THE EFFECTS OF GLOBAL CRISIS ON TURKISH INDUSTRIAL FIRMS

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INTRODUCTION

No one could have foreseen that East Asian Countries which had successful emerging economies could suddenly become embroiled in one of the worst financial crisis of post war period. Their very success led foreign investors to underestimate their underlying economic weaknesses; weak financial systems, large external deficits, inflated property and stock market values, maintenance relatively fixed exchanged rates and over dependence on short–term capital flows (IMF Staff, 1998).

The crisis which first began in Thailand effect on other East Asian Countries, Russia, Latin America and most of the emerging economies including Turkey. Almost all of the emerging markets began to be considered as risky, as a result, international investors forwarded their funds to the developed markets where they consider them as safe heavens. Because financial sector was unable to provide necessary funds to real sector, companies have serious financial problems.

In this study, the effect of the global crisis on the Turkish Industrial Firms which registered to Istanbul Stock Exchange (ISE) were investigated. This study attempts to clarify, through a questionnaire, which sectors were affected more seriously by this crisis, what problems it caused and how they are solved. The findings that were revealed are investigated in a comparative form.

1. THE GENERAL EVULATION OF CRISIS

1.1. Chronological Overview Of The Global Crisis

Chronological developments of the crisis were summarised as follows.

Table 1:Chronological Layout Of The Global Crisis (From Turkish Central Bank Investigate)

	TIME	OCCASION
1997	Mid - May	- The Thailand Bath under speculative attack
July	Early	- The Thailand Bath exchange rate regime was switched to floating one and the Thailand Central Bank applied to the IMF for technical assistance. - The Malaysian Central Bank intervened in foreign exchange markets.
	Mid	- The Philippines and Indonesia extender their floating bands of exchange rate
	Late	- The Malaysian foreign exchange markets collapsed
August	Early	- Thailand announced a stabilisation program for financial sector as recommended by the IMF
	Mid	- Indonesia switched to flexible exchange rate regime - The IMF accepted a financial aid package of 17.2 billion US dollar to Thailand
October	Late	-The situation of the companies that had been facing payment difficulties resulted in speculative attack on Won in Korea - The IMF announced a financial aid package of 40 billion dollars to Indonesia
November	Early	- 16 banks in Indonesia were liquidated - Latin American stock markets crashed
	Mid	- Nikkei, Dow Jones, Dax Extra ended in day lows - The floating band of won was extended to 10 percent.
	Late	- Yamaichi of Japan went bankrupt.
December	Early	- Russia raised interest rates. The IMF rescue package of 57 billion US dollars to Korea was accepted a fiscal surplus by spending cuts and tax hikes as well as Lowering growth level in 1998 to 3 percent from 6 percent. - The IMF revised its world growth by downgrading. - Social Stress in Indonesia.
	Late	- World's major banks agreed on rescheduling short-term debt of Korea amounting 100 million US dollars.
1998	Jan	- Letter of intent was signed by the IMF and Indonesia that requires government to bail-out highly indebted banks and limits fiscal construction. - Asian currencies headed south against US dollar. - Rescheduling of Asian nations short-term debt by international creditors. Korea's rescheduling amounts to 24 billion US dollars.
February		- The Gulf Crisis.
End-Mar		- The US Senate as well as industrial nations agreed on a more transparent and accountable IMF.
End-May		- Russian Economic Stress due to liquidity squeeze and rush to foreign exchange.
July		- Fed intervened in the Japanese yen market with 5 billion US dollars purchase of yen .
August		- Latin Americans Stock Markets crashed due to loss of confidence in emerging markets - Russian Economic Crisis, "Moratorium for 90 days on foreign debt".
October		- Fed and BOJ lowered interest rates and 4 billion US dollars of bail-out package for LTCM was announced. - The IMF-World Bank Annual Meeting. - "G7 countries decided on financial aid package to the crisis countries, especially to Latin America". - Japanese bank restructuring package of 1 trillion US dollars was announced.

Source: Binay, ŞÜKRÜ & Ferhan SALMAN, "The Global Crisis and The Turkish Economy", The Central Bank Of The Republic Of Turkey Research Department, November 1998, Ankara

1.2. The Reasons of the Crisis:

The reasons of the Asians crisis have been discussed very deeply in the international economic literature. The interesting one among them belongs to Michael Camdessus, Director of IMF. He expressed his ideas about this crisis as follows:

> The crisis in the emerging market economies have arisen from complex interactions among shortcomings associated with three highly positive global trends :
>
> - The growth of capital markets, facilitated by high technology and sophisticated financial instruments, led to an upsurge in capital flows to emerging markets, some of it highly mobile. But decisions were too often based on inadequate risk assessment by the investors.
>
> - Many emerging markets tried to open their capital accounts to reap the benefits of competition and international finance. But too often the sequence of liberalisation was not appropriate, and supporting policies were too weak. The creation of conditions that would encourage more stable, longer term flows lagged behind the rapid de facto freeing of short-term flows, as banks and corporations in the emerging markets sought ways of taking advantage of abundant finance.
>
> - Economic policy in most countries has leaned toward freer markets, a smaller role for the state, and the use of indirect instruments of macroeconomic management. But countries in many cases were deficient in one or both of two vital areas: they did not strengthen their governance or their economic institutions, especially prudential and risk management mechanism; and their macroeconomic management was not sufficiently robust.

Corporations, government and banks have close relationship in many East Asian Countries. Many sectors of their economies are dominated by conglomerates controlled by a small group, non-transparent accounting, interlocking ownership between the corporate and financial sector and weak minority shareholder rights. It is estimated that the top 10 families in Indonesia in 1997 controlled corporations worth than half of the countries market capitalisation. Comparable figures are one–half in Thailand, one–fourth in Korea and Malaysia. Their central banks have had little if any, meaningful independence from their national treasuries. The commercial banks have been handmaidens of political authority, with consequent resource misallocation, inflation of property and equality values and egregious corruption (Iskender, Meyerman, Gray and Hogan, 1999). Weakness of financial institutions has not only impeded adjustment to domestic economic shocks but has also exacerbated macroeconomic instability stemming from external shocks (John M. 98, P 181)

1.3. The Effects of The Crisis

The large depreciation of Asian crisis currencies seriously impaired the balance sheets of already weak and unhedged domestic financial institutions and corporate, and led to sharp increases in credit risk.

Compared with the situation at time of the 1994-95 Mexican crisis, the reduction in capital flows to the crisis countries was not offset by a reallocation of flows to emerging markets in other regions (Adams, Mathieson, Schinasi and Chadha, 1998).

Table 2: Net Capital Flows (Billion Dollars)

TOTAL	**1994**	**1995**	**1996**	**1997**	**1998**	**1999** (est.)
Net private capital flows[1]	160.5	192.0	240.8	173.7	122.0	196.4
Net direct investment	84.3	96.0	114.9	138.2	119.6	119.7
Net portfolio investment	87.8	23.5	49.7	42.9	18.0	34.4
Other net investment	-11.7	72.5	76.2	-7.3	-15.6	42.3
Net official flows	-2.5	34.9	-9.7	29.0	37.0	-8.9
Change in reserves[2]	-77.2	-120.5	-115.9	-54.7	-67.1	-91.1
DEVELOPING COUNTRIES						
Net private capital flows[1]	136.6	156.1	207.9	154.7	99.5	168.6
Net direct investment	75.4	84.3	105.0	119.4	99.1	99.1
Net portfolio investment	85.0	20.6	42.9	40.6	19.4	32.2
Other net investment	-23.8	51.2	60.0	-5.3	-19.0	37.3
Net official flows	9.1	27.4	-3.4	17.5	28.6	5.7
Change in reserves[2]	-42.4	-65.6	-103.4	-55.2	-37.3	-80.8
ASIA						
Net private capital flows[1]	63.1	91.8	102.2	38.5	1.5	58.8
Net direct investment	43.4	49.7	58.5	55.4	40.6	43.7
Net portfolio investment	11.3	10.8	10.2	-2.2	-7.0	5.3
Other net investment	8.3	31.3	33.5	-14.7	-32.1	9.8
Net official flows	6.2	5.1	9.3	17.7	24.7	7.0
Change in reserves[2]	-39.7	-29.0	-48.9	-17.2	-24.4	-65.5

Source: IMF Staff, “The Asian Crisis: Causes and Cures”, F&D, June 1998, Volume:35, Number:2

(1) Because of data limitations, other net investment may include some official flows.

(2) A mines sign indicates an increase.

Despite of huge amount of capital outflows from East Asian Countries, the investments in some sectors continue in that region.

Bayer proceeds with investment plans, despite economic slowdown, despite the economic crisis that has ripped Thailand since mid 1997. Bayer has pledged to invest DM 500 million through 2001. Bayer plans to rise Asia’s share of its overall sales from 14 % in 1996 to 25 % by 2010 (Baldave, 1998). Despite economic crisis, multinational companies are continuing to maintain their confidence in Asian investment. In December 1997, Roche completed its sixth joint-venture agreement in China. The investment comes as a survey reveals that most U.S. and European multinationals with sales or manufacturing in Asia remain committed to the region despite currency turmoil and the prospects of austere measures imposed by IMF in return for its huge loans (Kevin, 1998).

The effects of crisis in East Asian Countries can be summarised as follows:

-A loss of confidence in financial markets and large losses in financial markets.
-Huge amount capital outflow.
-Decreasing in international reserves.
-Sharp currency depreciation.
-Increase in debt stock and debt services ratios.
-Weaker exports to Asia and higher imports from region.
-The decline in commodity prices.

1.4. Solutions To The Problems

The Asian crisis underscored the importance of strong supervisory and regulatory structures and sound corporate governance for the efficient intermediation of private capital flows and appropriate management risk (The Role of International Community, Annual Report of IMF 1998, s.26).

In the wake of the Asian Crisis, the international community, including the IMF, has been undertaking a far reaching reassessment of the of the international architecture for crisis prevention and resolution (Adams, Mathieson, Schinasi and Chadha, 1998).

One of the primary ways in which the architecture of international monetary system may be improved is by developing and implementing international standards to strengthen the operation of financial markets. These standards or principles attempt to (1)foster effective financial market and reputation, (2)improve the institutional infrastructure, (3)enhance surveillance, market discipline, and corporate governance.

In discussing the role of the international organisation in helping contain the crisis, several Directors were concerned about the possible moral hazard implications of the current crisis resolutions mechanism. They stressed the importance of ensuring to the maximum extent that IMF financing did not serve to bail out private creditors. The IMF, other international financial institutions, and the official sector should not assume the burden of financial support alone; private sector creditors should play a part as well (IMF Annual Report, 1998, s.26).

Banking sectors in the emerging markets during 1997-98 were closely influenced by broader macro economic and financial developments and shoved clear regional patterns related to the Asian financial crisis. Accordingly IMF arrangements with Indonesia, Korea and Thailand have placed primary emphasis on the restructuring and re-capitalisation of financial institutions in these countries. In addition, wide-ranging reform’s are being introduced to avoid the re-emergence of similar problems, through strengthening supervisory and regulatory regimes, reducing connected lending, and scaling back excessively broad national safety nets that have contributed to problems of moral hazard (Adams, Mathieson, Schinasi and Chadha, 1998).

2. THE EFFECCTS OF GLOBAL CRISIS ON TURKISH INDUSTRIAL FIRMS: AN EMPRICAL INVESTIGATION

The loss confidence in emerging markets due to the global crisis resulted in an increasing demand for foreign exchange where the reserve of the Turkish Central Bank fell by 2.8 billion US dollars in the last quarter of 1997.

The crisis affected Turkish Treasury's debt program and cost of financing (T-Bill rates) and maturity of debt.

The Istanbul Stock Exchange (ISE) also presented a downward trend during and after the crisis periods. Due to the uncertainty about the near future and existing capital outflow, ISE composite index entered into a declining trend.

The financial sector immediately responded to the volatility due to the crisis, however real sector followed a longer pattern.

When the terms of trade measures examined, there cannot be seen any significant disadvantages situation against Turkey. However, due to an approaching world recession the volume of the trade began to decline as in the case of world economy. It is observed that a downward trend in export and import figures (Turkish Central Bank, 1998).

2.1. Research Objectives

In this study, the effects of the global crisis on Turkish Industrial Firms which registered to Istanbul Stock Exchange (ISE) were investigated. This study attempts to clarify through a questionnaire, which sectors were affected more seriously by this crisis, what problems it caused and how they are solved.

2.2. Research Frame And Source of Data

Population of this research were Turkish Industrial Firms. Sample set consisted of 116 Industrial ISE firms among The Top 500 Turkish Industrial firms **(Large Firms)** and 50 of other ISE firms **(Small Firms)**.

Probability sampling was used to select sample firms.

2.3. Research Methodology

Mail survey was used for this research. It was developed a questionnaire designed to measure the effects of global crisis on Turkish Industrial firms. This questionnaire included 25 questions: 4 of them multiple-choice questions, 5 of them were scale questions , 15 of them were dichotomous questions and only one of them was open-ended question. This questionnaire was mailed to 116 of ISE firms among The Top 500 Industrial Firms and 50 of other ISE firms. Response rate was 33 percent (55/166).

2.4. Analysing Data

%20 of sample firms operate in the chemicals, petroleum, rubber and plastic product sector; %18 of them in the food, beverage and tobacco sector; %12 of them in the textile, wearing apparel and leather sector; %12 of them in the basic metal industries sector and the rest of them in other industrial sectors.

%92.6 of the sample firms are owned by private sector and only %7.4 of them are owned by public sector. %24.5 of the sample firms have less than 250 employees.

To explore the global crisis and its results in Turkey, 8 questions asked and responses are provided in Table 3

Table 3:The impacts of the crisis on firm's in 1998

Did your sales from production fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	32	58.2
NO	18	32.7
UNCHANGED	5	9.1
TOTAL	55	100.0
Did your production capacity fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	23	41.8
NO	24	43.6
UNCHANGED	8	14.5
TOTAL	55	100.0
Did your real assets investment fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	26	48.1
NO	18	33.3
UNCHANGED	10	18.5
TOTAL	54	100.0
Did your number of employees fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	24	43.6
NO	11	20.0
UNCHANGED	20	36.4
TOTAL	55	100.0
Did your domestic sale fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	35	63.6
NO	18	32.7
UNCHANGED	2	3.6
TOTAL	55	100.0
Did your export volume fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	19	35.8
NO	24	45.3
UNCHANGED	10	18.9
TOTAL	53	100.0
Did your import volume fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	24	44.4
NO	20	37.0
UNCHANGED	10	18.6
TOTAL	54	100.0
Did your profit margin fall in 1998?		
ANSWERS	FREQUENCY	PERCENT
YES	35	64.8
NO	12	22.2
UNCHANGED	7	13.0
TOTAL	54	100.0

As observed on Table 3, %58.2 of the firms revealed a drop in sales from production as compared to their sales in 1998. About forty two percent said that they reduced their operations capacity while %48.1 reported a reduction in the actual production output. About %43.6 indicated that they laid off workers because of the global crisis. In terms of their sales, some %63.6 indicated that sales in Turkish markets dropped, and %38.8 reported a drop in export volumes. Firms with response indicating a reduction in import are %44 among the surveyed.

Table 4: How was your sales policy changed?

ANSWERS	FREQUENCY	PERCENT
UNCHANGED	12	22.2
EXTENDED THE MATURITY	32	59.3
SHORTENED THE MATURITY	8	14.8
USE CASH DISCOUNT	2	3.7
TOTAL	54	100.0

Among the surveyed firms %22.2 did not change their sales conditions as compared to the year before, but %59 of the firms extended the maturity of payment. And, %14.8 of the firms shortened the payment time.

Table 5: How was your raw materials purchasing policy changed?

ANSWERS	FREQUENCY	PERCENT
UNCHANGED	26	51.0
EXTENDED THE MATURITY	21	41.2
SHORTENED THE MATURITY	4	7.8
TOTAL	51	100.0

Forty nine percent of the firms changed their purchasing policies in 1998. For instance, %41.2 indicated that they had extended the payment time to the supplier, while only %7.8 said that they shortened the time of payment to suppliers.

Table 6: Were foreign credit standards increased during the crisis?

ANSWERS	FREQUENCY	PERCENT
NOT USE ABROAD CREDIT	25	46.3
YES	23	42.6
NO	6	11.1
TOTAL	54	100.0

During the global crisis period both, national and international financial institutions raised their credit terms and conditions. In this period about %46.3 of the surveyed firms indicated that they had not used financial credits, and, %42.6 informed that they used credits from the international institutions.

Table 7: Were domestic credit institutions standards increased during the crisis?

ANSWERS	FREQUENCY	PERCENT
YES	36	67.9
NO	6	11.3
UNCHANGED	11	20.8
TOTAL	53	100.0

Observation of the data also indicate that problems exist in the use of credits from the national credit organisations. About %68 revealed that terms and conditions in using credit have worsened.

Table 8: Were there any reduction in competitive advantages after East Asian Crisis?

ANSWERS	FREQUENCY	PERCENT
YES	20	38.5
NO	10	19.2
UNCHANGE	22	42.3
TOTAL	52	100.0

Global crisis originated in the far east also reduced the competitive advantages of Turkish firms. About %39 the firms in our sample indicated that their competitive advantages had been negatively effected by the crisis.

Table 9: Is devaluation of Turkish Liras necessary to gain competitive advantages in the international markets?

ANSWERS	FREQUENCY	PERCENT
YES	7	13.5
NO	45	86.5
TOTAL	52	100.0

Concerning the necessary steps to take in order to maintain competitive advantage, %13.5 of the respondents favoured to devalue Turkish Liras.

Table 10: Significant level of sectors according to how they affected by the global crisis

SECTORS	Highly Affected	Affected	Partially Affected	Not Affected	Never Affected
Mining and mineral products	-0-	7 (*) 41.2	5 29.4	4 23.5	1 5.9
The food beverage and tobacco sector	1 3.8	4 15.4	7 26.9	12 (*) 46.2	2 7.7
The textile, wearing apparel and leather sector	19 (*) 70.4	5 18.5	3 11.1	-0-	-0-
The wood products including furniture sector	-0-	9 (*) 50.0	6 33.3	3 16.7	-0-
The paper and paper products, printing and publishing sector	2 10.5	4 21.1	10 (*) 52.6	3 15.8	-0-
The chemicals, petroleum, rubber and plastic products	4 16.7	11 (*) 45.8	7 29.2	2 8.3	-0-
Non-metallic mineral product sector	3 15.0	7 (*) 35.0	6 30.0	3 15.0	1 5.0
The basic metal industries	8 (*) 36.4	8 (*) 36.4	5 22.7	1 4.5	-0-
Fabricated metal products, machinery equipment sector	6 33.3	7 (*) 38.9	3 16.7	2 11.1	-0-
The automotive sector	22 (*) 100.0	-0-	-0-	-0-	-0-
The electricity, gas and water sector	-0-	5 27.8	9 (*) 50.0	1 5.6	3 16.7

Note: First numbers shows frequencies and second numbers shows percentages in columns.

Consistent with the development in the entire world, in Turkey too, automotive, textile and apparel, leather and metal are strongly hit.

Table 11: Significant level of sectors according to firm's scales (%)

SECTORS	AFFECTED			NOT AFFECTED		
	Large	Small	General	Large	Small	General
Mining and mineral products	66.7	100.0	70.6	33.3	-.-	29.4
The food beverage and tobacco sector	45.9	50.0	46.1	54.1	50.0	53.9
The textile, wearing apparel and leather sector	100.0	100.0	100.0	-.-	-.-	-.-
The wood products including furniture sector	82.4	100.0	83.3	17.6	-.-	16.7
The paper and paper products, printing and publishing sector	82.4	100.0	84.2	17.6	-.-	15.8
The chemicals, petroleum, rubber and plastic products	90.9	100.0	91.7	9.1	-.-	8.3
Non-metallic mineral product sector	82.4	100.0	80.0	17.6	-.-	20.0
The basic metal industries	95.0	100.0	95.5	5.0	-.-	4.5
Fabricated metal products, machinery equipment sector	87.5	100.0	88.9	12.5	-.-	11.1
The automotive sector	100.0	100.0	100.0	-.-	-.-	-.-
The electricity, gas and water sector	75.0	100.0	77.8	25.0	-.-	22.2

When we examined various industries to understand the degree of damage created by global crisis it was obvious that the mining industry was negatively influenced, %70.6 of the firms stated that global crisis hit them hard. Among the firms operating in food and beverages, and tobacco industries %46.2 said that the global crisis negatively affected their operations. All the firms in textile, leather and shoe manufacturing stated that global crisis worsened their business. Eighty three percent of the firms in wood and forestry, and furniture industries informed that their business slowed because of the crisis. Percentage of the firms negatively influenced by the global crisis in paper and printing industries is 84.2, while the same percentage for firms in chemicals and petroleum industries is 91.7. In the basic metal industries this rate, percentage of firms negatively affected by the crisis is %95.5. In the fabricated metal products, machinery and equipment industries the rate is %88.9; automotive %100, and finally electricity, gas and water %77.8.

When we tried to make the meaning of these rates, we concluded that about %80 of the firms in the country got hit hard by the global crisis. When we examined the date in terms of firms size and degree of influence of the crisis, almost all of the small-size firms negatively affected by the crisis.

Responses to the question dealing with financial institutions that provide funds during crisis.

Table 12: Significant level of financial institutions that provide funds during the crisis period

INSTITUTIONS	Highly Significant		Significant		Partially Significant		Not Significant		Never Significant	
Suppliers	11	32.4	13	(*) 38.2	7	20.6	2	5.6	1	2.9
Banks (commercial banks)	17	38.6	20	(*) 45.5	3	6.8	2	4.5	2	4.5
Private finance ins. (Islamic Banks)	4	18.2	2	9.1	1	4.5	8	(*) 36.4	7	31.8
Leasing institutions	2	9.5	3	14.3	4	19.0	7	(*) 33.3	5	23.8
Factoring institutions	5	20.8	6	(*) 25.0	3	12.5	5	20.8	5	20.8
Consumer finance institutions	2	10.5	1	5.3	3	15.8	8	(*) 42.1	5	26.3
Stock Exchange	5	22.7	3	13.6	3	13.6	4	18.2	7	(*) 31.8
Eximbank	19	(*) 51.4	9	24..3	7	18.9	-0-		2	5.4

Note: First numbers shows frequencies and second numbers shows percentages in columns.

During the crisis period Turkish Eximbank seem to be the most important provider of the funds to business. Then we see that banks and factoring institutions that follow Turkish Eximbank to provide the business with necessary funds.

Table 13: Importance of financial institutions that provide funds during the crisis period according to firm's scale (%)

INSTITUTIONS	SIGNIFICANT			NOT SIGNIFICANT		
	Large	Small	General	Large	Small	General
Suppliers	92.9	83.3	91.2	7.1	16.7	8.8
Banks (commercial banks)	94.5	71.4	90.9	5.5	28.6	9.1
Private finance ins. (Islamic Banks)	35.3	20.0	31.8	64.7	80.0	68.2
Leasing institutions	41.2	50.0	42.9	58.8	50.0	57.1
Factoring institutions	60.0	50.0	58.3	40.0	50.0	41.7
Consumer finance institutions	39.8	-.-	31.6	60.2	100.0	68.4
Stock Exchange	55.6	25.0	50.0	44.4	75.0	50.0
Eximbank	96.6	87.5	94.6	3.4	12.5	5.4

Among the surveyed firms %94 reported that they used Eximbank credits. Ninety one percent said that they used credits from banks other than Eximbank. Those who reported that they used trade credits were %91.2 of the entire sample. Firms using the funds obtained from factoring institutions were %58 of the total surveyed; while only %42.9 indicated the use of leasing institutions for funds. In terms of size of firms and source of funds we observed no significant differences.

The responses to the question the most benefited financial instruments, and their evaluation explained below.

Table 14: Financial instruments that were used during the crisis

INSTRUMENTS	Highly Significant		Significant		Partially Significant		Not Significant		Never Significant	
Trade (suppliers) credits	7	19.4	17	(*) 47.2	7	19.4	3	8.3	2	5.6
Bank credits	20	(*) 46.5	14	32.6	3	7.0	5	11.6	1	1.8
Bonds, ABS etc.	1	5.6		-0-	5	27.8	6	(*) 33.3	6	(*) 33.3
Receivables discount	3	15.0	4	20.0	7	(*) 35.0	4	20.0	2	10.0
Initial public offerings IPO	4	20.0	3	15.0	4	20.0	3	15.0	6	(*) 30.0
Incentive credits	14	(*) 48.3	6	20.7	4	13.8	2	6.9	3	10.3

Note: First numbers shows frequencies and second numbers shows percentages in columns.

Bank credits seemed to be the most utilised source of funding for the firms in our study. Following the bank credits is the low interest, credits or inducement supported by the government. When we examined the data with respect to the use of financial instruments, %86.1 said that used supplier credits and %86 bank credits, %83 incentive credits, %70 receivables discount and finally %55 revealed that they used stocks export (public offering) as financial instruments.

Table 15: Financial instruments that were used during the crisis according to firm's scale (%)

INSTRUMENTS	SIGNIFICANT			NOT SIGNIFICANT		
	Large	Small	General	Large	Small	General
Trade (suppliers) credits	86.3	85.7	86.1	13.7	14.3	13.9
Bank credits	91.6	57.1	86.0	8.4	42.9	14.0
Bonds, ABS etc.	35.7	25.0	33.3	64.3	75.0	66.7
Receivables discount	70.6	66.7	70.0	29.4	33.3	30.0
Initial public offerings IPO	64.7	-.-	55.0	35.3	100.0	45.0
Incentive credits	84.0	75.0	82.8	16.0	25.0	17.2

Responses to the question dealing with the impact of global crisis and evaluations of answers are explained below.

Table 16: Significant level of basic factors according to how they affected by the crisis

FACTORS	Highly Affected		Affected		Partially Affected		Not Affected		Never Affected	
A decrease in the domestic sales	17	32.1	19	(*) 35.8	11	20.8	5	9.4	1	1.9
A decrease in the export level	6	13.3	16	(*) 35.6	14	31.1	4	8.9	5	11.1
Difficulties to get foreign funds	3	7.3	12	29.3	14	(*) 34.1	5	12.2	7	17.1
An increase in competitive advantages of foreign competitors	5	11.6	13	(*) 30.2	10	23.3	9	20.9	6	14.0
A break in firm's operations because of uncertainty	1	2.5	8	20.0	8	20.0	15	(*) 37.5	8	20.0
A requirement to search new markets	1	2.6	12	(*) 30.8	12	(*) 30.8	12	(*) 30.8	2	5.1
Difficulties in receivables collection	13	27.1	11	22.9	14	(*) 29.2	8	16.7	2	4.2

Note: First numbers shows frequencies and second numbers shows percentages in columns.

Responses to this question indicate that none of surveyed firms “influenced a lot” by the global crisis. However, they report that there is a drop in the national and international sales and the inform that they lost competitive advantage when compared to their competitors in the global markets.

To be precise, %88.7 of the firms report that sales in the national markets had dropped, and %80 say that there is drop in international sales. In terms of the appropriate financial resources they need, %70.7 reveal that they could not find appropriate financial resources for their business while %79.2 indicate difficulties concerning with the collection of their receivables. Sixty four percent attempted to find new markets because of the global economic crisis and %65.1 believed that competitors gained advantage. Out of the firms in the entire sample only %42.5 indicated that they stopped their operations because of the unstable conditions.

Table 17: Significant level of basic factors according to firms scale (%)

FACTORS	AFFECTED			NOT AFFECTED		
	Large	Small	General	Large	Small	General
A decrease in the domestic sales	88.4	90.0	88.7	11.6	10.0	11.3
A decrease in the export level	76.9	100.0	80.0	23.1	-.-	20.0
Difficulties to get foreign funds	69.4	80.0	70.7	30.6	20.0	29.3
An increase in competitive advantages of foreign competitors	63.9	71.4	65.1	36.1	28.6	34.9
A break in firm's operations because of uncertainty	36.3	71.4	42.5	63.7	28.6	57.5
A requirement to search new markets	57.5	100.0	64.1	42.5	-.-	35.9
Difficulties in receivables collection	80.0	75.0	79.2	20.0	25.0	20.8

When this question is evaluated in terms of firm size, we observed that all of the small-size firms have losses as regard to national sales, while %90 indicated loss of sales in the international markets. Therefore we see that all of the surveyed firms are involved in the search for new markets for their products and services. As result of the analysis, we can say that small-size firms are affected negatively more than the large-size firms.

Responses to the question on precautions to reduce the effect of crisis and discussion.

Table 18: Significant level of measures that aim to offset effects of crisis

FACTORS	Highly Significant		Significant		Partially Significant		Not Significant		Never Significant	
Tend to get stronger financial sources	23	45.1	25	(*) 49.0	3	5.9	-0-		-0-	
Taking measures to increase efficiencies in assets (especially in current assets)	36	(*) 67.9	17	32.1	-0-		-0-		-0-	
Divestiture of some idle assets	8	16.0	21	(*) 42.0	19	38.0	2	4.0	-0-	
Shrinking of firm to survive	5	10.9	21	(*) 45.7	18	39.1	2	4.3	-0-	
Increasing effectiveness of firms by using niche-marketing	33	(*) 62.3	12	22.6	7	13.2	1	1.9	-0-	
Delaying new investment opportunities	7	14.3	18	(*) 36.7	3	46.9	-0-		1	2.0
Searching merger opportunities	4	8.3	11	22.9	18	(*) 37.5	12	25.0	3	6.3
Protecting or expanding of current market share by entering new markets	29	(*) 58.0	18	36.0	2	4.0	1	2.0	-0-	

Note: First numbers shows frequencies and second numbers shows percentages in columns.

Here we discuss the precautions that the firms have to take to lessen the impact of global crisis. First of all, firms must be careful with the use of current assets in order to increase the effectiveness of these assets. Second, firms suffering from the global economic crisis have to give prime importance to customer satisfaction in their marketing activities. Finally, it is necessary that these firms try to find new markets so that they can maintain their existing sales volume and gain new customers.

Among the firms questioned in terms of necessary precautions to deal with the global crisis, %100 said that they have to solidify their financial resources. Ninety six percent on the other hand believe that they should got rid off their useless fixed assets. Some %95 of the firms reported that they need to reduce their operations to stay in the business. While %98 of the firms believe in that they can be more effective in the marketing efforts if they pay attention to customer satisfaction. To remain in the business, %98 think that they should avoid new investments for a while. Those who think that existing sales volume could be kept if alternative markets are created or developed is %98 of the surveyed firms. Some %68 percent on the other hand propose to merge with other firms to deal with the global crisis.

Table 19: Significant level of measures that aim to offset effects of crisis according to Firm's scale (%)

FACTORS	SIGNIFICANT			NOT SIGNIFICANT		
	Large	**Small**	**General**	**Large**	**Small**	**General**
Tend to get stronger financial sources	100.0	100.0	100.0	-.-	-.-	-.-
Taking measures to increase efficiencies in assets (especially in current assets)	100.0	100.0	100.0	-.-	-.-	-.-
Divestiture of some idle assets	97.5	90.0	96.0	2.5	10.0	4.0
Shrinking of firm to survive	94.6	100.0	95.7	5.4	-.-	4.3
Increasing effectiveness of firms by using niche-marketing	97.7	100.0	98.1	2.3	-.-	1.9
Delaying new investment opportunities	100.0	87.5	98.0	-.-	12.5	2.0
Searching merger opportunities	67.5	75.0	68.8	32.5	25.0	31.2
Protecting or expanding of current market share by entering new markets	100.0	85.7	98.0	-.-	14.3	2.0

We observed significant differences as regard to this question between large-size firms and small-size firms.

CONCLUSION

Because of the global crisis in 1998, almost half of the Turkish manufacturing firms along with the drops in sales, production capacities were also reduced. Because of the reduced production capacity, profit margins were decreased. Additionally, several manufacturing enterprises had to lay off employees.

Our findings indicated that the hardest hit sector of the economy were automotive, textile and the basic metal industries. Food and nutrition sector was the least influenced from the crisis. About %80 of the Turkish manufacturing enterprises were affected negatively due to global economic crises.

In order to avoid or reduce the difficulties stemming from the crises firms turned to manage their current assets more effectively; emphasize customer satisfaction and niche-marketing; and find new markets for their products and services. Because of the devaluation in the foreign countries Turkish manufacturing industries lost competitive advantage and thus started emphasizing marketing activities more than before.

Furthermore, to deal with the global crisis-related problems firms revised their purchasing and sales policies. While firms tried to extent the time in selling efforts, they tried to maintain the existing terms and conditions in purchasing decisions.

During the crisis period, both national and foreign credit institutions made it more difficult to obtain financial resources for the firms. Also in this period, due to incredible amount of the government financing requirement, firms were not able to borrow money with acceptable interest rates, and therefore they had to pay for the increased credit costs. Even though cost of borrowing was high, large size firms preferred to finance their operations through commercial banks. The reason for this is that large size enterprises as subsidiaries of holdings were able to borrow from the parent banks. Overall, Turkish Eximbank regarded as the primary financial source for the firms to benefit from. Therefore, during this crisis period Turkish Eximbank was relied upon as an institution to solve export related problems of the manufacturing enterprises.

Along with individual precautions that the firms take to lessen the effect of crisis, the new government started negotiations with the IMF to receive the needed international financial support. Other countries also have held meetings with the IMF to lessen the impact of crisis. To deal with the global crises Turkish firms need to get a support from the international financial institutions as well as IMF support.

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