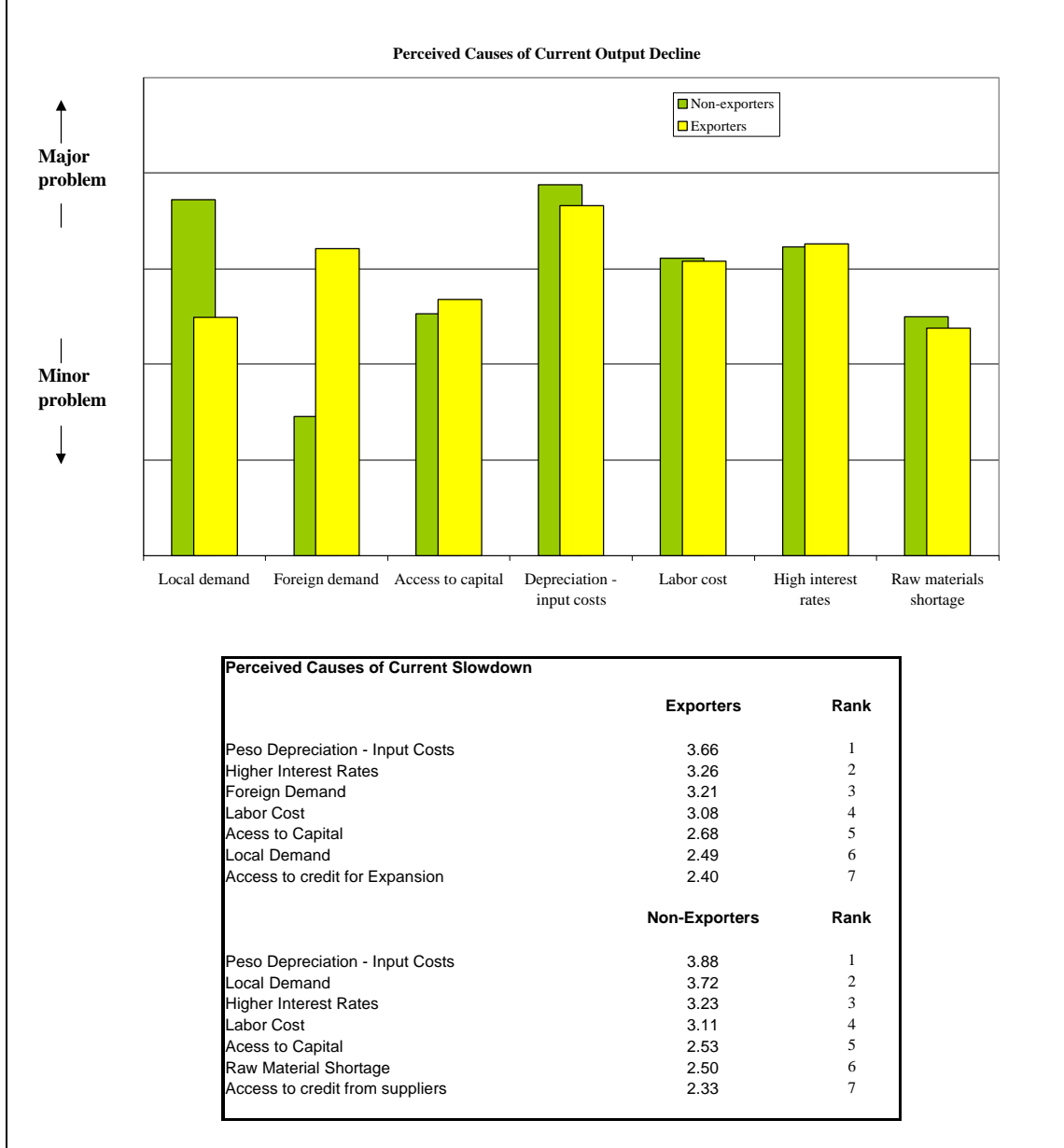
Perceived Causes of Slowdown

The survey identified ten major causes of output decline. These are: (1) decline in domestic demand; (2) decline in foreign demand; (3) insufficient credit being extended by suppliers; (4) insufficient credit is available from banks for working capital; (5) insufficient credit is available from banks for expansion; (6) high interest rates; (7) high cost of raw materials due to depreciation of the peso; (8) increases on labor cost; (9) shortages in raw materials; and (10) suppliers hurt by the crisis are not delivering goods. If one assumes that reduced capacity utilization implies reduced output level, then the above reasons could also be used as causes for the drop in capacity utilization rate discussed earlier.

Figure 4 presents separate sets of results for the exports and non-exporters with regard to their perception on the possible causes of the output decline. In the survey, 1 means no contribution, while 5 means major contributor. Thus the higher the number the bigger is its contribution to the decline in output and capacity utilization. For both exporters and non-exporters, the biggest contributor to the slowdown in output was the increase in input costs due to the depreciation of the peso. The effect of the currency depreciation was slightly bigger for the non-exporters (3.88) than for the exporters (3.66). Note that while a peso depreciation would be favorable to all exporters, nonetheless it would adversely affect some of them because of the relatively high import content of their products.

For the exporters, the second in rank as the major cause of the slowdown was high interest rates. On the other hand, for the non-exporters, the second major factor was the decline in domestic demand.

FIGURE 4. PERCEIVED CAUSES OF CURRENT OUTPUT DECLINE



Changes in foreign demand came out as the third factor perceived to be the major cause of the slowdown as far as the exporters are concerned, while high interest rates turned out as the third factor to affect the decline in output for the non-exporters.

For both exporters and non-exporters, the fourth and fifth factors were the same, i.e., labor cost and access to capital, respectively. For the exporters, the sixth factor and the last factor in the list were local demand and access to credit for expansion. On the

other hand, for non-exporters, the sixth factor was raw material shortage, while the last in the list was access to credit from suppliers.³

From the point of view of a firm facing a perfectly competitive market, the results discussed above seem to suggest that the simultaneous drop in demand and increase in the average cost during the crisis period squeezed the firm's profit. The results also seem to suggest that firms did not have much problem in accessing credit, although they had to pay a higher interest on it.⁴

Competitor's Profile

The results shown in **Figure 5** indicate that for those firms selling to the domestic market their biggest and major competitors in the local market were other domestic producers owned by local investors/owners. Joint venture companies and multinationals were considered far less of a threat in terms of competition in the domestic market than other domestic producers.

In the international market, the biggest threat to the local exporters in terms of competition were those firms within the neighboring countries (i.e., firms in Malaysia, Indonesia, and Thailand). Not too far second from the first group were firms in low-cost producing countries like Vietnam, China, Cambodia, Laos, and Myanmar. The third group of firms which pose market competition in the international market were firms in NICs (South Korea, Taiwan, Hong Kong, and Singapore). The last group of firms were from OECD countries.

b. The Level of Employment Before and After the Crisis

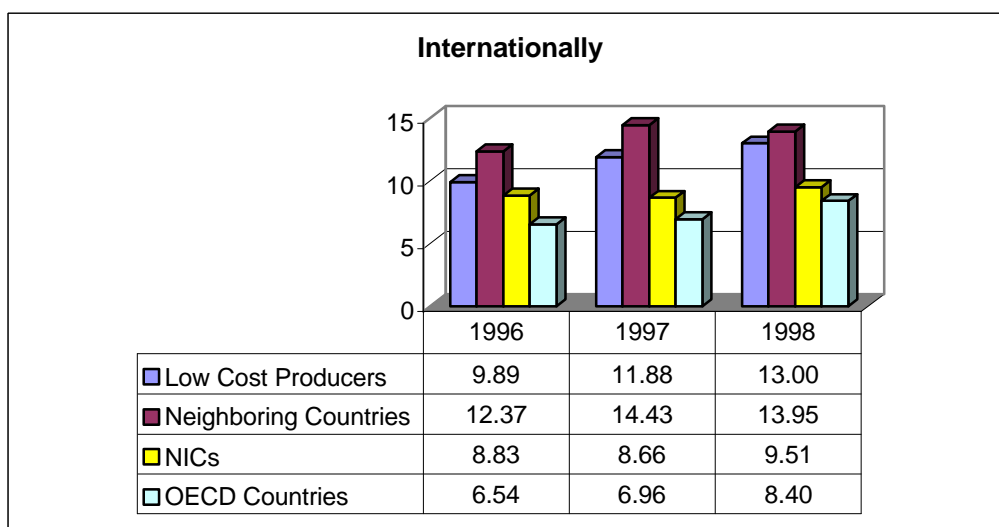
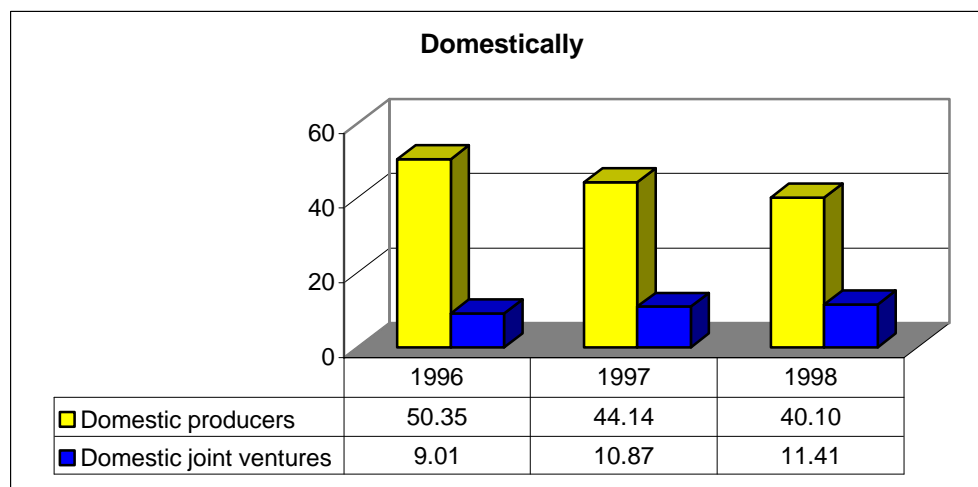
Share of firms with fewer workers

About two-fifths of the firms surveyed reported to have been operating with fewer workers after the crisis struck in July 1997 (**Figure 6**). Firms in the wearing apparel and leather sector had the highest (49%) proportion that reduced the number of workers in the wake of the crisis, followed by the electrical machinery sector (44%). In terms of export orientation, non-exporters had higher proportion of firms (46%) with fewer workers after

³ The issue regarding the impact of the crisis on the firms' access to capital is discussed in greater detail below.

⁴ This issue will be discussed in greater detail below.

FIGURE 5. COMPETITOR'S PROFILE



Note:

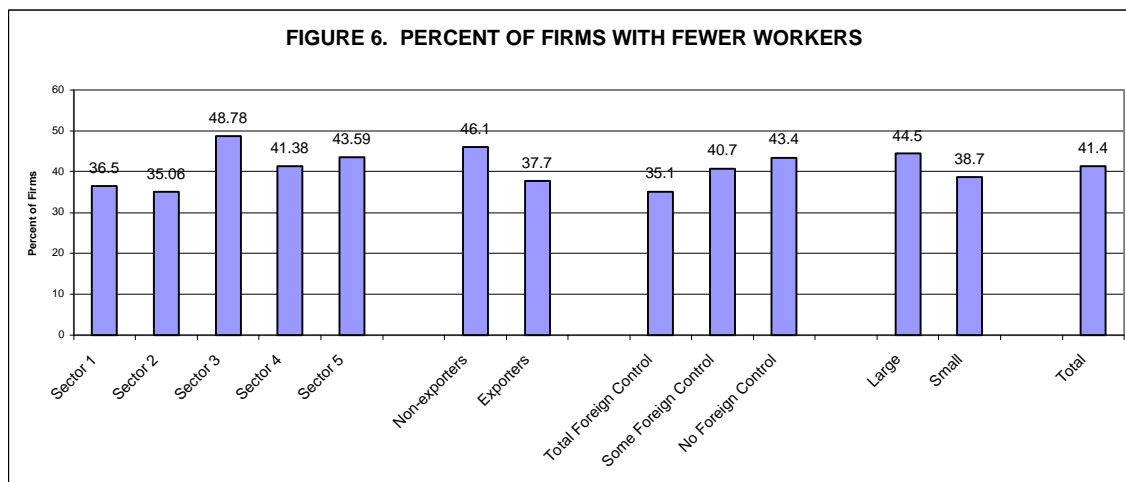
Low Cost Producers = firms in Vietnam, China , Cambodia, Laos, Myanmar

Neighboring Countries = firms in Malaysia, Indonesia, Thailand

NICs = firms in Korea, Taiwan, Hongkong, Singapore

OECD Countries = firms in US, Japan, Europe

the crisis than exporters (38%). By size of firm, the large firms had higher proportion of firms (44%) operating with fewer workers after the crisis than the small firms (39%). Finally, firms with no foreign control had higher proportion of firms (43%) with fewer workers after the crisis than those with some foreign control (41%) and with total foreign control (35%).



Profile of jobs being lost

The survey results show that the workers leaving the firms were younger and newer workers in the company (**Table 4**). This is to be expected because firms have still little capital invested in them. Also, many of those newly hired workers may have not yet earned their permanent appointment.

More than half (55%) of the workers leaving the firms were thirty years old or less. Another 37 percent leaving the firms were between 31-50 years old. In terms of sectors, there was a higher proportion of younger and newer workers leaving the firms in the electrical machinery sector than in the other four sectors. As regards to export orientation, exporting firms had higher proportion of younger and newer workers leaving the firms than non-exporters. In terms of size, small firms had a higher proportion of younger and newer workers leaving the firms than large firms.

As regards tenure, almost half of the employees had been with the company for 3 years or less while about one-third were with the company for 4 to 10 years.

Share of firms retrenching workers or using other methods of reducing labor

Some 39 percent of the sample firms were filling-up their vacancies as workers leave (see **Table 5**). However, 29 percent of the sample firms had laid-off workers as a result of the crisis. Some 61 percent of the sample firms gave severance pay or benefits to workers who were separated from work.

While the wearing apparel sector (42%) and chemical sector (43%) had higher proportion of firms filling up their vacancies than the other sectors, they also had a higher

TABLE 4. PROFILE OF WORKERS LEAVING THE PLANT						
	Average age (years)			Average tenure (years)		
	30 or less	31-50	above 50	3 or less	4-10	above 10
	%	%	%	%	%	%
By Sector						
Food products	43	42	15	40	31	30
Textiles	51	38	10	41	35	24
Wearing apparel, leather	59	36	5	50	29	21
Chemicals, rubber, plastic	49	42	9	44	31	25
Electrical machinery	71	26	3	53	36	11
Total	55	37	9	46	32	22
By Export Orientation						
Exporters	58	34	8	49	30	21
Non exporters	51	40	8	43	35	22
Total	55	37	8	46	32	21
By Size						
Small	58	35	7	51	31	18
Large	52	38	10	41	33	26
Total	55	37	9	46	32	22
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>						

proportion of firms (34% and 37%, respectively) laying-off workers as a result of the crisis compared to the other sectors. The electrical machinery sector (48%), textile sector (54%) and wearing apparel sector (55%) had a higher proportion of firms that give severance pay or benefits than the other sectors.

In terms of export orientation, exporting firms had a higher proportion of firms filling-up their vacancies than non-exporters, while the latter had a higher proportion of firms laying-off workers than the former. Both exporters and non-exporters had almost the same proportion of firms giving severance benefits to their laid-off workers.

TABLE 5. RESPONSES TO CRISIS: LABOR

	Are filling up vacancies	Laying-off workers	Pay severance	Cut down on hours	Compressed work week	Forced vacation	Freeze salary: rank & file	Freeze salary: mgt.	Salary cut: rank & file	Salary cut mgt.
	%	%	%	%	%	%	%	%	%	%
By Sector										
Food products	39	21	68	38	16	26	27	32	2	4
Textiles	31	29	65	36	17	20	29	37	1	9
Wearing apparel, leather	42	34	56	41	20	23	27	29	6	7
Chemicals, rubber, plastic	43	37	70	33	18	23	31	29	4	2
Electrical machinery	38	29	47	40	22	25	28	27	3	4
Total	39	29	61	38	19	24	28	31	3	5
By Export Orientation										
Exporters	47	29	59	34	20	26	25	29	3	5
Non exporters	30	31	62	43	18	22	32	33	4	5
Total	39	30	60	38	19	24	28	31	3	5
By Size										
Small	33	27	59	37	17	16	29	31	4	5
Large	45	32	62	39	20	32	27	31	2	4
Total	39	29	61	38	19	24	28	31	3	5

Source: Survey of Philippine Industry and the Financial Crisis, 1998

By size of firm, the large firms had a higher proportion of firms that were filling-up their vacancies and laying-off workers than the small firms. However, large and small firms had almost the same proportion of firms giving severance benefits to their laid-off workers.

Aside from laying off workers, firms may resort to other measures to respond to an economic crisis that will possibly affect them. These may include: (1) cutting down on hours/days of hourly/daily paid workers; (2) compressed work week for monthly paid workers; (3) forced vacation leaves; (4) freeze in salary increases of rank and file workers and/or management; and (5) cuts in salary of rank and file workers and/or management. Almost two-fifths of the sample firms cut down on work hours/days, about one-fifth implemented a compressed work week, about one-fourth used forced vacation, and close to one-third froze the salary increases of rank and file employees and management. Only a small proportion of the sample firms implemented salary cuts for rank and file (3%) and management personnel (5%) (see **Table 5**).

In terms of sectors, the wearing apparel/leather sector obtained the highest proportion of firms that cut down on working hours in response to the crisis. The electrical machinery sector had the highest proportion of firms that resorted to compressing the workweek for their employees. Forced vacation, on the other hand, was done by a higher proportion of firms in the food and electrical machinery sectors than in other sectors. The textile and electrical machinery sectors had a higher proportion of

firms that froze salary increases of rank and file employees than other sectors. Freezing salary increases of management personnel was employed by more firms in the food and textile sectors than in other sectors.

In terms of export orientation, the proportion of firms resorting to compressed workweek and forced vacation was higher for the exporters than for the non-exporters. On the other hand, the proportion of firms that cut down on work hours/days and froze salary increases of both rank and file and management personnel was higher for non-exporters than for exporters.

In terms of size, large firms had a higher proportion of firms that cut down on work hours/days, compressed workweek and resorted to forced vacation more than small firms in response to the crisis. On the other hand, small firms had a higher proportion of firms that froze salary increases of rank and file workers than large firms.

Membership of workers in unions was mentioned by 41 percent of the sample firms (see **Table 6**). Compared to firms in other sectors, the electrical machinery sector had the lowest proportion (23%) of workers who were members of unions. Exporting firms (43%) and large firms (53%) had higher proportion of workers who were members of unions than non-exporting and small firms.

As regards formal training activities, 52 percent of the sample firms claimed that they have formal training activities for their workers (see **Table 6**). More than half of the firms in the food, chemical and electrical machinery sectors reported to have training activities. Exporting firms (61%) and large firms (67%) had a higher proportion of firms that had training activities for their workers than non-exporting and small firms.

Out of the number of firms that had training activities for their workers, one-fourth reported that they were planning to reduce the amount of training for their workers due to the crisis. The wearing apparel and leather sector obtained the highest proportion of firms that planned to reduce their training activities. In terms of export orientation, non-exporters had a higher proportion of firms that intended to reduce their training activities than exporters. One-fourth of the large and small firms planned to decrease their training activities.

c. Policy Responses and Social Programs

Policy Responses

Minimum wage fixing. The prevailing law governing minimum wage in the country is Republic Act (RA) 6727 or the Wage Rationalization Act enacted in 1989. It

TABLE 6. HUMAN RESOURCE AND TRAINING			
	Workers member of union %	With formal training %	Decreased amount of training %
By Sector			
Food products	45	51	26
Textiles	43	44	21
Wearing apparel, leathe	48	44	38
Chemicals, rubber, plas	49	59	24
Electrical machinery	23	62	18
Total	41	52	25
By Export Orientation			
Exporters	45	61	22
Non exporters	37	42	31
Total	41	52	25
By Size			
Small	27	38	25
Large	55	67	25
Total	41	52	25
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>			

created the National Wage and Productivity Commission (NWPC⁵) but wage fixing was devolved to the Regional Wages and Productivity Tripartite Boards (RWPTBs). Since 1991, 16 regional boards have been established and they have been responsible for setting minimum wage rates in their respective localities. CARAGA was added in 1997 to the number of regions in the country. In terms of promulgating wage orders, the RWPTBs

⁵ The NWPC serves as the consultative and advisory body to the President on matters relating to wages, incomes and productivity and also exercises technical and administrative supervision over the RWPTBs

have been proven to be faster than wage legislation despite the required hearing/consultation process to be followed.

The minimum wage has been adjusted almost regularly and the past year is not an exception. The inflation rate has been the primary factor contributing to wage hikes. The wage adjustment in 1998 was a response to the increase in the inflation rate brought about by the substantial depreciation of the domestic currency. **Table 7** presents the daily minimum wage rate by region in recent years.

Restrictions on lay-off. Security of tenure is one of the rights of workers that is safeguarded by the Constitution. This right prohibits management from terminating the services of a regular employee without just cause and without due process of law.

Mandated severance pay. There are authorized causes for termination of employment by employers. These include: (a) for installation of labor-saving devices; (b) for redundancy; (c) retrenchment to prevent losses; or (d) worker suffering from diseases. In the case of (a) and (b), the separation pay is one (1) month pay or to at least one (1) month pay for every year of service, which ever is higher. In the case of (c) and (d), one (1) month pay or one-half (1/2) for every year of service, whichever is higher.

Social Programs

In response to the crisis, the Department of Labor and Employment (DOLE) was able to work out on 6 February 1998 a tripartite agreement dubbed as the "Social Accord for Industrial Harmony and Stability." Under the Accord, employers promised that they "exercise the utmost restraint in the lay-off, termination or rotation of their employees, which should be availed of only as a last resort." On the part of workers, they pledged that they "exercise utmost restraint in declaring or going on strikes, slowdown of work and other forms of concerted work stoppages which should be availed of only as a last resort." Similar accords have been brokered by DOLE in various regions of the country. The statistics on labor strikes shown in **Table 8** seem to suggest that the accord is holding. In particular, the number of recorded strikes has not significantly gone up during the crisis period compared with the period before the crisis.

Moreover, on 11 February 1998 a National Economic Summit (NES) was convened by President Ramos to draft a comprehensive response to the crisis. Among the proposals taken up was for DOLE to monitor workers layoffs, provide job placements for displaced workers, disseminate information on job vacancies and implement programs for retraining, entrepreneurship, and credit/livelihood assistance. It should be noted, however, that these are on-going activities of the department. The monitoring of workers layoff is being done by the Bureau of Labor and Employment Statistics (BLES) which publishes in its website (www.manila-online.net/bless/welcome.htm) the latest update on actual and planned layoffs including the number and firms involved. **Table 9**

TABLE 7. REGIONAL DAILY MINIMUM WAGE RATES, 1990 - 1998* In (Philippine) Pesos							
YEAR	1990	1991	1992	1993	1994	1995	1996
NCR	106.0	118.0	118.0	135.0	145.0	145.0	165.0
CAR	99.0	106.0	106.0	106.0	119.0	119.0	129.0
Region I	101.0	109.0	109.0	124.0	124.0	124.0	132.0
Region II	101.0	101.0	101.0	116.0	116.0	116.0	131.0
Region III	103.0	112.0	112.0	112.0	127.0	127.0	147.0
Region IV	104.0	113.0	113.0	128.0	138.0	138.0	155.0
Region V	103.0	106.0	106.0	123.5	123.5	133.0	133.0
Region VI	112.3	114.3	114.3	114.3	126.6	126.8	126.8
Region VII	105.0	110.7	110.7	120.7	120.7	120.7	141.0
Region VIII	99.0	110.5	103.0	115.0	115.0	115.0	130.0
Region IX	102.0	111.5	111.5	114.0	114.0	114.0	132.0
Region X	102.0	102.0	102.0	119.0	119.0	119.0	134.0
Region XI	104.0	112.3	129.0	129.0	129.0	119.0	119.0
Region XII	103.0	113.0	117.5	117.5	117.5	117.5	127.0
ARMM	89.0	89.0	89.0	101.0	101.0	101.0	116.0
CARAGA	89.0	89.0	89.0	89.0	89.0	89.0	134.0

YEAR	1997						
	June						Dec
NCR	185.0	185.0	185.0	185.0	185.0	185.0	185.0
CAR	134.0	139.0	139.0	139.0	139.0	139.0	147.0
Region I	148.0	148.0	148.0	148.0	148.0	148.0	148.0
Region II	145.0	145.0	145.0	145.0	145.0	145.0	145.0
Region III	163.5	163.5	163.5	163.5	163.5	163.5	163.5
Region IV	170.0	175.0	175.0	175.0	175.0	175.0	175.0
Region V	143.0	143.0	143.0	143.0	143.0	143.0	143.0
Region VI	136.8	136.8	136.8	136.8	136.8	136.8	136.8
Region VII	145.0	150.0	150.0	150.0	155.0	155.0	155.0
Region VIII	138.0	138.0	138.0	138.0	138.0	138.0	138.0
Region IX	132.0	132.0	132.0	132.0	132.0	132.0	132.0
Region X	134.0	134.0	134.0	134.0	134.0	144.0	144.0
Region XI	135.0	135.0	135.0	135.0	135.0	135.0	135.0
Region XII	134.0	134.0	134.0	134.0	134.0	134.0	134.0
ARMM	131.0	131.0	131.0	131.0	131.0	131.0	131.0
CARAGA	134.0	134.0	134.0	134.0	134.0	134.0	134.0

YEAR	1998									
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
NCR	185.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0	198.0
CAR	147.0	147.0	147.0	147.0	147.0	155.0	155.0	155.0	155.0	155.0
Region I	148.0	148.0	156.0	156.0	156.0	156.0	166.0	166.0	166.0	166.0
Region II	155.0	155.0	155.0	155.0	160.0	160.0	160.0	160.0	160.0	160.0
Region III	163.5	175.5	175.5	175.5	175.5	175.5	175.5	175.5	175.5	175.5
Region IV	175.0	175.0	175.0	175.0	188.0	188.0	188.0	188.0	188.0	188.0
Region V	143.0	153.0	153.0	153.0	153.0	153.0	163.0	163.0	163.0	163.0
Region VI	136.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8	146.8
Region VII	155.0	155.0	155.0	160.0	160.0	160.0	160.0	160.0	160.0	165.0
Region VIII	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0	153.0
Region IX	132.0	132.0	132.0	142.0	142.0	142.0	142.0	142.0	142.0	142.0
Region X	144.0	144.0	144.0	144.0	144.0	144.0	149.0	149.0	149.0	149.0
Region XI	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0
Region XII	141.0	141.0	141.0	141.0	141.0	141.0	141.0	141.0	141.0	141.0
ARMM	131.0	131.0	131.0	131.0	140.0	140.0	140.0	140.0	140.0	140.0
CARAGA	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0
* Daily Minimum Wage Rates refer to the highest rates in the region and include COLAS. For Years 1990-1996, figures are end-of-period Source: National Wages and Productivity Commission										

provides information on the number of workers and firms involved in retrenchments from January to October 1998 recorded by the BLES. Compared to records in the immediately preceding years, the number of establishment that have resorted to closure, retrenchment and work rotation indeed increased. Consequently, more workers had been adversely affected.

While the DOLE has prepared the program document for the "Comprehensive Program Package for Displaced Workers," there appears to be no readily available data on actual assistance given to displaced workers. The program includes monitoring, job loss prevention, training, livelihood programs, placement assistance and educational assistance for children of displaced workers.

Another recommendation that came out of the Summit was for the Social Security System (SSS) to implement a P200 million Emergency Loan Program for displaced workers. It has been reported⁶ that as of December 1998, P300⁷ million were already disbursed and SSS has recently approved the allocation of another P200 million for the program. As reported by the SSS, the program had already approved some 25,815 applications as of 22 February 1999. The program offers a maximum of P12,500 to members at 6 per annum per annum payable in 24 equal monthly installments starting after a 12-month grace period. Borrowers are required to be a member of good standing and present either his termination papers or proof of employment from the DOLE and certification from the employer that they have suffered loss in income due to job rotation or reduced work hours. It must be noted that this program violates the government's standing policy of doing away with subsidized credit programs.

⁶ BusinessWorld, 16 February 1999.

⁷ Another P100 million has been added to the initial fund of P200 million.

TABLE 8. STRIKE/LOCKOUT NOTICES FILED, ACTUAL STRIKES/LOCKOUTS, WORKERS INVOLVED AND MAN-DAYS LOST						
Year	Strike/Lockout Notices Filed	Actual Strikes/Lockouts				
		Total	With Notices	Without Notice	Workers Involved	Mandays Lost (000)
1980	362	62	31	31	20,902	105
1981	784	260	155	105	98,585	796
1982	743	158	119	39	53,824	1,670
1983	705	155	113	42	33,638	395
1984	960	282	239	43	65,306	1,908
1985	1,175	371	309	62	111,265	2,458
1986	1,613	581	459	122	169,479	3,638
1987	1,715	436	365	71	89,574	1,908
1988	1,428	267	222	45	75,848	1,525
1989	1,518	197	169	28	56,541	955
1990	1,562	183	164	19	68,412	1,345
1991	1,345	182	162	20	55,390	1,140
1992	1,209	136	120	16	47,797	724
1993	1,146	122	109	13	35,119	710
1994	1,089	93	84	9	48,849	568
1995	904	94	78	16	54,412	584
1996	833	89	83	6	32,322	519
1997*	932	93	-	-	52,000	673
1st Qtr.	237	25	-	-	12,000	203
2nd Qtr	235	23	-	-	8,000	132
3rd Qtr	251	34	-	-	27,000	233
1st to 3rd Qtr.	639	82	-	-	47,000	568
4th Qtr	209	11	-	-	4,000	105
1998*						
1st Qtr.	231	30	-	-	9,000	152
1st to 3rd Qtr.	723	86	-	-	33,000	564
*preliminary						
Source:						
For Years 1980-1996: Yearbook of Labor Statistics						
For 1997 and 1998: Current Labor Statistics as of 1st Qtr. 1998						
1st to 3rd Qtr. Estimates: BLES Statistics, Internet Edition (http://www.manila-online.net/bles/welcome.htm)						
Bureau of Labor and Employment Statistics, Department of Labor and Employment						

Still another program proposed during the NES was the setting up of a guarantee facility for loans of small and medium enterprises (SMEs) which are still viable but are under distress due to the crisis. The program, called Enterprise Stabilization Guarantee Fund (ESGF), is being implemented by the Small Business Guarantee and Finance Corporation (SBGFC). The proposed facility will guarantee up to 50 percent of the principal loan balance. While awaiting for the proposed financing requirement of P1 billion, the SBGFC has already set aside P200 million from its own funds for the project. Up to March 1999, there is still no available record of performance besides the preparation of the guidelines and presentation of the project to SME-concerned government and private institutions. With the Department of Trade and Industry's endorsement, the project was presented to donor agencies for possible funding support.

TABLE 9. ESTABLISHMENTS RESORTING TO CLOSURE/RETRENCHMENT DUE TO ECONOMIC REASONS AND WORKERS AFFECTED: 1996 - 1998 (JAN. 1 - OCT. 31, 1998)								
Year	Establishments Reporting*				Workers Affected			
	Total	Closure	Retrenchment	Rotation, etc.	Total	Permanent Layoff	Temporary Layoff	Rotation, etc.
1996	1,077	351	736	39	80,701	47,008	29,487	4,206
1st Qtr	336	75	279	12	20,708	14,020	5,248	1,440
2nd Qtr	276	72	223	10	19,615	8,611	10,667	337
3rd Qtr	347	120	234	19	23,904	15,629	6,661	1,614
4th Qtr	252	94	173	5	16,474	8,748	6,911	815
1997	1,103	320	790	46	104,714	66,543	32,076	6,095
1st Qtr	309	106	235	14	15,848	12,201	2,596	1,051
2nd Qtr	271	78	201	12	17,265	9,260	7,177	828
3rd Qtr	289	63	255	9	11,740	7,168	3,802	770
1st-3rd Qtr	869	247	691	35	44,853	28,629	13,575	2,649
4th Qtr	337	84	268	14	15,008	9,285	4,926	797
1998**								
1st Qtr	1,055	200	784	71	43,712	18,566	20,824	4,322
Jan. 1-May. 31	1,324				62,302	29,838	22,462	10,002
Jan. 1- Oct. 31	2,495				126,608	64,724	40,294	21,590
*Details may not add up to total due to multiple reporting								
**Preliminary data								
<i>Bureau of Labor and Employment Statistics, Department of Labor and Employment</i>								

4. FINANCIAL POSITION OF FIRMS BEFORE AND AFTER THE CRISIS

a. Sources of Funds

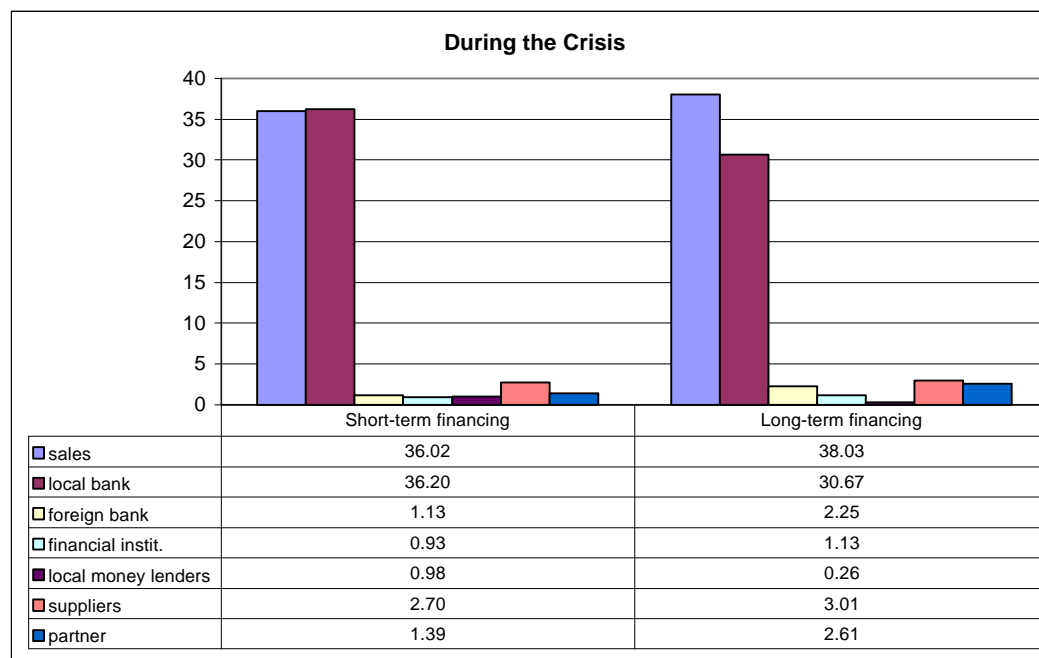
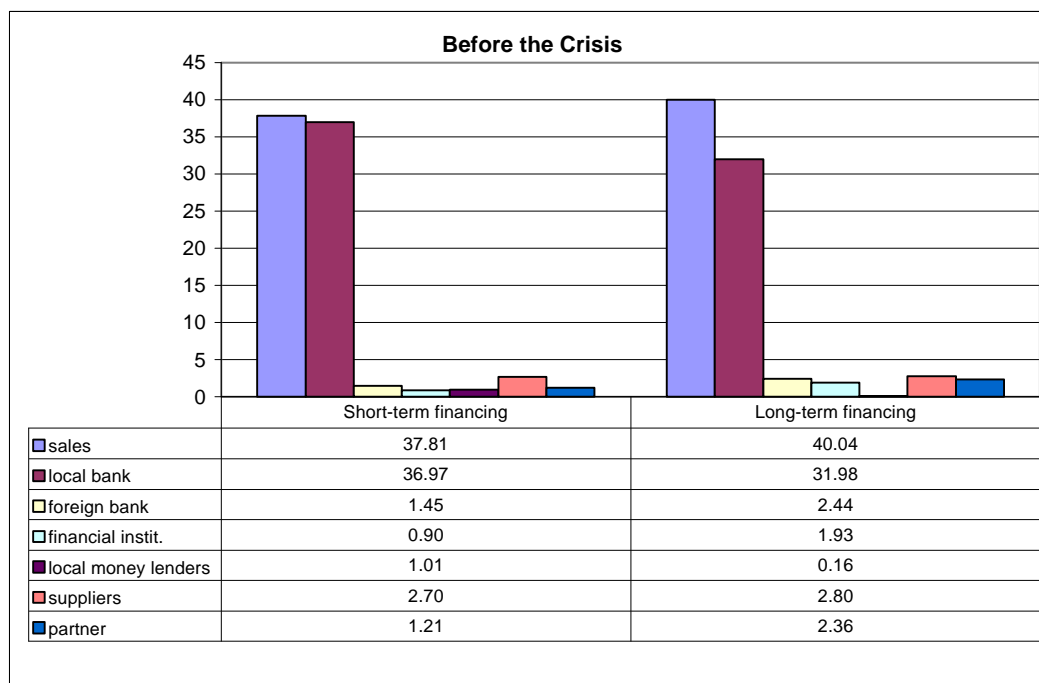
Firms raise short- and long-term funds from internal and external sources. As can be observed from **Figure 7**, income from sales, which is an internal source of funds, and loans from local banks, which is an external source of funds, are the two main sources of short-term and long-term funds for the sample firms before (i.e., January to June 1997) and during the crisis period. It is to be noted that the structure of the sources of short- and long-term funds of the sample firms had hardly changed at all since the onset of the Southeast Asian financial crisis.

b. Firms' Reliance on Debt

The long-term stability of a firm can be gauged from various indicators, one of which is the debt-equity ratio, which measures the relative amounts provided by the creditors and owners of the firm. Highly leveraged firms are bound to be more vulnerable to sudden negative changes in the conditions of the financial markets than less leveraged firms. The average debt-equity ratio of the sample firms in 1996 stood at 2.27 (see **Figure 8** and **Table 10**).⁸ It inched up to 2.46 in 1997, but declined to 2.04 in the first half of 1998, a level lower than that of 1996. This pattern holds true for large and

⁸ This is based on the median.

FIGURE 7. SOURCES OF SHORT-TERM AND LONG-TERM FINANCING
Percent of Total Financing



small firms, for exporting and non-exporting firms, and for all but one sector, i.e., electrical machinery, whose debt-equity ratio already started to decline in 1997.

FIGURE 8. DEBT - EQUITY RATIOS

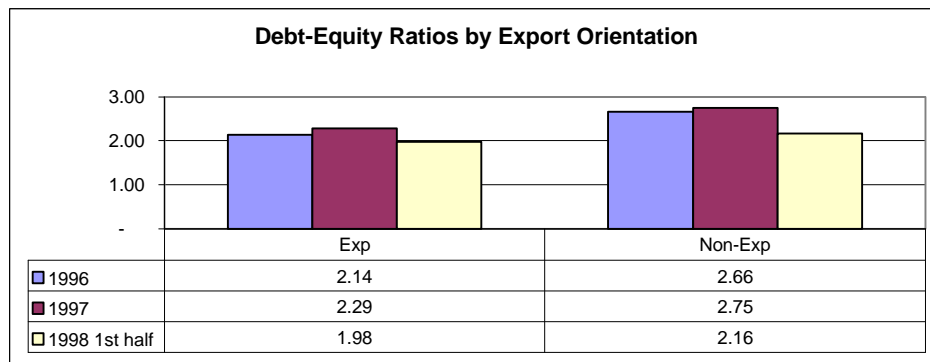
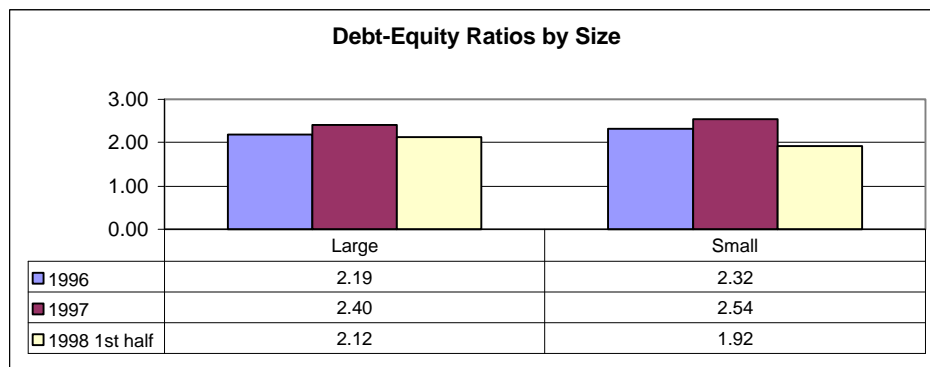
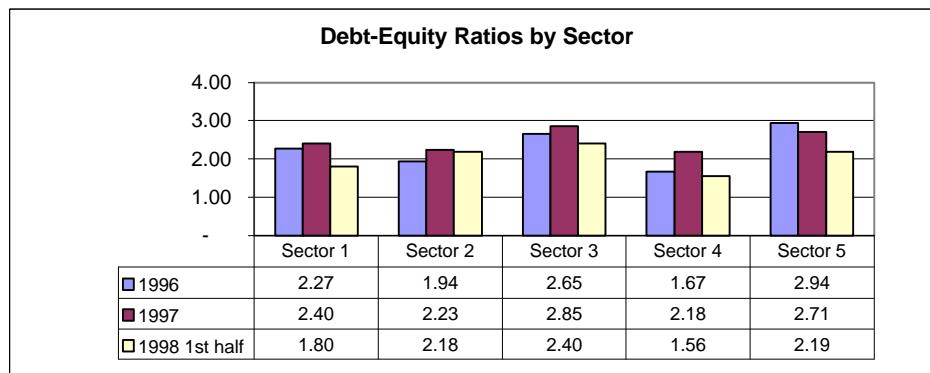
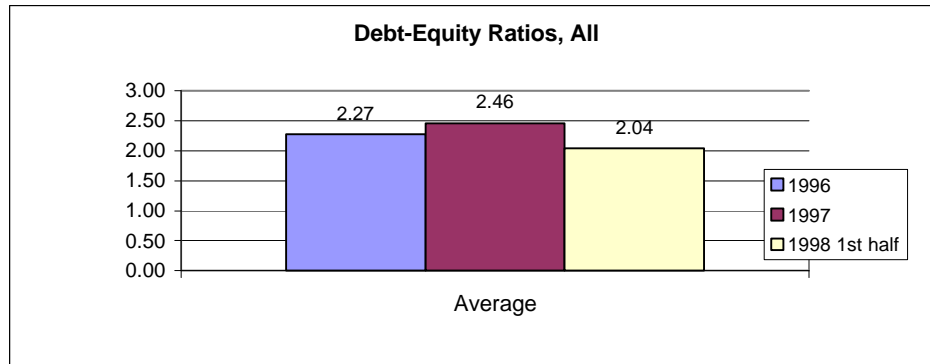


TABLE 10. FINANCIAL INDICATORS										
Indicators	Sector					Size		Export Orientation		Average
	1	2	3	4	5	Large	Small	Exp	Non Exp.	
Short-Term Debt/Total Financing 1/										
1996	0.29	0.30	0.34	0.27	0.33	0.31	0.31	0.31	0.30	0.31
1997	0.30	0.33	0.39	0.31	0.34	0.35	0.32	0.34	0.33	0.33
First half of 1998	0.27	0.34	0.44	0.26	0.32	0.33	0.31	0.34	0.29	0.32
Long-Term Debt/Total Financing 2/										
1996	0.21	0.30	0.25	0.24	0.20	0.23	0.24	0.22	0.25	0.23
1997	0.20	0.26	0.19	0.25	0.19	0.21	0.22	0.20	0.23	0.21
First half of 1998	0.19	0.26	0.17	0.25	0.20	0.21	0.21	0.19	0.23	0.21
Debt-Equity Ratio										
1996	2.27	1.94	2.65	1.67	2.94	2.19	2.32	2.14	2.66	2.27
1997	2.40	2.23	2.85	2.18	2.71	2.40	2.54	2.29	2.75	2.46
First half of 1998	1.80	2.18	2.40	1.56	2.19	2.12	1.92	1.98	2.16	2.04
Notes: 1/ Both sectors 2 and 3 exclude 3 outliers. 2/ Sector 2 excludes 3 outliers; sector 3 excludes 1 Description: Sector 1 - Food Products Sector 2 - Textiles Sector 3 - Wearing Apparel, Leather Sector 4 - Chemicals, Rubber, Plastic Sector 5 - Electrical Machinery Source: Survey of Philippine Industry and the Financial Crisis, 1998										

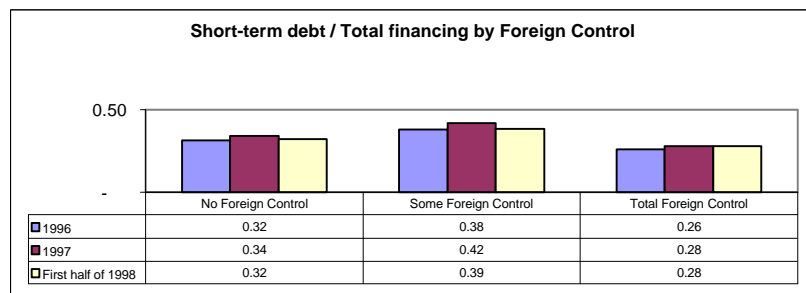
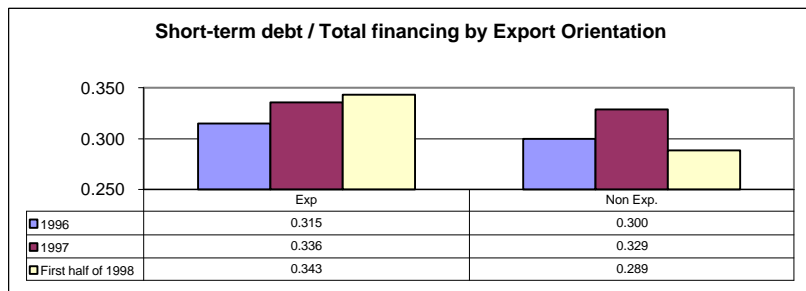
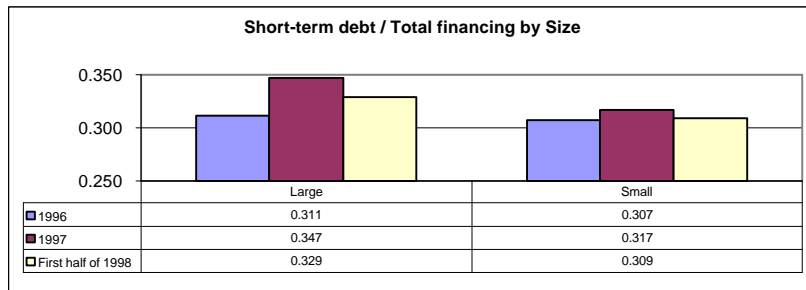
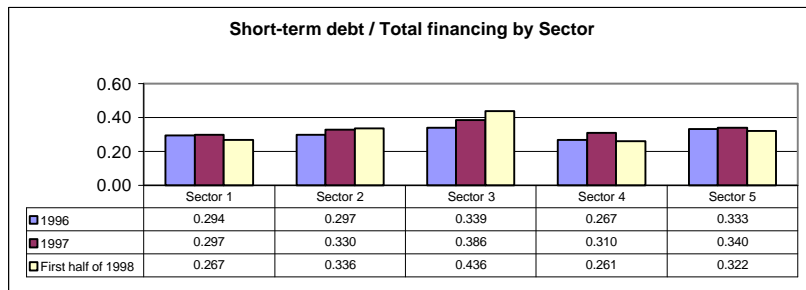
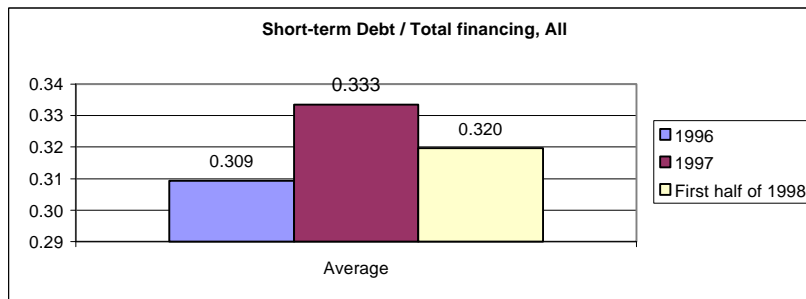
The above results seem to suggest that firms reduced their debt as they began to feel the effects of the Southeast Asian financial crisis in 1998.⁹ However, the degree of adjustment in the debt-equity ratio seems to vary by type of firms. More specifically, the decline in the debt-equity ratio in the first half of 1998 was much larger for non-exporting firms than for exporting firms. Small firms made more adjustment in their debt-equity ratio than large firms during the same period. Among the five sectors, the food and chemical sectors experienced much larger decline in the debt-equity ratio compared with the other three sectors. On the other hand, the textile sector made the smallest adjustment in the debt-equity ratio in the first half of 1998. In 1996, the electrical machinery sector obtained the highest debt-equity ratio, followed by the wearing apparel and leather sector. This ranking was reversed in the first half of 1998.

The shares of short-term and long-term debt in the total financing could serve as a good indicator of the vulnerability of firms to sudden tightness in the credit market. Short-term debt comprised almost one-third of the total financing of firms (see **Figure 9** and **Table 10**). The share of or degree of reliance of firms on short-term debt changed very little during the period 1996 to the first half of 1998. When classified by size, large firms show much larger changes in the share of their short-term debt than small firms during the indicated period. In the first half of 1998, the large firms' share of short-term debt stood at 33 percent compared to 31 percent for small firms.

Some differences in the pattern of behavior of the share of short-term debt among various sectors can also be discerned. The food, chemical and electrical machinery

⁹ See below for a discussion on the credit crunch.

FIGURE 9. SHORT -TERM DEBT / TOTAL FINANCING



sectors exhibit an inverted U-shape in the pattern of the share of short-term debt between 1996 and the first half of 1998. On the other hand, the textile and wearing apparel sectors show a rising share in their short-term debt during the indicated period. It is to be noted that the wearing apparel sector stood out prominently among the five sectors with its short-term debt accounting for 44 percent of total financing. When firms are classified according to export orientation, results show that the share of short-term debt of non-exporting firms had declined to 29 percent in the first half of 1998 from 33 percent in 1997, whereas that of exporting firms had remained the same at 34 percent during the same period.

The share of long-term debt to total financing of sample firms declined a little from 23 percent in 1996 to 21 percent in 1997, and stayed at that level in the first half of 1998 (see **Figure 10** and **Table 10**). Large and small firms have almost the same level and pattern of behavior of the share of their long-term debt during the indicated period. Exporters and non-exporters show similar pattern, but the former's share of long-term debt was lower than that of the latter. Among the five sectors, the textile and wearing apparel sectors experienced a significant decline in the share of their long-term debt to total financing from 1996 to the first half of 1998, while the other three sectors realized very little change in the same variable during the same period. In the first half of 1998, the textile and chemical sectors show a much higher share in long-term debt than the other three sectors.

The results discussed above suggest that the decline in the debt-equity ratio experienced by firms in the first half of 1998 can be attributed to the drop in both their short- and long-term debt during the same period.

c. Availability of Credit

Almost half of the total number of sample firms pointed out that domestic banks were renewing or extending new loans to them (see **Table 11**). There was a larger proportion of large firms (60%) and exporters (55%) making this claim than small firms (37%) and non-exporters (42%). Among the five sectors, the electrical machinery sector appears to have the lowest proportion of firms making the same claim. Only 9 percent of the total number of respondents mentioned that foreign banks were renewing or extending new loans to them. This is because only handful of the sample firms (18%) were availing themselves of the services of foreign banks.

The respondents were asked whether banks or finance companies had declined to grant them a loan before and during the crisis. Only 6 percent answered positively to this question before the Southeast Asian financial crisis, i.e., January to June 1997 (see **Table 12**). During the crisis, the proportion of firms denied of bank loans had doubled. It is to be noted that the proportion of firms denied of bank loans in the first half of 1998 was slightly higher for exporters (14%) than for non-exporters (12%). Large firms had also slightly higher proportion of firms (15%) having been denied of bank loans in the first half of 1998 than small firms (12%). When classified by sector, the electrical machinery

FIGURE 10. LONG - TERM DEBT / TOTAL FINANCING

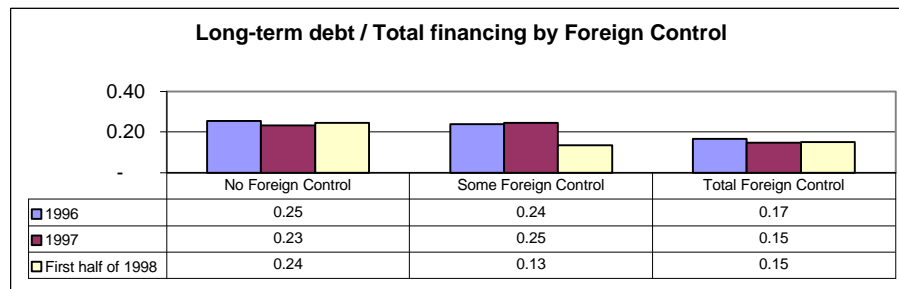
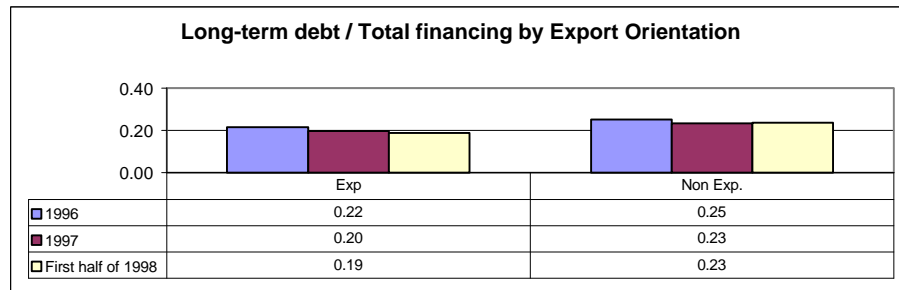
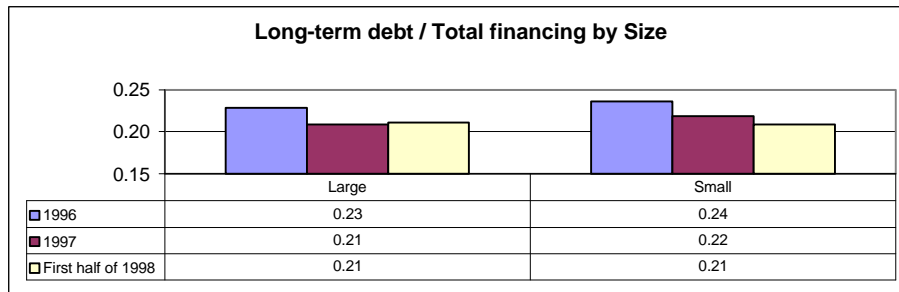
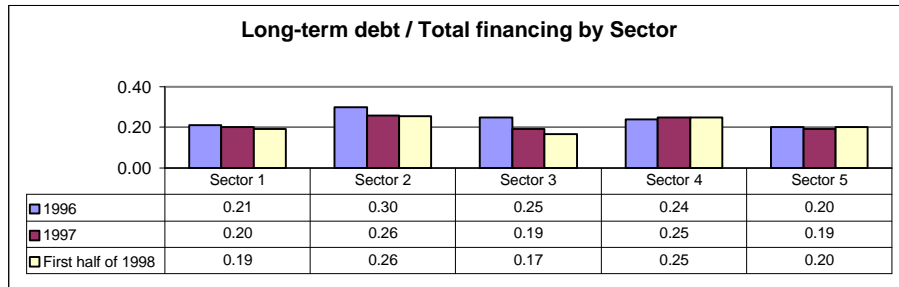
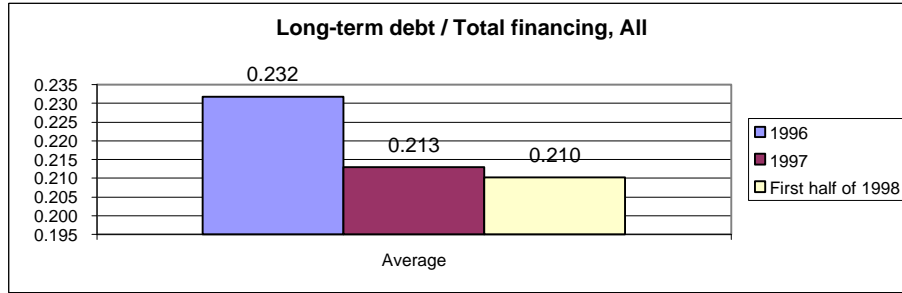


TABLE 11. ACCESS TO BANK LOANS		
In Percent		
Category	Domestic	Foreign
A. By sector		
1. Food products	54.95	7.27
2. Textiles	46.38	5.80
3. Wearing apparel	52.29	8.26
4. Chemicals	55.00	11.54
5. Electrical machinery	36.11	13.08
T o t a l	48.85	9.30
B. By export orientation		
1. Exporters	55.28	13.88
2. Non-exporters	41.74	3.96
T o t a l	48.74	9.11
C. By size of firms		
1. Small	37.13	4.68
2. Large	60.42	13.87
T o t a l	48.85	9.30
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>		

sector appears to be the least affected by the crisis when it comes to access to bank credit. Only 6 percent of the electrical machinery firms were denied of bank credit in the first half of 1998. On the other hand, 18 percent of the wearing apparel firms were denied of bank loans in the first half of 1998, up from only 7 percent in 1996.

Note that though the percentage of those who admitted having been denied of a loan by a bank or finance company had doubled during the crisis period, still it is much smaller than what is generally expected considering the economic uncertainty brought about by the Southeast Asian currency meltdown. In other words, still a great majority of the sample firms have continued access to credit from a bank or finance company during the crisis period.

Firms typically buy inputs on credit. Seventy-four (74) percent of the sample firms confirmed this practice (see **Table 13**). The proportion of firms doing this practice does not significantly differ among different categories of firms. The results seem to suggest that access of firms to suppliers' credit during the crisis seems to have not

TABLE 12. DENIED OF BANK LOANS			
In Percent			
Category	January 1 - June 30, 1997	July 1 - December 31, 1997	so far in 1998
A. By sector			
1. Food products	6.31	16.22	11.71
2. Textiles	6.15	9.23	15.15
3. Wearing apparel	7.48	15.89	17.59
4. Chemicals	6.49	10.26	15.38
5. Electrical machinery	5.61	7.55	6.54
T o t a l	6.42	12.21	12.98
B. By export orientation			
1. Exporters	6.61	11.98	14.34
2. Non-exporters	6.28	12.56	11.61
T o t a l	6.45	12.26	13.03
C. By size of firms			
1. Small	5.24	8.66	11.16
2. Large	7.56	15.68	14.77
T o t a l	6.42	12.21	12.98
<i>Source: Survey of Philippine Industry on the Financial Crisis, 1998</i>			

diminished. As **Table 13** show, 81 percent of the sample respondents said that their input suppliers were still extending credit to them after July 1997. The proportion of firms who maintained this view does not significantly differ among the various categories of firms.

Firms also typically sell their products to their customers on credit. About three-fourths of the sample firms were doing this before the crisis. During the crisis period, a little over three-fourths of the sample firms claimed to have continued selling their products on credit to their customers. The proportion of firms extending credit to their customers appears to be higher for non-exporters than for exporters. Large firms had a higher proportion of firms extending credit to their customers than small firms. Among the five sectors, the chemical sector had the highest proportion of firms selling their products on credit, while the wearing apparel and leather sector had the lowest.

Firms were asked which usual source of loans/credit has/have become more restrictive in making credit available to them since the onset of the regional financial crisis in July 1997 (see **Figure 11**). Domestic banks were the most frequently mentioned

TABLE 13. ACCESS TO SUPPLIERS' CREDIT In Percent				
Category	Buying inputs on credit	Suppliers still extending credit (after July 1997)	Selling products on credit	Still extending credit to buyers (after July 1997)
A. By sector				
1. Food products	71.43	82.30	80.45	84.96
2. Textiles	72.73	84.06	83.12	81.16
3. Wearing apparel	69.42	75.45	55.37	59.63
4. Chemicals	75.58	82.72	86.05	90.00
5. Electrical machinery	80.00	83.33	80.00	79.25
Total	73.68	81.29	75.94	78.20
B. By export orientation				
1. Exporters	72.89	84.34	71.79	74.39
2. Non-exporters	75.10	77.92	80.63	82.17
Total	73.95	81.25	76.05	78.15
C. By size of firms				
1. Small	69.96	75.31	75.27	76.37
2. Large	77.91	87.19	76.71	80.00
Total	73.68	81.29	75.94	78.20
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>				

by the respondents as a source of credit that had become more restrictive since the crisis struck, followed by input suppliers. Interestingly, 36 percent mentioned that the availability of credit from their usual source has remained the same. The same pattern of responses can be observed if respondents are broken down by size and export orientation. However, when the sample firms are classified according to sector, the electrical machinery sector appears to have a different pattern of responses from the rest of the sectors. In particular, half of the firms in this sector claimed that their access to credit had not changed at all during the crisis period. Only a little over one-fifth said their access to bank credit had become more restrictive.

The sample firms were also asked whether they currently have adequate liquidity to finance their production. About three-fourths of the total sample of firms claimed to have no liquidity problem during the time the interview was conducted (see **Table 14**). The proportion of large firms making the same claim is not significantly different from

FIGURE 11. RESTRICTIVENESS OF CREDIT AFTER THE CRISIS

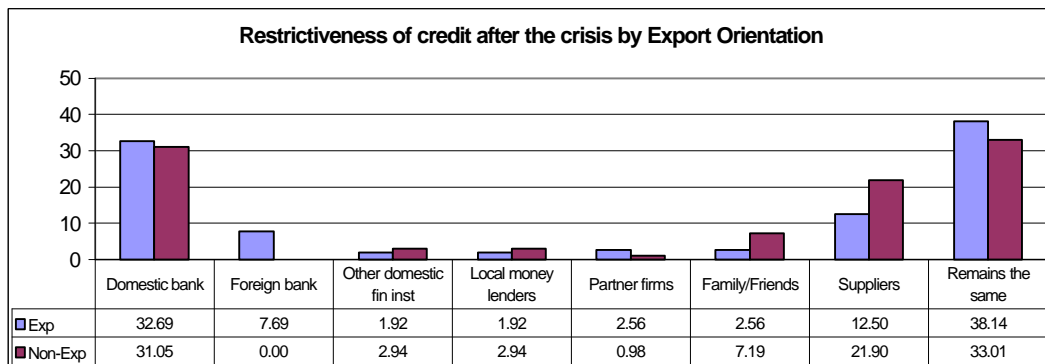
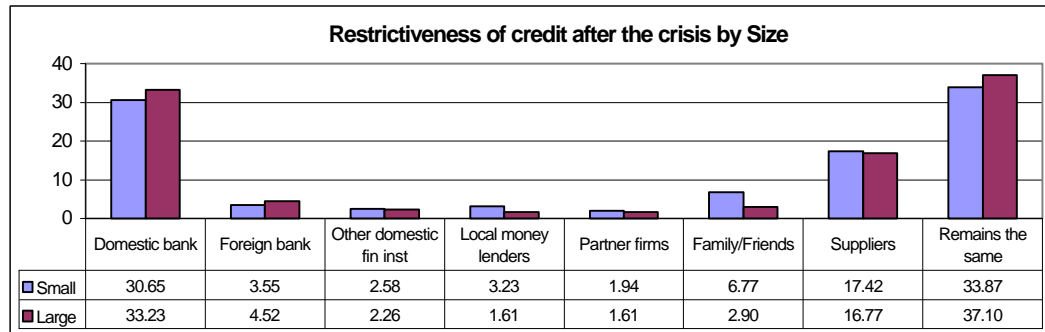
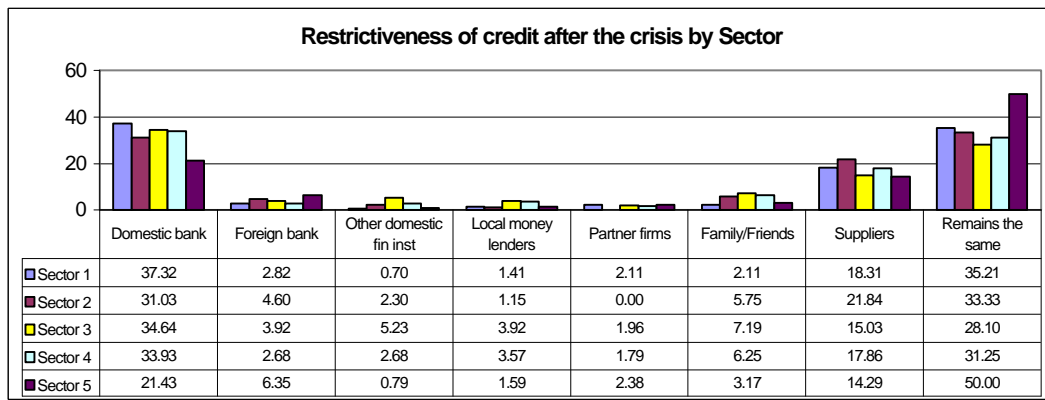
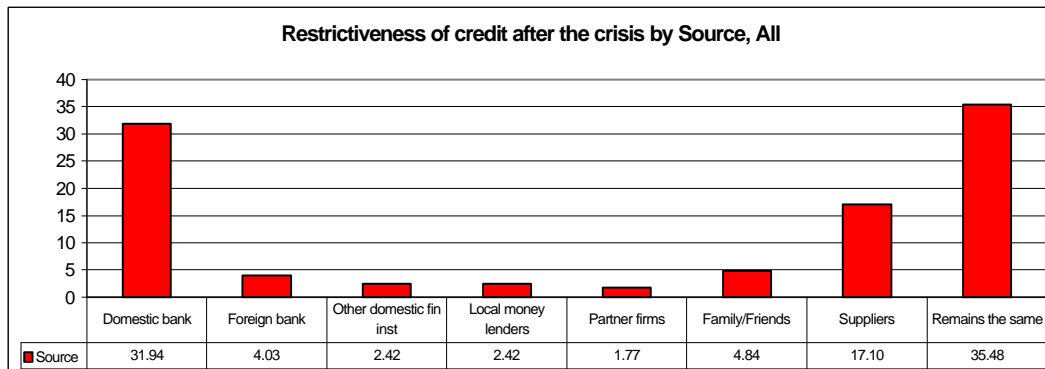


TABLE 14. ADEQUATE LIQUIDITY TO FINANCE PRODUCTION In Percent	
Category	Yes
A. By sector	
1. Food products	75.00
2. Textiles	67.57
3. Wearing apparel	73.28
4. Chemicals	80.95
5. Electrical machinery	82.88
T o t a l	76.22
B. By export orientation	
1. Exporters	79.77
2. Non-exporters	72.18
T o t a l	76.08
C. By size of firms	
1. Small	74.36
2. Large	78.33
T o t a l	76.22
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>	

that of small firms. The same can be said of exporters and non-exporters. Looking at the responses of firms by sector, the textile sector appears to have the lowest proportion of firms claiming to have no liquidity problem.

Among those who said that they had inadequate liquidity to run their operations, a little over half singled out low revenue as the major reason (see **Table 15**). A little over one-third mentioned low collection rate and insufficient loans as the major reason for encountering a liquidity problem during the time of the interview.

d. Transparency

1. Financial Statements, Collateral and Guarantees

The problem of asymmetric information, i.e., lenders know less about the borrowers and their prospects for repayment than do the borrowers themselves, is pervasive in the finance process, preventing lenders from lending freely. This problem can be reduced if lenders have adequate information about the business performance of firms and if they have strong and effective recourse in the event of default, i.e., their loans are adequately covered by collateral and can quickly seize the collateral when the borrowers default. Accounting information, i.e., balance sheets and income statements, is

TABLE 15. CAUSES OF INADEQUATE LIQUIDITY					
In Percent					
Category	Low revenue	Insufficient loans	Insufficient credit from suppliers	Low collection rate	Others
A. By sector					
1. Food products	44.83	32.26	24.14	37.93	13.33
2. Textiles	50.00	28.57	20.00	33.33	6.67
3. Wearing apparel	60.71	60.71	25.00	30.77	28.57
4. Chemicals	40.00	14.29	15.38	50.00	40.00
5. Electrical machinery	66.67	14.29	6.67	28.57	22.22
T o t a l	52.63	34.26	20.00	35.58	21.43
B. By export orientation					
1. Exporters	52.08	32.61	16.28	19.05	29.63
2. Non-exporters	53.03	35.48	22.58	46.77	16.28
T o t a l	52.63	34.26	20.00	35.58	21.43
C. By size of firms					
1. Small	59.09	35.48	25.00	38.33	22.73
2. Large	43.75	32.61	13.33	31.82	19.23
T o t a l	52.63	34.26	20.00	35.58	21.43
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>					

one of the instruments that can make firms transparent to lenders. The value of this accounting information can be enhanced if it is certified by an independent auditing firm. Coming out with audited accounting reports on a regular basis can greatly facilitate the job of lenders in monitoring the borrowers to minimize the moral hazard problem.

Philippine firms and banks are required to maintain appropriate financial records that observe standard and generally accepted accounting and auditing principles and procedures. In practice, however, some firms, especially small ones, do not regularly prepare balance sheets and income statements, and if they do, the financial statements are not audited by an auditing firm. Out of the total sample firms for this study, 88 percent claimed to have financial statements audited by an independent auditing firm (see **Table 16**). As expected, the proportion of firms having audited financial statements is lower for small firms (82%) than for large firms (93%). Ninety-three (93) percent of exporting firms maintain audited financial statements, whereas 82 percent of non-exporting firms do so. The rigor involved in competing in the international market is perhaps one of the compelling reasons for exporters to have audited financial statements. Looking at the five sectors, the textile firms appear to have the lowest proportion of firms with audited financial statements (80%), followed by food producing firms (83%). The rest have proportions ranging from 89 to 92 percent.

In general, Philippine banks require loan applicants, especially business enterprises, to submit financial statements as part of the documents needed to evaluate the

TABLE 16. FINANCIAL STATEMENTS AUDITED BY INDEPENDENT AUDITING FIRM	
In Percent	
Category	Yes
A. By sector	
1. Food products	83.49
2. Textiles	80.30
3. Wearing apparel	88.89
4. Chemicals	91.25
5. Electrical machinery	91.74
T o t a l	87.50
B. By export orientation	
1. Exporters	92.71
2. Non-exporters	81.61
T o t a l	87.45
C. By size of firms	
1. Small	81.55
2. Large	93.31
T o t a l	87.50
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>	

creditworthiness of their borrowers. Whether they accept audited or unaudited financial statements is another matter. Results show that despite the fact that 88 percent of the total sample respondents for this study claimed that their financial statements are audited by independent auditors, only 65 percent of them said that they typically need audited financial statements to apply for and receive a bank loan (see **Table 17**). As expected, large firms reported higher proportion (71%) than small firms (60%) being required to submit audited financial statements when applying for a loan. The difference is less significant between exporters (68%) and non-exporters (63%). Among the five sectors, the electrical machinery sector reported the lowest proportion (56%) of firms being required to submit audited financial statements when they applied for and received a loan.

Usually, the longer the maturity of the loan, the more the banks require collateral from their borrowers. The results of the survey support this practice. Almost half of the total number of respondents said that they typically provide a collateral when they borrow for 12 months or longer, whereas only 24 percent said so when they borrow for less than 6 months and 27 percent when they borrow for 6 months or longer (see **Table 18**). There is not much difference in this respect when respondents are grouped by export orientation or by size. When classified by sector, the textile sector appears to have the highest proportion of respondents claiming that they were required to present a collateral

TABLE 17. SUBMISSION OF AUDITED FINANCIAL STATEMENT TO APPLY FOR A LOAN In Percent	
Category	Required
A. By sector	
1. Food products	66.67
2. Textiles	63.08
3. Wearing apparel	64.81
4. Chemicals	78.48
5. Electrical machinery	55.96
T o t a l	65.25
B. By export orientation	
1. Exporters	67.48
2. Non-exporters	62.95
T o t a l	65.32
C. By size of firms	
1. Small	59.48
2. Large	70.83
T o t a l	65.25
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>	

for their loans with less than 6 months maturity period. On the other hand, the electrical machinery sector shows the lowest proportion of firms reporting that they are required to present a collateral for their long-term loans.

Of those who said they are required by their banks to present collateral, 87 percent mentioned land and buildings as collateral they provide and 65 percent machineries and equipment. Only 24 percent mentioned stocks being used as a collateral for their loans (see **Table 19**).

In some cases, banks require their borrowers to have guarantors for their loans, especially if they cannot present an acceptable collateral or if their collateral is inadequate. Twenty-nine (29) percent of the total number of respondents mentioned having obtained guarantees on their financing (see **Table 20**). Large firms and exporters had a higher proportion of respondents obtaining guarantees for their loans than small and non-exporting firms. A large proportion of them (60%) mentioned the stockholders as their usual guarantors (see **Table 21**). One-fourth mentioned other banks as guarantors.

TABLE 18. REQUIREMENT OF A COLLATERAL FOR A LOAN In Percent			
Category	L O A N		
	Less than 6 months	6 months or longer	12 months or longer
A. By sector			
1. Food products	22.77	25.77	50.00
2. Textiles	37.29	41.38	55.00
3. Wearing apparel	25.25	29.90	50.49
4. Chemicals	18.67	19.18	56.41
5. Electrical machinery	17.65	21.00	35.64
T o t a l	23.39	26.59	48.65
B. By export orientation			
1. Exporters	21.97	25.00	45.61
2. Non-exporters	24.64	28.02	51.87
T o t a l	23.27	26.48	48.64
C. By size of firms			
1. Small	23.56	25.49	46.98
2. Large	23.25	27.60	50.22
T o t a l	23.39	26.59	48.65
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>			

2. *Level and Depth of Accounting Practices*¹⁰

Banks and non-bank enterprises prepare financial statements that follow the legal and regulatory framework and the accounting policies and procedures set by the supervisors (Central Bank for financial institutions and SEC for firms). In this respect, the private sector, more specifically, the professional accountants or the so-called certified public accountants, has prepared formal professional standards both for accounting and auditing practice that conform with the requirements of interested parties, such as the government regulatory and supervisory agencies, the public, investors and owners of the concerned enterprise. Deliberate misstatement of information or misrepresentation in financial statements is a punishable act under Philippine laws.

The Accounting Standards Council (ASC) was organized in 1981 by the Philippine Institute of Certified Public Accountants (PICPA) to provide suitable financial accounting standards for the Philippines. Its main function is to establish and improve accounting standards that will be generally accepted in the Philippines. The ASC utilizes

¹⁰ This draws on Lamberte and Llanto (1995).

the accounting pronouncements issued by PICPA, the International Accounting Standards Committee and the Financial Accounting Standards Board.

TABLE 19. TYPE OF COLLATERAL PROVIDED				
In Percent				
Category	Land and Buildings	Machineries and Equipment	Stocks	Others
A. By sector				
1. Food products	87.04	62.00	30.23	11.76
2. Textiles	94.12	81.25	8.33	27.27
3. Wearing apparel	86.79	64.15	26.53	31.58
4. Chemicals	84.09	58.54	29.73	10.71
5. Electrical machinery	81.58	65.71	12.90	11.11
T o t a l	86.55	65.40	23.37	18.79
B. By export orientation				
1. Exporters	81.31	74.26	27.71	30.99
2. Non-exporters	91.30	56.88	20.00	7.69
T o t a l	86.49	65.24	23.50	18.79
C. By size of firms				
1. Small	90.83	52.58	11.49	12.50
2. Large	82.46	76.32	34.02	24.68
T o t a l	86.55	65.40	23.37	18.79

The Professional Regulation Commission must give its approval to the Statements of Financial Accounting Standards and Related Interpretations that the ASC will issue. The Statements of Financial Accounting Standards are applicable to the financial statements of any commercial, industrial or business enterprise which must be prepared according to the generally accepted accounting principles (GAAP). The GAAP encompass the conventions, rules and procedures necessary to define accepted accounting practice at a particular time. The GAAP include both the broad guidelines of general application and the detailed accounting practices and procedures. Principles of accounting refer to accounting principles and practices and also to the method of applying them. For instance, the GAAP discuss the nature and valuation of the account and how it is presented in the financial statement

Enterprises are duty bound to adopt sound accounting policies and practices, maintain an adequate and effective system of accounts, safeguard the integrity of the assets and devise a system of internal control that will help establish the viability of the business. Following the Statements of Financial Accounting Standards, an enterprise must include a description of the accounting policies it has adopted as an integral part of

TABLE 20. GUARANTEES ON FINANCING	
In Percent	
Category	With guarantees
A. By sector	
1. Food products	30.77
2. Textiles	35.48
3. Wearing apparel	23.30
4. Chemicals	36.71
5. Electrical machinery	22.64
T o t a l	28.85
B. By export orientation	
1. Exporters	31.06
2. Non-exporters	26.27
T o t a l	28.76
C. By size of firms	
1. Small	24.43
2. Large	33.05
T o t a l	28.85
<i>Source: Survey of Philippine Industry and the Financial Crisis, 1998</i>	

the financial statements. Financial statements are generated by the accounting process which follows the GAAP on three levels: pervasive principles, broad operating principles and detailed principles. The enterprise's "accounting principles" are the specific accounting principles and methods that are considered by the enterprise as the most appropriate in presenting its financial position, changes in said financial position and the results of operations in accordance with the GAAP. Some examples of disclosure of accounting principles and methods are: depreciation methods, amortization of intangibles, inventory pricing and overall valuation policy, methods of revenue recognition, gains and losses on disposal of property, among others. The GAAP also require the disclosure of related party transactions which include those transactions between parent company and its subsidiaries; between or among subsidiaries of a common parent; an enterprise and trusts for the benefit of employees, etc. Transactions involving related parties cannot be presumed to be carried out on an arm's length basis because the requisite conditions of competitive, free market transactions may not exist. Finally, the nature of the control relationship among enterprises under common ownership or management control must also be disclosed.

The accrual method of accounting is commonly used by almost all of the financial institutions in the Philippines. For most businesses, satisfactory measurement of operating results can only be achieved through accounting on accrual basis.

TABLE 21. GUARANTORS In Percent						
Category	Other Banks	Affiliated Firms	Finance Companies	Stockholder	Government	Others
A. By sector						
1. Food products	20.83	12.50	0.00	66.67	0.00	39.13
2. Textiles	20.00	21.43	7.14	66.67	23.08	23.08
3. Wearing apparel	10.00	20.00	10.00	69.57	0.00	16.67
4. Chemicals	50.00	25.00	10.53	45.83	0.00	11.11
5. Electrical machinery	16.67	38.10	11.76	50.00	0.00	13.33
T o t a l	24.24	23.23	7.53	60.00	3.30	21.84
B. By export orientation						
1. Exporters	23.64	23.64	8.00	62.71	4.08	17.02
2. Non-exporters	25.58	20.93	4.76	58.00	2.44	27.50
T o t a l	24.49	22.45	6.52	60.55	3.33	21.84
C. By size of firms						
1. Small	28.57	22.73	10.00	51.11	5.13	36.36
2. Large	21.05	23.64	5.66	66.15	1.92	12.96
T o t a l	24.24	23.23	7.53	60.00	3.30	21.84

Source: Survey of Philippine Industry and the Financial Crisis, 1998

The Bureau of Internal Revenue permits the filing of income tax returns on the accrual or cash basis. But the cash basis for tax purposes is actually a combination cash-accrual basis, since it is recognized that the application of a strictly cash approach could result in serious distortions in net income measurement. Furthermore, a strictly cash approach could offer a means of shifting significant amounts of revenues and expenses from one year to another by control of cash receipts and disbursements.

The Philippines has an Auditing and Standards Council (ASPC) established in 1987 which issues statements on the "Generally Accepted Auditing Standards." These standards are approved by the Board of Accountancy and the Professional Regulation Commission. The standards require the independent auditor to indicate whether the financial statements presented conform with generally accepted accounting principles.

The generally accepted auditing standards are applicable in the audit of the financial statements of banks, related financial institutions and business enterprises. The independent audit seeks to state an opinion on the fairness of financial statements which are judged on the basis of conformity with the GAAP and consistency of the application of those GAAP to the financial statements that cover the current and preceding period. In addition to the audit, management letters prepared by the auditors give important information on various facets of the enterprise's operations. For example, deficiencies in internal control, inadequate allowance for losses may be brought to the attention of interested parties by such management letters. The audit is undertaken by a cadre of qualified professional auditors who must pass stringent qualification standards and procedures laid down by the Professional Regulation Commission and the Auditing Standards Council of the Philippines. Although the audit is not a statement of the future

viability of the enterprise, it is quite important because it indicates the credibility and fairness of the financial statements.

The primary objective of an audit is the statement of an opinion by the independent auditor on the financial statements of the enterprise. For this purpose, the auditor studies and evaluates the accounting systems and internal controls; tests the operation of those controls and assesses the accounting transactions and account balances.

There are more than two hundred accounting and auditing firms registered with the SEC. Although almost all of them are located in the National Capital Region (NCR), however, they also provide auditing services to firms located outside of the NCR by sending audit teams.

In conclusion, it can be said that the existing accounting and auditing systems are comparable with those of more developed countries. However, the actual accounting and auditing practices are different from their respective standards. In particular, small- and medium-sized firms seldom keep good accounting system and this is one of the reasons why banks seldom lend to this group of borrowers. Also, it has been a general practice among firms to keep two books of accounts, one for their creditors (this is called in-house financial statement) and one for the BIR for tax purposes, and the difference between the two are glaring. This is complicated by the fact that auditors certify only the accuracy of the accounting information and methods used, not necessarily the veracity of the information. This is because under the Philippine practice, a lot depends on the willingness of the firm to disclose pertinent information about itself and the project. Therefore, audited financial statements are as good as the amount and quality of information provided by the firm. Under this environment, the problem of asymmetric information persists.

e. Policy Environment

Concerned about the rapidly deteriorating condition of the corporate sector as the crisis continued to deepen, the government introduced some measures to alleviate their plight. These are briefly discussed below.¹¹

BSP's NDF Facility

The Bangko Sentral ng Pilipinas (BSP) created in December 1997 the Currency Rate Protection Program (CRPP), which essentially is a non-deliverable forward (NDF) facility, to protect corporations with foreign exchange liabilities against currency

¹¹ See also Lamberte and Yap (1999).

fluctuation risk. Settlement of the difference between the contracted rate and the market rate is done in pesos. Eligible foreign exchange liabilities include unsecured registered foreign currency loans, foreign currency trust receipts and customer liabilities booked locally before 19 December 1997 that are unhedged. Later on, loans of exporters were included as eligible to the CRPP.

Since the CRPP can spread the demand for dollars between the spot and forward market, therefore, it can also ease the demand pressure in both the spot market caused by corporate borrowers wanting to cover their foreign exchange exposure and the domestic interest rate.

Required Reserve and Liquidity Requirements

The BSP has maintained its policy of gradually reducing the statutory reserve, which now stands at 8 percent. However, in view of the need to control liquidity growth and, at the same time, reduce the bank's intermediation cost during the crisis period, the BSP made a series of increases in the liquidity reserves, which reached a high of 8 percent in August 1998.¹² This was brought down to 4 percent in November 1997, but was raised again to 7 percent in March 1998 in exchange for the reduction in statutory reserves from 13 percent to 10 percent. Since October 1998, the statutory and liquidity reserves stand at 10 percent and 7 percent, respectively.

To reduce further the bank intermediation cost, the BSP increased the proportion of the interest-bearing statutory reserves from 25 percent to 40 percent in May 1988. Without this measure, corporations could have been paying much higher interest rates than they do during the crisis period and undermine their viability.

Industrial and Trade Policy

The government issued EO 465 on 13 January 1998 to modify the nomenclature and tariff structure of 22 industries identified as "*Philippine winners*". These are the industries which have proven to be competitive or with some potentials. EO 465 was the result of the review of the pace of tariff reduction under EO 264 in consideration of the recent Southeast Asian currency crisis. The review aimed to correct the remaining distortions in the tariff structure and to smoothen the pace of schedule of tariff reduction to deserving industries. The recalibration of the tariff structure was based on the pace of

¹² The BSP started in December 1993 to impose a 2 percent liquidity reserve on deposits, which banks can keep in the form of short-term, market-yielding government securities purchased from the BSP.

liberalization in other ASEAN countries and whether or not an industry has potentials or has proven to be competitive.

The “Philippine winners” include electronics, garments and textiles, metal products, processed foods, marine products, furniture, jewelry, holiday decors, seaweeds and carageenan, ceramics, marble products, basketwork, footwear, leather goods, fresh fruits, oleochemical products, fertilizer, copper products, petrochemical products, motor vehicle parts and components, iron and steel products, and industrial tree plantation products including rubber products.

The rates of duty for certain tariff lines were either raised or reduced under EO 645. Other tariff lines had the same rate as set under EO 264. It should, however, be noted that EO 465 was not designed to delay the attainment of a uniform tariff rate of 5 percent by 2004. While it resulted to the small increase in the overall average nominal tariff rate from the pre-EO 465 level, the overall effective protection rate actually went down.

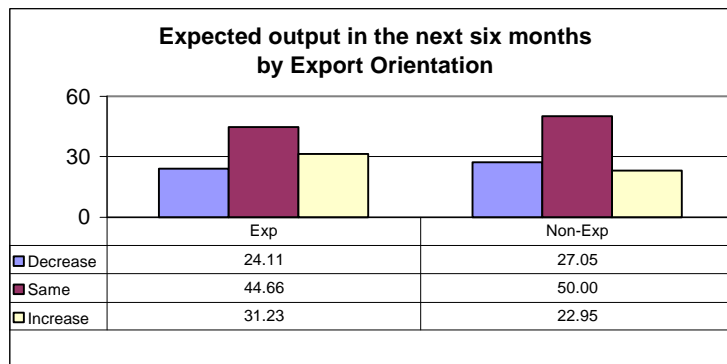
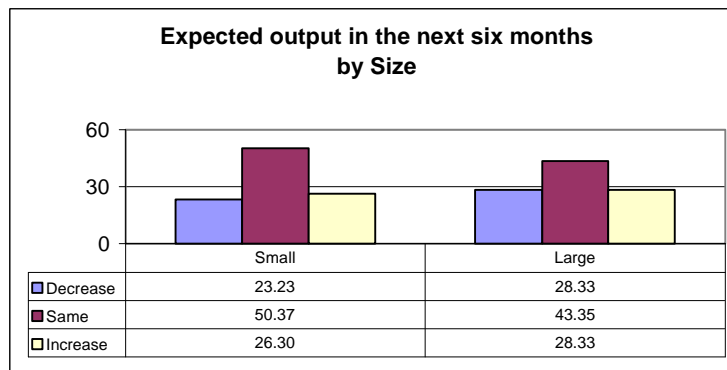
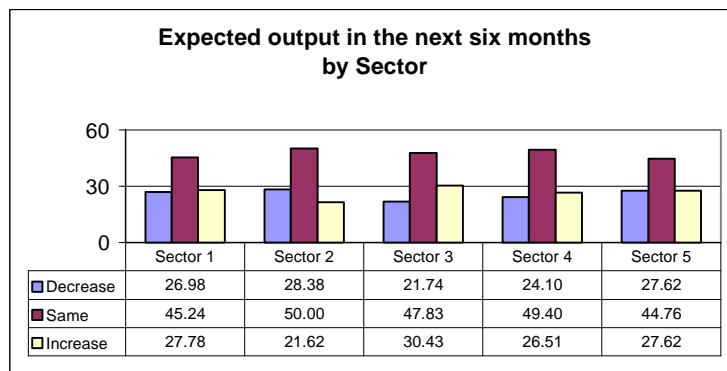
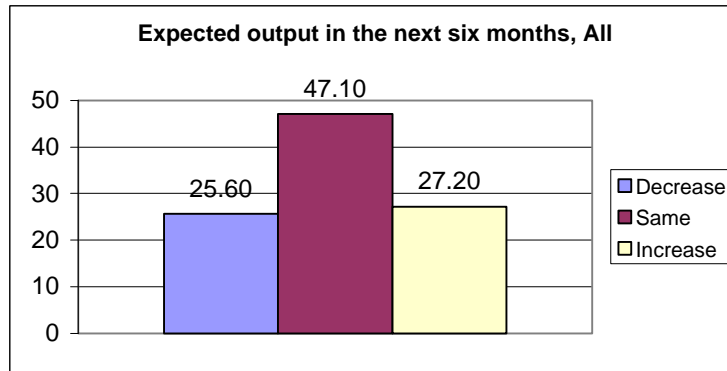
Enterprise Credit Support Programs

The government of the Philippines secured in December 1998 from the World Bank US\$150 million for the Private Enterprise Credit Support Project, which aims to assist enterprises to restructure and meet their permanent working capital needs, improve productivity and create jobs. It also secured another US\$150 million from the World Bank for its Third Rural Finance Project, which will assist farmers and agribusiness undertake new projects, and finance working capital requirements. A US\$7 million microfinance component is included in the project to supplement on-going microfinance programs and help satisfy demand for credit by small-scale enterprises.

5. SHORT-RUN PROSPECTS

The sample firms were not optimistic about the economy, in general, and their situation, in particular, in the next six months. Almost half thought that their capacity utilization rate, which already significantly dropped to a certain level since the onset of the Southeast Asian financial crisis, would remain the same, while one-fourth were expecting a further decline (see **Figure 12**). Only 27 percent were optimistic, i.e., expecting a rebound in their capacity utilization rate in the next six months. In terms of export orientation, results suggest that non-exporters were more pessimistic, i.e., expecting capacity utilization rate to decline further or remain the same in the next six months, than exporters. In terms of size, small firms were more pessimistic than large firms. When classified according sector, it appears that the wearing apparel sector was the least pessimistic and the textile sector the most pessimistic about prospects of their business in the short-term.

FIGURE 12. EXPECTED OUTPUT IN THE NEXT SIX MONTHS



6. CONCLUSIONS AND RECOMMENDATIONS

This study has examined the impacts of the Southeast Asian financial crisis that struck in July 1997 on the Philippine industries and their responses to such crisis. The data were collected from a sample of 541 establishments representing five manufacturing sectors, namely: food products; textiles; wearing apparel and leather; chemicals, rubber and plastic products; and electrical machinery.

The survey results clearly show that the capacity utilization rate of the Philippine manufacturing firms started to decline even before the crisis struck in July 1997, and that it continued to drop as the crisis deepened. While the recent drop in capacity utilization rate can be attributed to the slowdown in both the domestic and foreign demand for goods and the sudden rise in the cost of inputs, especially imported inputs, and interest rate, thereby squeezing the firms' profits, the earlier drop in capacity utilization rate could perhaps be due to overinvestment made by firms in building additional capacity given a much more liberal and cheaper access to external sources of funds. Thus, the current capacity underutilization rate may be attributed to both cyclical and structural factors, which call for demand management as well as industrial restructuring policy measures.

As the crisis deepened, there seemed to have emerged a consensus that firms were facing a credit crunch, that is, institutional lenders had stopped lending to them due to the highly volatile economic situation. The results of this study do not provide a clear evidence on the existence of a supply-side credit crunch during the crisis period. It is to be noted that a great majority of firms still had continued access to institutional loans, albeit at a much higher interest rate. While banks are now much more discriminating in lending to the business sector, the decline in total loan growth in 1998 could also be attributed to the lower demand for credit which was brought about by the sharp reduction in demand for goods produced by firms during the crisis period.

The significant drop in capacity utilization rate and output of firms during the crisis period would have required a large labor lay-off. However, to minimize the laying off of labor, firms resorted to other means, such as reducing workweek or days, applying forced vacation leave and freezing salary increases, to save some jobs.

Although this study has generally confirmed the adverse impacts of the financial crisis on the manufacturing sector, however, it also yields some positive signs which the government can use as a platform for formulating policies and programs to stage a rapid economic recovery. First, most of the firms surveyed were still earning profits, albeit declining in the last 2-1/2 months. If the worst of the crisis had already passed, then these firms can quickly rebound, using partly their profits to finance their growth. Second, most of the firms still have access to credit, although at relatively higher price. A reduction in the interest rate will surely help them a lot during the recovery period. Third, although firms resorted to some cost-cutting measures, still most of them preferred to preserve jobs, a strategy they think would pay off once the crisis fades away. With most of their core staff intact and excess capacity readily available, a resurgence in demand will certainly be most welcome by them.

All this leads us to conclude that the most appropriate policy the government could adopt at this point in time would be an expansionary one to stimulate aggregate demand. Both monetary and fiscal policies are required to support such expansionary policy.

There is still some room for relaxing monetary policy. First of all, inflation rate already started to come down in February of this year. The agricultural sector, particularly the crop sub-sector, which suffered a large decline in 1998 as a result of the El Nino weather phenomenon, is expected to rebound in 1999. In fact, the price of rice, which constitutes a large component in the consumer price index, already softened in the last few weeks. Second, the reserve money level during the February 1999 test period was found to be P30 billion below the level agreed upon between the government and IMF under the existing standby arrangement program.

The relaxation of monetary policy, which will push interest rate down, can accomplish four things. One is that it will lighten the debt-service burden of enterprises, freeing some resources that can be used to meet increased demand for goods. It can also reduce the cost of debt restructuring, whenever resorted to by both enterprises and banks. Still another benefit is that it can stimulate consumer spending and revive the sagging consumer durable sector. Finally, it can help arrest the appreciation of the peso vis-à-vis the US dollar and improve the competitiveness of the export sector, which has been pulling the economy up during this crisis period.

There is a limit as to how much monetary policy can accomplish the task above. Pushing the interest rate further down and exhorting banks to lend to private enterprises would not be sufficient to stimulate growth unless demand for goods is pulled upward with the help of fiscal policy. Thus, on the fiscal side, the pump-priming measures should continue in 1999, focusing on the critical sectors of the economy, specifically the agriculture sector, which has the most extensive linkages with the rest of the economy, and the social sectors, such as health, education and housing. However, there are two important programs the government could launch to help directly the labor and manufacturing sectors. One is to provide skills training programs for those who have been laid off as a result of the retrenchment undertaken by firms in the wake of the crisis and offer them in various regions of the country so that the benefits from such training programs can be widely spread. It is to be noted that those who were laid off are younger, most probably less experienced and less skilled but highly trainable. The government may give incentives to those firms that have resorted to reducing work hours/days to encourage them to offer their unutilized facilities and, maybe, the slack time of their senior staff for training.

The other is for the government to stimulate the housing sector, which has direct short-term economic and social impact. There is still a huge backlog of housing units, especially for the lower middle class and poor households, in the country today. One of the ways of doing it is to beef up the resources of the Home Insurance Guarantee Corp. (HIGC) so that it will have additional resources to provide guarantees to bonds to be

issued by local government units (LGUs) for the purpose of financing mass housing projects in their respective localities. Of course, the government housing finance system has to be reformed quickly so that it can efficiently provide the services the public requires of it without necessarily dissipating its funds.

To support its pump-priming measures in 1998, the government tapped foreign sources of funds to avoid crowding out the private sector and also secure foreign exchange to beef up the country's international reserves. Since private sector demand for funds is still down and interest rate has already come down to the pre-crisis level, it would be worthwhile for the government to secure funding for its pump-priming measures for 1999 from the local market, which now stands cheaper than foreign loans.

Finally, the recent crisis has underscored the importance of keeping a flexible exchange rate policy. However, even if a flexible exchange rate policy is pursued and corporate governance is improved, still the level of foreign capital inflows experienced by the country before the Southeast Asian crisis is unlikely to be attained in the near term unless additional measure are put in place. One way is to liberalize further the entry of foreign banks into the country, preferably allowing foreign banks to wholly own domestic banks either by establishing new subsidiaries or buying existing ones, especially those that are not well capitalized. The presence of more foreign banks in the country can certainly breathe new life to the banking system and make additional capital available to Philippine industries.

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ANNEX A

Sector	Industry Codes	Description
1	Food products	
	1512	Production, processing and preserving of meat and meat products
	1513	Processing and preserving of fish and fish products and other seafoods
	1514	Processing and preserving of fruits and vegetables
	1515	Manufacture of vegetable and animal oils and fats
	152	Manufacture of dairy products
	154	Manufacture of starches and starch products
	156	Manufacture of bakery products
	157	Manufacture of sugar
	158, 1593, 1594	Manufacture of coconut-based products
	1591	Manufacture of cocoa, chocolate and sugar confectionery
	1592	Manufacture of macaroni, noodles, couscous and similar farinaceous products
	1595	Coffee roasting and processing
	1599	Manufacture of other food products, nec (eg, soup, vinegar, nuts)
2	Textiles	
	171	Spinning, weaving and finishing of textiles
	172	Manufacture of other textiles
	173, 174	Manufacture of knitted and crocheted fabrics and articles; Manufacture of embroidered fabrics
3	Wearing apparel & footwear	
	181	Ready-made garments manufacturing
	189	Manufacture of wearing apparel, nec
	192	Manufacture of footwear
4	Chemical products, rubber	
	2411	Manufacture of basic chemicals except fertilizers and nitrogen compounds
	2412	Manufacture of plastics in primary forms and of synthetic rubber
	2423	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
	2424	Manufacture of pharmaceuticals, medicinal chemicals and botanical products
	2425	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
	2429	Manufacture of other chemical products, nec (eg, matches, ink, glues and adhesives)
	243	Manufacture of man-made fibers
	251	Manufacture of rubber products
	252	Manufacture of plastic products
5	Electrical machinery	
	311	Manufacture of electric motors, generators and transformers
	312, 313	Manufacture of electricity distribution and control apparatus; Manufacture of insulated wire and cables
	321, 322	Manufacture of electronic valves and tubes; Manufacture of semiconductor devices and other electronic components
	323, 324	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy; Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods

ANNEX B

Industry Stratum/Sector		ATE Class				% of total
		20-49	50-99	100-199	>=200	
TOTAL	Frame	46.9%	21.1%	15.7%	16.4%	100.0%
	Sample	19.3%	17.2%	18.0%	45.5%	100.0%
Food products	% frame	54.1%	21.0%	11.5%	13.3%	32.0%
	% sample	18.1%	17.4%	19.6%	44.9%	22.0%
Textiles	% frame	40.1%	24.1%	16.3%	19.5%	10.0%
	% sample	21.3%	23.2%	18.5%	37.0%	18.0%
Wearing apparel & footwear	% frame	46.8%	19.7%	15.8%	17.7%	20.0%
	% sample	15.6%	12.5%	13.7%	58.2%	22.0%
Chemical products, rubber	% frame	46.3%	22.1%	19.4%	12.2%	23.0%
	% sample	20.3%	15.2%	16.9%	47.6%	20.0%
Electrical machinery	% frame	21.8%	19.0%	21.8%	37.5%	6.0%
	% sample	21.8%	19.0%	21.8%	37.5%	18.0%