

**First International Student Conference:
“Financial Economics”**

**I. Hakan Yetkiner
Editor**

Copyright © 2006

ISBN: 975-8789-04-X

Izmir University of Economics Publication no: IEU-005

**Izmir University of Economics
Sakarya Cad. No.156, 35330 Balçova, Izmir, Turkey**

IZMIR UNIVERSITY OF ECONOMICS

**FIRST INTERNATIONAL STUDENT CONFERENCE
“FINANCIAL ECONOMICS”**

Izmir, TURKEY

April 14-15, 2005

Introductory Words

İzmir University of Economics was established as a public corporation on April 14, 2001 by the İzmir Chamber of Commerce Education and Health Foundation. It is the first foundation university of İzmir with the mission to provide high quality integrative education in all areas that are related to economy. The vision of İzmir University of Economics is to be a higher education institute with world-class education, training and research facilities to develop individuals that can deliver high quality services for both national and international communities and to display life-long leadership qualities.

One critical step towards the achievement of abovementioned mission and vision is to make students involve actively in scientific communication and in generation of scientific knowledge. To this end, İzmir University of Economics organized the First International Student Conference in April 14-15, 2005. I happily observed that the conference was a great success in terms of giving the students the opportunity to present original research, express and exchange their opinions and ideas, and meet other students who have common interests. In all these aspects, this conference serves very much to our mission and vision and therefore I wholeheartedly congratulate the organizers, the participants, and the supporters of the conference.

Ekrem Demirtaş

President, Board of Trustees

Introductory Notes

Izmir University of Economics organized the First International Student Conference in April 14-15, 2005. The subject of the IEU First International Student Conference was financial economics. Financial economics is gaining eminence as the need to frame financial issues in the broader economic environment become critical for a better understanding of the problems and devising realistic solutions. Furthermore, the global integration of financial markets increasingly necessitates an international perspective. Therefore, choosing financial economics as the subject of the IEU First International Student Conference was the ideal venue to bring students of Economics, Business and Finance from all over the world together. And that happened indeed. Students all over the world showed up great interest to the First International Student Conference, and we happily hosted them in our university. I believe that this conference series will soon become one of the top research occasions in the region and Izmir University of Economics is ready to host and to support such occasions by all means.

Prof. Dr. Attila Sezgin

Rector

Editor's Notes

On April 14, 2005, Izmir University of Economics (IEU) hosted the First Annual Student Conference in Economics and Business Sciences. Students from all over the world have diligently presented their individual or group researches. The conference was not only a basis for scientific communication but also a solid ground for long-enduring friendship and multicultural environment.

The main theme of the conference was financial economics. The Conference started with opening speech of Prof. Dr. Attila Sezgin, the Rector of Izmir University of Economics. In addition to welcoming everyone to the Conference, Prof. Sezgin praised the willingness and dedication of students who conducted research and emphasized the importance of these events at the University.

The Conference had four sessions, two in the morning and two in the afternoon. In the first session, under the title of "Perspectives on Economic Growth", Azamat Imanaliev from International Ataturk Alatoo University, Kyrgyzstan, talked about "Effect of Foreign Direct Investment to the Economies of Central Asian Countries". Next, Seda Artkay, Izmir University of Economics, Turkey, made her speech on "Foreign Direct Investment and Growth". Pelin Bulut, Izmir University of Economics, Turkey, made an interesting speech on "An Econometric Research on the Implications of Globalization on Economic Growth". Prof. Turgut VAR served as the moderator in the session.

The second session was on "The Effects of Globalization on Emerging Markets", and chaired by Prof. Hülya TÜTEK. Zarina Turgunaliyeva, from International Ataturk Alatoo University, Kyrgyzstan, presented his paper "Financial Crises in Emerging Markets and Their Implications for the Poor". Melih Bozkurt, Middle East Technical University, Turkey, talked about "International Financial Flows and Growth: The Turkish Case", and finally Gülin Taçgın and Gökhan Efecan, Izmir University of Economics, Turkey, made a speech on "The Impact of Financial Globalization on International Crises".

The third session was on International Financial Markets, chaired by Prof. İsmail BULMUŞ. Marina Krokovich and Vadim Godun, Ben Gurion University, Israel, talked on "Is Contrarian Investment Strategy Profitable? The Case of Israeli Stock Market". Next, Volkan Coşgun, Izmir University of Economics, Turkey, made his speech on

“Examination of Capital Asset Pricing Model in Istanbul Stock Exchange”. Nazmi Akyüz, Izmir University of Economics, Turkey, talked about “What Are Future Contracts and the Future of Contracts in Turkey?” The last speaker, Yaron Amzaleg, Ben Gurion University, Israel, talked “On the Role of Institutional Investors in Corporate Governance: Evidence from Voting of Mutual Funds in Israel”.

The last session was on Financial Markets and the Real Economy, and chaired by Prof. Tunçdan BALTACIOĞLU. Tassos Chondrogiannis, Panteion University, Greece, made his speech on “Innovation and New Product Development Based on Inter-Regional Networks”. Next, Hakan Güngör, Izmir University of Economics, Turkey, spoke on “The Effects of Developments in Turkish Economy over the Sales of White and Electronic Goods Market”. Finally, İsmail Tartuk, Izmir University of Economics, Turkey, made the very last speech on “International Credit Rating Agency”.

The conference was not fruitful only in the sense of scientific communication but also of creating long-enduring friendships and a multicultural environment. The book you hold is an outcome of this scientific communication and multicultural environment.

We greatly thank Prof. Dr. Attila Sezgin, the Rector of Izmir University of Economics for his continuous support of scientific research. We owe a great deal to the organizing committee of the first IEU Student Conference, Prof. Attila Sezgin, Prof. Erhan Ada, Prof. Hülya Tütek, Prof. Oğuz Esen, Asst. Prof. Ayla Oğuş, Asst. Prof. Gülem Atabay, and Asst. Prof. Hasan Baklacı. Our thanks also go to Dean of Students for their assistance in organizing the conference.

Asst. Prof. Dr. I. Hakan Yetkiner

Director, Research Center “Izmir Congress of Economy”

Editor

TABLE OF CONTENTS

Effect of Foreign Direct Investment (FDI) to the Economies of Central Asian Countries	1
By AZAMAT IMANALIEV International Ataturk Alatoo University, Kyrgyzstan	
Is Contrarian Strategy Profitable? A Test of Tel Aviv Stock Exchange	12
By VADIM GODUN, MARINA KRAKOVITCH Ben-Gurion-University of the Negev, Israel	
The Impact of Financial Globalization on International Crises	25
By GÜLIN TAÇGIN, GÖKHAN EFECAN Izmir University of Economics, Turkey	
The Theory of Banking and Financial Crises: A Developing Country Perspective	41
By GULNAZ K. BALTABAEVA International Ataturk Alatoo University, Kyrgyzstan	
The Effects of Recent Developments in Turkish Economy Over the White Goods Market	51
By HAKAN GÜNGÖR Izmir University of Economics, Turkey	
International Credit Rating Agencies: Their Impact On Capital Flows To Developing Countries	63
By İSMAL TARTUK Izmir University of Economics, Turkey	
The Use of Barter to Finance Expenditures of the Enterprises	71
By MELEK AKIN Izmir University of Economics, Turkey	
International Financial Flows and Growth: Turkish Case	83
By MELİH BOZKURT Middle East Technical University, Turkey	
On the Role of Institutional Investors in Corporate Governance: Evidence from Voting of Mutual Funds in Israel	97
By YARON AMZALEG, URI BEN-ZION, AHRON ROSENFELD Ben-Gurion-University of the Negev, Israel	
Future Contracts and the Turkish Experience	115
By NAZMI AKYÜZ Izmir University of Economics, Turkey	

An Econometric Research on the Implications of Globalization on Economic Growth	129
By PELIN BULUT Izmir University of Economics, Turkey	
The Trade Liberalization Policy Followed by the WTO and IMF in 90s and its Implications for the Developing Countries	137
By RENATA AVELAR GIANNINI Universidade Estadual Paulista “Julio de Mesquita Filho”, Brazil	
How does FDI affect the Economic Growth?	147
By SEDA ARTKIY Izmir University of Economics, Turkey	
Examination of Capital Asset Pricing Model in ISE	159
By VOLKAN COSGUN Izmir University of Economics, Turkey	
Financial Crises in Emerging Markets and their Implications for the Poor	173
By ZARINA TURGUNALIEVA International Ataturk Alattoo University, Kyrgyzstan	

Effect of Foreign Direct Investment (FDI) to the Economies of Central Asian Countries

Azamat Imanaliev

International Ataturk Alatoo University

Abstract

This paper analyses the effect of Foreign Direct Investment (FDI) to the economies of Central Asian region. Moreover it examines FDI as a source of capital, technology and management expertise. Attraction of FDI has a big contribution to the economic growth of transition economies. Different investment climates in Central Asian countries create some dilemmas to invest to those countries. Also this research gives some information about problems concerning FDI and gives some recommendations for the solution of those problems. Furthermore article emphasis on the overall evaluation of strengths and weaknesses of different Central Asian Countries.

1. Introduction

Foreign Direct Investment is investment of foreign assets into domestic structures, equipment, and organizations. Foreign direct investment (FDI) has an important role to play in filling the gap between domestic savings and the high levels of investment needed to support economic growth in the Central Asian countries over the medium term. In most cases FDI helps accelerate the process of economic development in host countries. Governments try to improve investment climates, because FDI brings employment, equity, and innovation and increase competition in most of countries. Attraction of FDI is some kind of competition between Central Asian countries. In this severe competition there are some policies and strategies for the promotion of FDI. These policies concern legislation, trade barriers, tax and custom systems of Central Asian countries. Implementation of policies and strategies are very different from country to country.

Comparisons indicate that cumulative net FDI inflows per capita remain very low in the Central Asian Countries, compared to the Eastern European countries, despite progress in achieving macroeconomic stability and attaining relatively high growth rates. While levels of net FDI inflows prior to the Russian crisis in August 1998 were low in the wake of the 1997 Asian crisis, net FDI inflows generally fell further following the 1998 crisis. As economic activity in the region recovered starting especially in 2000, it had been hoped this would lead to a surge in foreign direct investment.

2. FDI Climate in Uzbekistan

With a population of 25.5 million, Uzbekistan is the largest consumer market in Central Asia. Rich natural resources such as gold, gas, and cotton offer attractive opportunities for investors. Uzbekistan is the world's fifth largest cotton producer and second largest cotton exporter after the United States. Uzbekistan has the potential to be a regional economic powerhouse, but the Government of Uzbekistan (GOU) has yet to create the necessary conditions to attract needed foreign investment. However, legislative requirements for these benefits are ambiguous, processes and procedures are cumbersome, and the regulatory environment is capricious. As a result, Uzbekistan has attracted less foreign direct investment per capita than any other Commonwealth of Independent States (CIS) country despite its strategic location and considerable economic potential (Uzbekistan, 2005 Investment Climate Statement). The value of its oil and gas reserves alone is estimated at over USD 1 trillion. At present, only around 30 per cent of these reserves is being explored. As such, the scope for development is substantial. Uzbekistan also holds considerable reserves of the world's gold, copper and uranium.

In order to tap into these resources, affect structural reform and improve its competitiveness, Uzbekistan needs massive investment. There are more than 3,000 companies working in Uzbekistan with foreign investment from 90 countries, of which over 20% are wholly foreign owned. Around 80% of such companies work in the manufacturing sector. Uzbekistan is implementing a state investment program costing \$4.3 billion, 30% of which is foreign direct investment. The latter include some substantial joint ventures with major international companies (Daewoo, BAT Industries). However, in total, Uzbekistan currently attracts very small flows of FDI in absolute terms, in relation to the

size of its population and in comparison with the rest of Central Asia (Salikhova Gulnoza, Korea-2004).

2.1 Strengths and Weaknesses

Strengths

Attractive natural resource endowment

The country has a clear strength in gold mining potential. Gas and cotton can open doors for FDI opportunities and create some jobs in the economy.

Relatively large domestic and regional market

With a population of approximately 25 million, Uzbekistan is seen as presenting a sizeable market for investment in consumer goods and for services especially where distance or transport costs provide some natural shield from foreign supply.

Uzbekistan is socially a highly stable country.

Uzbekistan has not been subject to the unexpected and violent changes in government, which often destabilize the investment climate in other emerging markets.

Weaknesses

Corruption

Officials supplement their salaries through bribes; several major incidents of bribe solicitation have been reported to government officials.

Limited progress in privatization

The Government is generally unwilling to sell controlling interests in enterprises and demands prices far in excess of what investors would be willing to pay.

Transparency of the Regulatory System

U.S. companies have complained that Uzbek laws are not interpreted or applied in a consistent manner. Tax legislation is ambiguous and constantly changing.

Red Tape and bureaucracy

Government-owned banks, ministries and agencies interfere in business operations and in some cases make efficient operations almost impossible.

1.1 2.2 FDI statistics about Uzbekistan

Table 1. FDI Inflows to Uzbekistan
(MILLION US \$)

Years	2003	2002	2001
FDI	70	167	NA

Sources: County Commercial Guide: Uzbekistan,
U.S. & Foreign Commercial Service and
U.S. Department of State, 2002.

Table 2. Main FDI investors, 2003

COUNTRY	Russia	South Korea	USA
FDI Inflows (%)	15.8	9.8	8.7

Source: County Commercial Guide: Uzbekistan,
U.S. & Foreign Commercial Service and
and U.S. Department of State, 2002.

3. FDI climate in Kazakhstan

Kazakhstan has attracted around 75% of all FDI into Central Asia and about 10% of all FDI into the former communist bloc. Kazakhstan's FDI stock at end-2001 amounted to 50% of the country's GDP. Of all the potential investments oil has emerged as the key sector to ensure long-term economic growth. The recent discovery of the potentially huge Kashagan oil field under Kazakhstan's portion of the Caspian seabed has created an expectation that Kazakhstan will become oil exporter in the medium term (United Nations, New York-2003). Kazakhstan's large reserves of minerals are mainly oil and gas, but also uranium, gold, chromium, rare earth metals, and diamonds are the main attraction for foreign investors in Kazakhstan. Kazakhstan's investment conditions are also among the best in the former Soviet republics. A stable government, and an improving legal, tax, and regulatory framework attracts foreign investors. Nevertheless, a lot remains to be done to improve the business environment. Investors still have to overcome numerous bureaucratic and legal obstacles, and corruption is endemic to the system. Kazakhstan booming economy (the country's economy grew by 9.2% in 2003, GDP growth rates were 9.8% in

2002, 13.5% in 2001, and 9.8% in 2000)) is very closely linked to its rich oil and gas resources on and off shore near and in the Caspian Sea, which have attracted \$10 billion in foreign direct investment over the past decade (more than Russia), with over \$ 100 billion expected for the next ten years. Foreign direct investment inflows in the first nine months of 2003 reached 3.2 billion US dollars, which is 12% more than during the same period of 2002. The FDI/GDP ratio amounted to 7%, which ranges among the highest ratio in the world in 2003, according to the Central Bank of Kazakhstan. Since independence, Kazakhstan has attracted about 24.5 billion USD of foreign direct investment (FDI). The country has the highest FDI per capita rate in the whole CIS. The EU share in the total volume of investments is likely to remain high in the coming years. Two major oil projects, Kashagan and Karashaganak, in which European companies have strategic interests, are expected to attract massive investment flows (Economy, trade and investment).

3.1. Strengths and Weaknesses

Strengths

Rich natural resources endowment

Kazakhstan is among top world countries in the amount of proven reserves of oil and gas, and the potential for new findings. Kazakhstan's territory contains four different geological basins. Those basins remain largely unexplored even though current exploration activity is high.

Relatively large domestic and regional market

Kazakhstan is the largest economy in Central Asia, and with a population of nearly 15 million, and GDP and FDI growing at high rates. Kazakhstan is transit country with great potential to become a major transit route for the transition of goods between the Russia, Central Asian countries and China (United Nations, New York-2003).

Well-developed financial market

Today many Kazakh commercial banks became players in the international capital markets. In addition, Kazakhstan has become the leader among the CIS and Baltic countries in terms of average total capital per bank (about US\$12 million in 2000 and US\$27 million in 2002).

Weaknesses

Red Tape and Transparency

Investors claim to have excessive “red tape” and other delays, which hinder the establishment of new investment. Transparency in application laws remains a major problem and put barrier for large inflows of investment.

Corruption

Corruption is widespread and encouraged by the gaps left in the legal system, the broad discretion given to civil servants and the relatively low wage levels in the public sector.

Infrastructure

Kazakhstan as a vast thinly populated, land locked country faces particularly salient needs for infrastructure improvement in transport and telecommunications.

3.2. FDI Statistics about Kazakhstan

Table 3. FDI Sources, 1993-2000

COUNTRY	USA	UK	Italy	Turkey	Canada	Japan	Germany	Korea	China	Others
FDI Inflows (%)	33.7	14.8	4.1	4.1	3.1	2.4	2.1	12.4	4.4	18.9

Source: IMF, National Bank of the Republic of Kazakhstan

Table 4. Foreign Direct Investments in the Economy of the Republic of Kazakhstan by Types of Economic Activities (mln. USD)

Type of Activity	2003	%
Agriculture, forestry and fishery	4,5	0,04
Mining industry	2178,8	47,6
Processing industry	993,7	21,6
Electric power, water and gas distributing	67,7	1,5
Construction	53,8	1,2
Commerce, car and household appliances repairment	164	3,6
Hotels, restaurants	7,3	0,2
Transport, communication	75,8	1,6
Finance	52,7	1,1
Real estate business, leasing and services	987,1	21,5
Public Administration, education, health services	4,2	0,1
TOTAL	4595,7	100

Source: National Bank of the Republic of Kazakhstan

4. FDI climate in Kyrgyzstan

Kyrgyzstan welcomes FDI, realizing that it plays a vital role in the development of the country's economy. In this regard, the Government's goal is to establish an open and liberal regime for FDI including guarantees of national treatment, non-expropriation, repatriation of funds, access to international arbitration and transparent administration procedures. The Government places high priority on liberalization, private sector development and establishment of a market-oriented system in its economic policy. Priority will be given to the diversification of industry, with a higher degree of value-added and finished production in manufacturing, with emphasis on a combination of export-oriented enterprises and import-substitution strategies. It has a very liberal trade regime; no foreign exchange controls, and in 1998 acceded to WTO.

Substantial progress in tightening fiscal policies has been made, while the monetary policy framework and instruments have been overhauled in parallel with the overall reform of the financial sector. Despite these policies, FDI in Kyrgyzstan is still low, and half of foreign investment goes to the single project, Kumtor gold mining, which is a joint venture set up by the Kyrgyz government and Cameco Gold Co. of Canada (Bishkek/Kyrgyzstan-2004 Ibrahim Kelesh).

4.1. *Strengths and Weaknesses*

Strengths

Tourism sector

Kyrgyzstan has much potential for development of tourism field because of the natural beauty of its mountainous areas.

Attractive natural resources endowment

Kyrgyzstan has substantial natural resources, including gold and several other non-ferrous metals, huge resources of hydro energy and water resources.

Free Economic Zones

Export of goods manufactured in the FEZ, import of goods to the FEZ, and of goods destined for transshipment and re-export are released from custom duties (Kyrgyzstan-2001, Bishkek, Investment Promotion Center).

Weaknesses

High external debt of Kyrgyzstan

Despite the recent rescheduling of Kyrgyzstan's external debt by the Paris Club, the debt indicators remain excessively high and the debt situation in the country remains vulnerable to sudden shocks that could compromise its capacity to honor its debt.

Poor infrastructure

Kyrgyzstan faces the urgent need for improvement of its infrastructure, particularly of the transport infrastructure, if it wants to exploit its potential as a transit country. The national infrastructure, inherited from the Soviet period, is in poor condition and requires extensive investment and upgrading.

Difficult business environment

Weaknesses in public policy, poor legislation, lack of transparency and consistency in their implementation resulting in unfavorable business conditions are identified as significant weaknesses.

4.2. FDI statistics about Kyrgyzstan

Table 5. FDI Sources, 2004

COUNTRY	Canada	USA	Turkey	UK	China	Russia
FDI thousands (\$)	30417.8	4699.1	4497.1	4067.1	2126.3	5757.6

Source: Based on National Statistical Agency of Kyrgyzstan.

Table 6. Sectoral Distribution of FDI, 2004

SECTOR	Mining	Industry	Construction	Retail Trade	Transport, Telecom	Others
FDI Stock (%)	55	5.8	5.9	21.1	1.2	11

Source: Based on National Statistical Agency of Kyrgyzstan.

Table 7. Regional FDI Per Capita Comparison

	Country Population (Millions of People)	Direct Investment (Millions of USD)	Per capita Investment
Kazakhstan	16	1158	72,4
Kyrgyzstan	5	102	20,4
Uzbekistan	24	85	3,5

Sources: Report on World Development. – World Bank, 1998-1999. World Investment Report 1999.
Foreign Direct Investment and the Challenge of Development– United Nations.

5. Recommendations for Central Asian Countries

- Establishment of anti-corruption programs for each country;
- Emphasis on political stability of Central Asian region;
- Liberalization of trade policies including gradual removal of tariff and non-tariff barriers in the region, and establishment of free trade;
- Identify clearly each agency's area of responsibility and eliminate bureaucracy;
- Increase transparency in tax and custom regulations, improve implementation process;

6. Conclusion

The investment climate is an important element in increasing direct foreign investment to the country. Because the improvement of climate can bring billions of dollars to economies of Central Asian Countries. In my opinion, every each Central Asian should eliminate barriers concerning FDI.

Political stability must be stable in Central Asia. Revolution in Kyrgyzstan in 24th March of 2005 effected many investors to invest to our country. Despite these events Kyrgyz government will try their best to increase FDI, because FDI has an enormous effect to the whole.

In the final analysis, I recommend Central Asian states to regulate their tax, judicial and custom system and largely open doors to foreign investors. Because FDI clearly shows

positive results in the overall growth of Central Asian economies, directly affect GDP, employment and recover main strategic industries.

References:

Gulnoza, Salikhova. FDI and Economic Growth (Uzbekistan Case), Korea-2004

Investment Promotion Center “Investment in the Millennium: Kyrgyzstan-2001”, Bishkek.

Kelesh, Ibrahim. “A Case Study of Foreign Direct Investment in Kyrgyzstan”,
International Ataturk Alattoo Bishkek/Kyrgyzstan-2004

United Nations. New York-2003 “FDI in Central Asian and Caucasian Economies:
Policies and Issues”,

United Nations. New York-2003 “FDI in Central Asian and Caucasian Economies:
Policies and Issues”,

Websites:

http://europa.eu.int/comm/external_relations/kazakhstan/intro/ Economy, trade and
investment

<http://www.state.gov/e/eb/ifa/2005/42196.htm>, 2005 Investment Climate Statement –
Uzbekistan

Is Contrarian Strategy Profitable? A Test of Tel Aviv Stock Exchange

Godun Vadim

Krakovitch Marina

Ben Gurion University of the Negev

Abstract

In this study, existence of contrarian profits in Israeli stock market was examined according to the contrarian profit theory, which is well-known phenomenon in finance literature. Method of the paper was based on the Lo and MacKinlay's methodology, which is choosing only ten stocks portfolio; to purchase five shares with extremely bad performance and to short five shares with extremely good performance at the period $t-1$ and all shares have same weights. According to the results, Israeli market was not found as fully efficient, since positive profits can be obtained by using information set of market performance in the past.

1. Introduction

The contrarian profit theory is a well-known phenomenon in finance literature and in our investigation we decided to examine existence of contrarian profits in Israeli Stock Market. De Bondt and Thaler (1985) compared the performance of two groups of companies: losers and winners. They formed portfolios of the best and the worst performing stocks over the previous three years, and then computed the returns on these portfolios over the five years following portfolio formation. They showed that over 3- to 5-year holding periods, stocks that performed poorly over the previous 3 to 5 years achieved higher returns than stocks that performed well over the same period. Following De Bondt and Thayer's findings, Jegadeesh and Titman (1993) (here JT) showed that movements in individual stock prices over the period of six to twelve months tend to predict future movements in the same direction.

Our paper is based on methodology of Lo and MacKinlay (1990) and Lee, Chan, Faff, and Kalev (2003) and as an expansion to their methods a new principle to short term contrarian strategy was evaluated and it was called Extreme Value (EXV) method. Our EXV method yield profits both in Bull and in Bear markets. Furthermore, the lead-lag effect and overreaction were tested as sources of the profits. Existence of positive cross-serial covariance between two stocks may cause lead-lag effect. This effect occurs when one stock (usually of a big firm) rises and a cross serial covariance results in a rise of the second stock too (usually of a small firm).

The main conclusion of the work is that the contrarian profits exist in Israeli market, even after adjustment of those profits to the acceptable transaction costs.

2. Data Description

Our data contains weekly close-to-close returns of stocks, which comprise TA-100 10/01/91-23/01/03. TA-100 is an index in Israeli stock market that contains 100 stocks with the highest market value in the exchange. Additionally was used TA-25, that contains 25 stocks with highest market value. The TA-25 index is included in the TA-100.

3. Methodology

3.1. Equally Weighted and Value Weighted Models

In our work we used both Equally Weighted model, developed by Lo and MacKinlay (1990) and Value Weighted model that was developed by Lee et al (2003). Both methods are based on a zero investment portfolio and use market index in order to calculate weights of each share.

3.2. Expanded EW-EW* and Extreme Value Strategy

The EW* strategy was developed due to nonprofitability of above methods. The weight of each stock in portfolio is calculated as:

$$w_{i,t}^* = \frac{1}{10} (R_{i,t-1}, R_{i,m-1}) \quad (1)$$

where $R_{m,t-1}$ is the weekly return of equally weighted stock index, $R_{i,t-1}$ is the weekly return of an asset i at the period $t-1$. The return of equally weighted index is calculated as simple average of lagged returns of those ten stocks.

The Extreme value (EXV) strategy, similar to the strategies described above, also based on zero net investment. The idea is that the weights are calculated by using total stock returns and not by their residual returns from the index. Following this strategy, we comprise ten stocks portfolio, by purchasing five shares with extremely bad performance and going short on five shares with extremely good performance at the period $t-1$. Based on the equally weighted approach, the profit from our strategy is simply defined as:

$$\pi_t = \left[\sum_{i=1}^5 R_{i,t} - \sum_{j=6}^{10} R_{j,t} \right] * (0.1) \quad (2)$$

where i denotes the shares which exhibited the lowest performance and j those with the highest performance at the period $t-1$.

3.3. Synthetic share

In order to examine profits that were received by EXV method, we compounded Synthetic Share (in short SS). Every week the shares in our portfolio might be different based on (2), thus it is difficult to observe the source of the profits, and therefore the synthetic shares were used to help in this situation.

As we explained previously there are 10 stocks in our portfolio every week (5 in a long position and 5 in the short), for this reason there are 10 synthetic shares. Synthetic

share number 1 presents the returns of the stocks that achieved the highest return (different stocks every week). On the other hand share number 10 demonstrates stocks with lowest return on the market.

Synthetic shares vector at week t is:

$$SS_t = (SS_{1,t}, SS_{2,t}, \dots, SS_{10,t})$$

$SS_{1,t}$ is number 1 synthetic stock returns, represents the stock that raised the highest at week t

$SS_{2,t}$ is number 2 synthetic stock returns, represents the stock that had the second highest return at week t .

$SS_{10,t}$ is number 10 synthetic stock returns, represents the stock that descended the most at week t .

3.4. Structural Breaks

Our sample can be divided into several sub-periods:

1/1993-1/1997 -the low-volatile period with no trend

1/1997-9/2000- the period of continuous positive trend

9/2000-1/2003-the period of continuous negative trend.

This distinction is supported by basic dummy trend-break tests.

3.5. What Causes the Profits?

3.5.1. Lead- Lag Relationship

In order to test lead-lag relationship we follow JT by estimating the following regression:

$$SS_{i,t} = \alpha + \beta_{0,i} R_{m,t-1} + \beta_{1,i} R_{m,t} + \varepsilon_{i,t} \quad (3)$$

where $SS_{i,t}$ is the synthetic stock return at the period t , and $R_{m,t}$, $R_{m,t-1}$ are the returns of the stock market index at the periods t and $t-1$ respectively. If stock i reacts with a delay (i.e. underreacts) to the common factor, then $\beta_{0,i} > 0$, and if stock i overreacts to the common factor, then $\beta_{0,i} < 0$. This lead-lag structure in stock returns arises because of the differences in the timeliness and magnitude of stock price reactions to the common factor. Stock with larger (lower) than average contemporaneous betas $\beta_{1,i} > \bar{\beta}_1$ ($\beta_{1,i} < \bar{\beta}_1$) are defined as lead (lag) stocks.

3.5.2. Overreaction

Overreaction means that stock price reacts too much to the firm's specific information. Because the synthetic share contains different shares every week is impossible to test overreaction in this case. Therefore, the following equation was estimated:

$$R_{i,0} = \alpha_0 + \beta_0 R_{m,t} + \varepsilon_{i,t} \quad (4)$$

In equation (4) we have ignored the firm's specific factors; therefore the residuals from this regression include the information about these factors. In order to test the presence of overreaction, residuals were calculated from the model and they were tested for the first order correlation. Positive signs point at underreaction and negative at overreaction.

4. Results and discussion

4.1. General Results of E. W, V. W, E. W* and Extreme Value Strategies

Table A.1 in the Annex contains weekly average and cumulative returns from all the strategies discussed above. Cumulative return is the benefit from the investment for the whole period. The results clearly show low or sometimes even negative profits from the

traditional investment strategies. On the other hand, we report high profits obtained from EXV strategy.

Another interesting finding is significant size effect. This, however, is opposite to what the finance theory predicts. Stocks with high market value yielded high average returns relative to the small ones, the result which is robust for all the strategies. Since EXV strategy yielded the highest average and cumulative returns, our further analysis will be concentrated on this strategy.

4.2. Extreme Value Profits Analysis - Discussion

In order to investigate further, structural break points were tested. It was found that structural breaks exist on 2/1/97 and 7/9/00 (See Figure A.1 in the Appendix that shows the behavior of the index over the sample period).

Table A.2 contains the analysis of EXV strategy profits when the distinction has been made both between different sub-periods and between lowest and highest "extreme returns" stocks from the period $t-1$. In this table the first column shows common profits and the next two columns tell us how profits are distributed between two positions - short and long.

EXV strategy, based on stocks included in TA-25, composite yields average weekly returns of 0.42% over the positive trend period of 1/1997-9/2000 and 0.27% over the negative trend period of 9/2000-1/2003. However, the average weekly return over the period 1/1992-1/1997 (when the market behavior exhibited no significant trend) was 0.09% only.

If we take a look at the returns yielded by stocks with the lowest performance one week before (long position), the average return during the positive trend period was 0.44% (the last column of table A.2). During the "calm" period the average return was 0.31%, while negative trend of TA-25 decreased it to 0.07%. On the other hand, stocks with the highest performance one week before (short position), yielded in average 0.2% during the negative period and negative average returns in the rest of the cases. Therefore, during the "calm" and the positive trend period going only with a long position is preferable; while during the negative trend period combined strategy (i.e. EXV) is preferred.

The possible explanation to this phenomenon is that Israeli stock market is "pessimistic" in the sense of overreaction to negative news. Therefore, there is overreaction adjustment in case of stocks with previously negative returns, while there is no sign to overreaction to positive news, suggesting well known investors asymmetry behavior (such as "leverage effect " in asymmetric GARCH models). During the negative trend period there is an overreaction adjustment of stocks with previously positive returns, while there is no sign to such adjustment in case of the stocks with previously negative returns. This finding also supports the idea that Israeli stock market is "overcautious".

Statistical evidence for this phenomenon is given by the following test. There is significantly positive correlation between the profit obtained from long position and positive weekly returns of TA-25. On the other hand, there is significantly negative correlation between the profit from short position and the positive return of TA-25. We will try to see the sources of the profits by synthetic share that were introduced in the methodology section.

Most of the profits flowed from synthetic shares numbers 6-10, in other words from long position shares.

There are estimation results for equation (3) of lead-lag relationship for ten synthetic stocks. For stocks 2, 6, 8,10 estimated $\beta_{1,i}$ is significant at 10% and positive. For these stocks estimation results of $\beta_{0,i}$ are as follows:

$$\bar{\beta}_0 = 0.8767$$

$$\beta_{0,2} = 1.03 > \bar{\beta}_0$$

$$\beta_{0,6} = 0.939 > \bar{\beta}_0$$

$$\beta_{0,8} = 0.92 > \bar{\beta}_0$$

$$\beta_{0,10} = 0.04 > \bar{\beta}_0$$

Based on these results, synthetic stocks 2, 6, 8 are the leading and stock 10 is the lagged one. The fact that three of them were the stocks with negative performance at $t-1$ (6, 8, and 10) might partially explain the obtained profits.

An additional explanation might be an investor's overreaction to the specific firm news. For more detailed analysis of this issue we chose five stocks most frequently

included in our portfolio: Phenix (0.49%), Teva (0.3%), Alco (0.4%), Israeli Company (0.29%) and Discount Investments (0.29%), the average of all stocks is 0.24% over the sample period. Those stocks are volatile relative to the others (the volatility is given in the parentheses), property which appears to contribute to EXV strategy.

Table A.3 presents the profits from these five stocks, when the distinction has been made between long and short positions strategy for each share both for cumulative and average returns. In addition, for each stock we calculate cumulative and average returns from purchasing the stock at the beginning and selling it at the end of our sample period (Buy& Hold position). The results show that for all the stocks long position profits are higher from short position profits which are actually losses. Thus EXV strategy could have yielded much higher returns if we have used only long position, which, however, requires initial investment and contains some risks. We compare the loss from short position to alternative of borrowing a risk-free rate of 5%. The results show that if we want to keep a zero net investment, selling short is the preferable strategy.

Comparison between Buy & Hold strategy and EXV strategy yields mixed results. For some stocks EXV strategy is the profitable one and for the others B&H position yields higher returns.

In order to test for the presence of overreaction effect we test for the presence of negative correlation between one period lagged residuals from a simple market model (equation 4). For all the stocks except Phenix, we found the evidence for overreaction. In case of Phenix the adjustment to overreaction occurs after more than one period. Therefore, the contribution to contrarian strategy of this particular stock is after more than one period, in other words more than a week.

5. Summary and Conclusions

This work tested the profitability of contrarian strategy applied to the assets traded on the Israeli stock exchange. Traditional strategies, EW, WV, EW* were found to be not profitable after the transaction costs are taken into account. Therefore we, proposed an alternative strategy Extreme Value which yielded positive average weekly returns, and remains positive after taking into account average transaction cost (0.1%). Our strategy was found to be more profitable during the highly volatile periods.

According to decomposition of the profits by synthetic share, the lead-lag effect was not found to be the dominant reason for contrarian profits. The main source was found to be the investor's overreaction to the firm's specific information. Most of the stocks, which were found to be the major contributors to contrarian strategy, exhibited negative one period autocorrelation, which indicates that most of the stocks returns are adjusted to one period ahead.

Those findings indicate that Israeli stock market is not efficient in any sense, since positive profits can be obtained by using information of the market performance in the past.

References:

De Bondt W. F.M., Thaler R. H., (1985). "Does the Stock Market Overreact?" *Journal of Finance*, Vol 40, Pages 793-808.

Jegadeesh N., Titman S., (1995). "Overreaction, Delayed Reaction, and Contrarian Profits", *Review of Financial Studies*, Vol.8,Pages 973-993.

Jegadeesh N.,Titman S., (1993). "Returns To Buying Winners and Selling Losers: Implications For Stock Market Efficiency." *Journal of Finance*, Vol.48, Pages 65-91.

Lee D.D., Chan H., Faff R.W., Kalev P.S.,(2003). "Short- Term Contrarian Investing-Is it Profitable?. Yes and No." *Journal of Multinational Financial Management*, Vol. 13, Pages 385-404.

Lo A.W., MacKinlay C.A., (1990). "When are Contrarian Profits Due to Stock Market Overreaction?" *The Review of Financial Studies*, Vol 3, Pages. 175-250.

APPENDIX

Table A.1 distribution of the returns between four methods
(All stocks)

	EW	vw	EW*	EV
Average Week's Return	0.0075%	0%	-0.004%	0.22%
Cumulative return	4.29%	2.4%	-2.039%	130.12%

Table A.2 Profit specified of Extreme Value Method

TA25			
	Total Profit	Profit from 5 Extreme "Up" Stocks	Profit from 5 Extreme "Down" Stocks
1992-2003	0.22%	-0.08%	0.30%
1992-1997	0.09%	-0.22%	0.31%
1997-2000	0.42%	-0.02%	0.44%
2000-2003	0.27%	0.20%	0.07%
TA100			
	Total Profit	Profit from 5 Extreme "Up" Stocks	Profit from 5 Extreme "Down" Stocks
1992-2003	0.09%	-0.08%	0.17%
1992-1997	0.09%	-0.0446%	0.1363%
1997-2000	0.22%	0.35%	0.57%
2000-2003	-0.09%	0.25%	-0.35%

* The profit mentioned in table 3 is not profit from long or short separately, in order to see profit only from short or long it is necessary to multiply profits by 2

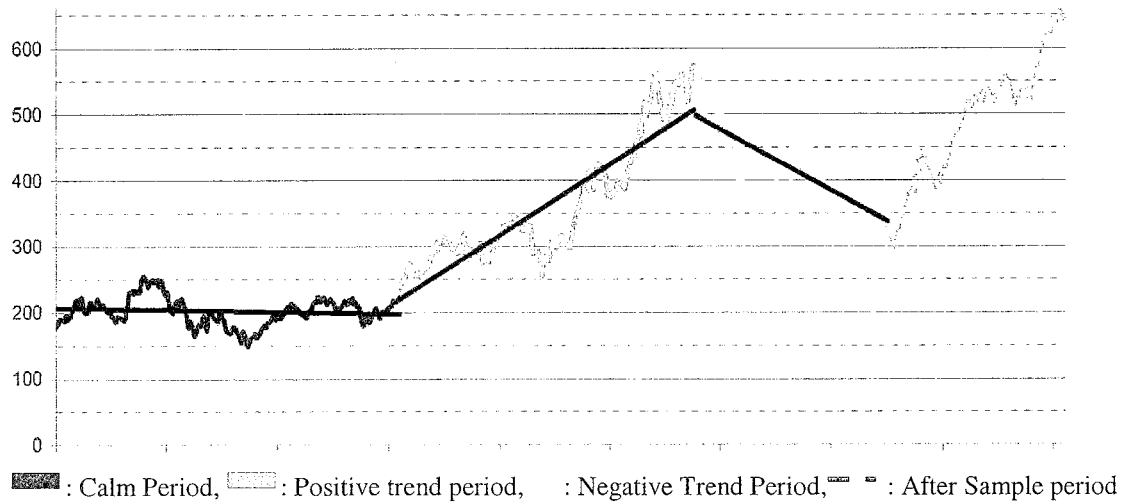


Figure 1: Behavior of index over time (TA25 Index)

Table 3: Distribution of profits between long and short in five common stocks

Name of Company	Short		Long		Buy and hold	
	Accumulated profit	Weekly average	Accumulated profit	Weekly average	Accumulated profit	Weekly average
Teva	-89.6%	-1.00%	632.10%	0.98%	412.84%	0.28%
Alko	-50.02%	-0.35%	635.16%	0.91%	235.63%	0.20%
Israeli corp.	-56.40%	-0.42%	121.64%	0.42%	175.91%	0.17%
Discount invest	-31.93%	-0.21%	9.92%	0.05%	147.43%	0.15%
Fenix	-91.45%	-1.05%	144.53%	0.39%	294.00%	0.23%

The Impact of Financial Globalization on International Crises

Glin Taın

Gkhan Efecan

Izmir University of Economics

Abstract

The term “globalization” simply refers to the interaction and integration of people, companies, and governments of different nations. This paper will mainly focus on developing countries and discuss the net benefits of globalization for them. Globalization has also been thought to be responsible for the recent financial crisis in several developing countries. According to the butterfly effect theory, the crises of the 90s were contagious; from Asia to Russia, then to Brazil, finally to Turkey and Argentina. These countries have faced massive outflows of short-term capital, which caused serious economic crisis due to increased risk and inappropriate macroeconomic policies. This paper aims to identify to what extent the globalization is responsible for these recent recessions. Previous crises show that opening up the portfolio flow causes negative effects. However, if adjustments are made properly, globalization will offer much more benefits for the developing countries are much more than the challenges.

1. Introduction

Today we live in a world where the greater parts of economic, political and cultural life are globally tied together. The term ‘globalization’ refers to the growing integration of economies and societies around the world (World Bank). Globalization, as a process, includes the expansion of international trade, increase in international flow of capital, technology and labor around the world along with tendencies toward universal application of some institutional, legal, political and cultural practices (Bonillo and Robinson). Since the beginning of the 20th century, the observations show such a progress that the share of economic activity between people who live in different countries has raised remarkably

According to Anninat, this progress moves us toward a globally integrated economy (Anninat, 2002). Trade theory (the comparative advantage and Stolper–Samuelson theorems) claims that opening of the capital account leads to capital inflows, increases the supply of capital and national capital stock, lower the rate of return and make investments cheaper. That is, it stimulates economic growth. Additionally, it increases the efficiency in allocation of investments (Mildner).

The cross-border economic activities take various forms; international trade, foreign direct investment and capital market flows, and they should be carefully distinguished. Here, it can easily be understood that globalization involves not only commodity markets but also international flows of both short term and long-term private financial capital. All these three items have different potential benefits and costs.

The most active partners of the financial globalization are the developed countries and the developing ones have started to play a part in this process. Being an actor in the financial global market is a choice of developing countries and due to the advantages, they participate in the integration. The World Bank generally favors greater openness to trade and FDI because the benefits of them outweigh the costs and risks in the long term. However, liberalization of other financial or capital market flows is a prudent matter due to the high volatility and globalization has also been thought responsible for the recent financial crises in several developing countries. The crises of the 90s were like this: it started in Mexico (1994), then in Asia (1997) and then jumped to Russia (1998), then continued in Brazil 1999, and in Turkey 2001.

The private capital movements in emerging markets have tripled in the last 20 years and daily transaction volume in the global financial markets has reached approximately forty times of commodity trade volume (Erçel, 2000). At the same time, the components of these movements have changed as well. That is, the share of the flows of portfolio investments and other short-term flows increased drastically.

‘The potential benefits of financial globalization leads to a more financially interconnected world and a deeper degree of financial integration of developing countries with international financial markets’ (Schmuckler). The main benefit of financial globalization for developing countries is to have a more complete, deeper, and better-regulated financial markets, which fosters economic growth (Levine & Zervos, 2001). However, financial globalization has some challenges to the countries in the short run most

important of which is a financial crisis. It is now a well-known fact that the gross volume of international capital flows across the national boundaries is far in excess of the financing needs of commodity trade flows or investments on physical capital, and is mostly driven by speculative considerations of risk hedging and currency speculation (Balkan, Yeldan, and Biçer, 2002)

Actually, the recent financial crises in the emerging markets occurred owing to the undesirable macroeconomic effects of the large, uncontrolled capital inflows as they lead to high real interest rates, inflationary pressures and currency appreciation, and widening current account deficits.

2. Reasons Behind Financial Crises

“There are mainly two arguments for the reasons of financial crises. It is necessary to investigate if the financial crises were caused by the liberalization of financial markets and irrational investor behavior, i.e. market failure or by structural problems i.e. government failure.”(Mildner). In the case of latter, it is argued that the cause of crises is not the financial liberalization. According to Krugman, government profligacy is the main cause of the crises (Krugman, 1999). If a budget deficit of a country, which has a pegged exchange rate, is financed by printing money, there occurs a high inflation. As a result, a devaluation of the currency is unavoidable. Then, investors leave the currency affecting reserves fall down (Economist, 1998). As for the market failure, asymmetric information prevents the market from efficient resource allocation. Consequently, international markets have tendency to radical investor reactions (Eichengreen and Michal, 1998). In addition to the asymmetric information, behavior of investors is a severe threat to the financial instability. Generally, investors invest in the assets that they expect future profits. Once they feel a threat in the country, they start to leave the market, which leads to a panic. Since this panic is not justified by available information, the market turns to be volatile and unstable. Due to these beliefs that the investors will behavior in this way, self-fulfilling crisis” is another explanation (Mildner).

“Thus, too much liberalization can be dangerous, there must be some optimal degree of financial repression which could be a good idea to approximate.”

(Hallwood&Macdonald, 2000). Besides, countries having such a situation run the risk of financial crisis after they open their capital accounts without setting some precautions.

3. Recent Financial Crises in the World

3.1. Mexico, 1994

When capital flow patterns in financially troubled countries are investigated, we see current account deficits created by offsetting inflows of capital to purchase assets like factories, real estate and stocks which are economically doubtful, and by over reliance on bank lending most of which are short term and in foreign money.

As in the case of Mexico, the financial crisis lived in 1994 was caused by the outflow of the hot capital due to the overvalued currency, high CA deficit, the decrease in private investments and political instability. The private capital had come at the end of 80s and in the early 90s with the effect of positive conjuncture (Akdiş, 2004). Between 1990 and 1993, the private capital inflow was more than \$72.5 billion. No one has foreseen a crisis in 1994. In contrast, people expected more foreign capital inflow after the ratification of entrance to the NAFTA by the US Congress. Nonetheless, due to the panic atmosphere towards the end of 1994, the foreign exchange reserves of Mexico were down from \$26 billion to \$6 billion. Followed by a devaluation of peso, a dangerous crisis took place (Akdiş, 2004). For a summary of economic chronology of Mexico, see Box 1 below.

Economic growth in Mexico between 1989 and 1994 had an average of 3.1 percent per year. In 1993 inflation was brought down to single digit levels for the first time in more than two decades (Tower, 1997). Mexico was attractive to foreign investment as its economic reform progressed. On the other hand, since there were no restrictions, such in or out flows were realized.

What were the main causes? All reasons mentioned before had some effect, but the combination of the exchange regime with a fast credit expansion a big part of which was of poor quality. Moreover, another important and structural effect was the fact that some bankers failed to meet the "fit and proper" criteria to own or to manage the institutions.

Concludingly, a fixed exchange rate, a considerable current account deficit, a substantial rise in U.S. interest rates, and a trigger which consists of the political tensions

accumulated during 1994 (elections) were the components of the crisis Mexico lived with very heavy costs.

Box 1: Chronology of Mexican economic crisis

March 1988: Stabilization of the currency with the peso exchange rate fixed at around 3 pesos to the dollar, but with a flexible band of 5 percent each way.

1988-1993: Growth of GDP averaged 3.5 percent between 1987 and 1992, but fell to 0.5 percent in 1993. Cumulative inflation in Mexico was 135.6 percent between 1988 and 1992, compared to 27.1 percent in the U.S.

January 4, 1994: Uprising of Chiapas peasants in the South.

March 1994: U.S. Federal Reserve Bank raised interest rates, bringing Mexican rates up also; presidential candidate Luis Donaldo Colasio assassinated on the 23rd; beginning of first run on the peso, leading to loss of foreign exchange reserves from a peak of 30 billion in January to 15 billion dollars in April. Loss of foreign reserves sterilized, i.e., the authorities issued domestic credit to prevent a fall in the money supply.

April-June 1994: Nevertheless peso interest rates began to edge up, because of the need of the central bank to draw in foreign exchange to maintain reserve: the premium on interbank rate over the LIBOR rate rose from 8-10 percent in the first quarter to 15-20 percent in the second quarter. Issue of short-term government bills switched from peso-denominated bills to dollar-denominated tesobonos, a trend which continued for the rest of the year. Inward flow of portfolio investment sank from an annualized rate of 15 billion dollars in the first quarter to near zero in the second quarter.

August 1994: Ernesto Zedillo of the ruling party was elected to the Presidency to take office in December.

September 1994: Jose Francisco Ruiz Massieu, secretary-general of the ruling party murdered. Raul Salinas, brother of the president was widely suspected of being the mastermind, and was in fact later arrested in February 1995.

October-December 1994: Outward flow of portfolio investment rose to 10 billion dollars.

November 1994: Further runs on the peso, triggered first by fears that the U.S. Congress would reject the NAFTA agreement and then by accusations made by Mario Ruiz Massieu concerning the September murder of his brother.

December 1994: The crash followed the attempt on the 20th to devalue by 15 percent, which was met with a fresh attack which exhausted the reserves. The peso had to be allowed to float: its value fell from 3.10 pesos to the dollar before the 20th to just a little short of 6 pesos to the dollar, and continued to drop further in later months. The government was unable to roll over its short-term debt at any reasonable rates, and the private sector also became unable to borrow.

December 1994-January 1995: The U.S. government put together an emergency 20-billion-dollar loan package coming from itself, and another 30 billion from the International Monetary Fund.

Throughout 1995: Mexico faced the consequences of the massive devaluation. Inflation and interest rates soared to reach levels of 100 percent in some months. Deep depression of the economy, with the GNP falling 9.3 percent (annualized rate) in the third quarter, allowed the trade deficit to turn into a surplus within two months of the devaluation. As many financial institutions and private companies faced sharply increased burdens of debt to foreigners with the fall in the value of the peso, there was a system-wide financial crisis. The rescue of financial institutions cost the Mexican government 12 percent of GNP. Outflow of portfolio investment totaled 60 billion dollars.

Source: TDRI Quarterly Review, Vol. 12 No. 3 September 1997, pp. 9-14

3.2. Asian Crisis, 1997

The most important financial crisis in the 90s was the Asian crisis. Starting in Thailand with the devaluation of Baht in July 2 1997, the economic depression got spread to the respectively stronger economies of Malaysia, Indonesia and the Philippines in a short period of time. At the beginning of the November, the crisis broke the South Korean economy, which was promising to have one of the most competitive industries in the world. Later, the crisis turned out to be a global threat by extending to Brazil (Aktan & Vural, 2004).

The fact that such a crisis was not predictable due to the absence of a problem with real economies of the countries in the region has raised question marks about the management and audit of the international financial systems and speculative capital movements which took a serious role in the crisis.

The capital flows were such excessive that they were greater than could be absorbed. That is, the capital flows were substantially larger than the current account deficits.

To illustrate, the capital inflows into Indonesia, Malaysia, the Philippines and Thailand in the five years 1990–94 were twice as large as the current account deficits (Calvo, Goldstein & Hochreiter, 1996, p. 125). In addition, capital inflows into Thailand in 1996 accounted for 13 per cent of GDP.

“Ajit Singh argues that the Asian crisis is mainly a crisis due to market failure and the liberalization of financial flows. Singh claims that the crisis was the result of the private's sector excessive reliance on hard currency denominated foreign loans and the failure of governments to control portfolio investment inflows. The liberalization of capital market allowed excessive short-term foreign currency denominated lending and encouraged extensive foreign portfolio investment. As soon as equity investors suspected that the exchange rate was about to fall, they sought to protect their funds by selling out. This, however, drove the exchange rate down, increasing the burden of foreign debts, pushing East Asia towards insolvency.”(Mildner). The net capital flows to Asia was \$102.2 billion in 1996, it decreased to \$38.5 billion in 1997, and then to \$1.5 billion in 1998.

In the countries that affected by the crisis, GDP values have decreased ranging from 5% to 15% in the year the crisis was lived. In the year that the crisis broke, Indonesia showed the biggest collapse with almost 15%.

The political insistence on the high growing rates, the official guarantee to the private sector projects and their even officially control, subsidization or private credits to some industries have put the banking sector in difficulty (Aktan & Vural, 2004). The provided official guarantee caused banks to behave more incautiously. Such released audit and infrastructure disabled banks to make reserves for debts. The ratio of all the companies' debt to capital stock in the affected countries was more than 100 % for each. Indeed, it was 236% in Thailand and 355% in the South Korea. Such an excess load of risk brought a financial crisis at the end (Aktan & Vural, 2004).

3.3. *Russia, 1998*

In Russia, the economic troubles starting in 1997 got tougher at July 1998. After the devaluation of ruble from \$1 to 6 to \$1 to 9.5, foreign capital movements were restricted and a 90 day moratorium was declared. Although this crisis had some reasons from the past, the effect of speculative attacks of the hot capital for short term profits is not ignorable.

In the period between 1996 and 1997, before the crisis, the amount of foreign capital in the finance and credit activities in Russia increased about 229%. During this period, with low interest rates like $\text{libor} +1$ or $+2$, incoming money was easily streamed to banks, and banks distributed that money to the domestic market with considerably high interest rates like 60%. However, the rapid decrease in the petroleum prices up to 50% which constitutes the 40% of the foreign income caused a \$10 billion loss. The sum of these effects created problems in the repayment of debts and the crisis was triggered (Akdiş, 2004).

Similar to the other crisis, financial points were seen in the first place. The critical events like bankruptcies of banks and companies, and Russian government's restriction of imports by an increase in tariffs were completed by Soros' low rating. Naturally, the crisis was spurred (Akdiş, 2004).

3.4. Brazil, 1999

Brazil was the world's eighth largest economy and also the largest economy of Latin America with a GDP of \$800 billion and a population of 165 million. In 1994, Brazil's economy was in such a bad situation that it had hyperinflation exceeding 1000 percent. However, after introducing the 'Real Plan', the inflation reduced to 1-3 percent and the growth rate reached to 4 percent. This plan was successfully implemented until the speculative attacks in 1998 and the crisis was unavoidable (Feldstein, 1998).

After the Asian crisis and the Russian crisis, the confidence of the investors' in the emerging markets had been damaged and Brazil also deeply affected (EconomicNews, 1999). In addition, Brazil had a large current account deficit.. Namely, Brazil was spending more on imports and interest of the foreign debt than its exports. As it is known that a country cannot sustain that much large current account deficit, speculative attacks to the currency started. (Believing that the currency was overvalued and would be depreciated.) From mid-August 1998 to the end of October 1998, the real had lost 2 percent of its value against the U.S. dollar. On January 6, 1999 the government announced a 90-day moratorium and this caused a raise of investors fears and in a few days about 1% billion left Brazil. Then a new currency band was established between R\$1.20 to 1.32 and by February 3, Real was devaluated by 32% to R\$ 1.79 (Langley&Bolling, 1999).

Also it has been observed that Brazil lost \$30 billion within 3 months after Russian crisis. In 1999, the economic growth was 0.8 percent, current account balance was -4.8% of GDP and foreign debt was 42.6% of GDP (Credit Issue-First Boston).

Capital account of Turkey was liberalized in 1989. Since then especially portfolio investments and other short term flows has increased relatively more than the FDI. In 1985 the net private capital flows to Turkey was only \$672 million, in 1990 it reached to \$4 billion, in 1995 to \$5.5 billion and in 1997 it was \$7 billion. Due to the Gulf Crisis in 1991, Turkish economic crisis in 1994 and Asian & Russia Crises in 1998, these years Turkey faced a huge amount of capital outflow. Although capital inflows to Turkey started to rise in 1999 and 2000, which was \$4.9 billion in 1999 and \$9.6 billion in 2000, after the crisis in 2001, the capital outflow reached to approximately \$13.9 billion (Kar, 2002).

4. Crises 2000-2001

“The economic crisis, which reached its peak in February 2001, has its origins in a three-year stabilizing, anti-inflationary program.” (Tsagaris, 2001).

The program had started out with a political backing, achieved remarkable initial results and was widely believed that it had a better chance of success than previous economic program. However, things started to go wrong. It was just 14 months after applying a three-year program, it came to end with high inflation rates, and in February, the government abandoned the currency peg and made an immediate devaluation of its currency, the lira, by around 30% (Bibbee, 2001).

In the second half of 2000, current account deficit started to rise rapidly owing to the appreciation of TL, which was caused by inflows of short-term financial capital (hot money). It is known that these rapid capital inflows and outflows have effects on macroeconomic indicators, which make especially emerging markets prone to the severe financial crises. At least these inflows and outflows have a significant role making the crises deeper (Guitian, 1998; Stiglitz, 2000). With this respect, ‘these flows had enabled, on the one hand, accelerated growth through cheapening of imports, and on the other hand, they motivated speculative transactions in the financial markets’ (Independent Social Scientists Alliance, 2004). In November 2000, problems with privatization and infrastructural reforms lead to fears that affecting the capital flow as well as the liquidity negatively. This situation caused the interest rates to rise and as a result, banking sector

faced a big problem rooted in the combination of portfolio losses (Bibbee, 2001). Loss of confidence in the banking system and currency peg caused a panic between investors and consequently, about \$5.4 billion capital went out (Boratav, 2001). In 2001 although the situation seemed well in 19 February 2001, after the quarrel between the president and the prime minister, the speculative attacks on currency started again and February 21 the government decided to shift to the float Exchange rate regime.

Comparing the net capital flow before and after crisis, it can be easily seen the substantial shock resulted from them. Between January and October 2000, the capital flow was +9.9 billion dollar and during the crisis this amount turned out to -13.5 billion dollar. That is it created a negative shock on the economy with 23.4 billion dollar. With respect to this, Boratav indicates that in order to be dragged into a crisis, a financial system facing that much big shock need not have structural problems (Boratav, 2001).

5. How to Prevent Crises?

Many policy reforms and some other suggested policies have been discussed after the recent crises.

1. People have had a consensus on the fact that "... before proceeding with capital account liberalization, a country needs to carefully consider deficiencies in domestic financial institutions, corporate governance, and bank regulation and supervision." (Meyer, 2001) .
2. Emerging market economies without a robust financial market infrastructure must have regulations discouraging capital inflows especially short time capital flows. Such regulation will be suitable for the emerging market economies in the period of having a robust domestic institutions and some policies. Because short term capital controls will eliminate the negative effect of the panic and outflow of the capital. For example, in 1991, Chilean government imposed a one year mandatory non-interest bearing reserve requirements on all foreign borrowing meaning that "... anyone who borrowed money abroad had to put 30% of the amount borrowed into the central bank without earning interest." (Mildner). After the Asian crisis, Malaysia also enforced exchange controls in order to prevent from speculative attacks, and reduction of FX reserves.

3. Exchange rate pegging could be dropped in favor of a float. "The experiences of the countries showed that pegged exchange rate regimes greatly limited the ability of real exchange rates to adjust in reaction to external shocks ..." (Meyer, 2001). Jeffrey Sachs claims that exchange rate pegging can be implemented to reduce inflation expectations. However, as soon as inflation expectations have been brought down, flexible exchange rate regime should be adopted (Sachs & Radelet, 1998).

4. Some reforms should be made on international financial institutions and measures. For example, information systems must be improved in order to reduce asymmetric information between borrowers and lenders. In addition, the already existing international standard should be extended and new standards concerning SWAP, options & futures should be developed.

5. James Tobin introduced a new concept in 1972 with a new tax on short term capital flows for the purpose of reducing short term capital flows. However, this concept has faced many opposition because of the financial sector preferences on unrestricted capital flows. So, the EU, Japan, the US, Singapore, Switzerland, Hong Kong, Canada and Australia did not support it (Grieve, 1999). Although it is questionable it is desirable or not, it can never be implemented without these countries' confirmation.

6. Conclusion

Through globalization, the capital accounts of the countries has opened up. After they opened up their markets, they face huge capital inflows who want to get higher returns in short term. An overdependence on inflow of hot money made the country vulnerable to the financial shocks by putting pressure on local currency to appreciate and making imports cheaper, and causing the trade balance to get worse. On the other hand, capital outflows require domestic demand cuts which in return cause a reduction of domestic output. A country with a highly liberalized capital account can face a financial crisis caused by capital flight, currency depreciation and interest rate increase. So, in order to prevent these financial shocks, a country should liberalize its capital account gradually. Of course financial crises occur due to not only capital flows but also some other factors such as wrong macroeconomic policies and government failure. Although the reason behind recent financial crises were thought to be financial globalization, the mismanagement of financial

markets of those countries and improper regulations should not be ignored. As a result, countries shouldn't liberalize their financial markets without having robust financial market infrastructure and macroeconomic policies.

References

Akdiş, M. (2004). "Financial Crises Caused By Short-Term Capital Movements and Instruments to be Used in Preventing These Crises: Tobin Tax". [Online]. Available at: <http://makdis.pamukkale.edu.tr/Mak21.htm> . [2005, April 10]

Aktan, C., & Vural, I. (2004). "Globalleşme: Fırsat mı, Tehdit mi?" Istanbul: Zaman Kitap.

Anninat, E. (March 2001). "Surmounting the Challenges of Globalization." Volume 39, Number 1

Balkan, E., & Biçer, G., & Yeldan, E. (2002). "Patterns of Financial Capital Flows and Accumulation in the Post-1990 Turkish Economy." [Online]. Available at: http://www.hamilton.edu/academics/Econ/workpap/02_02.pdf. [2005, April 10]

Bibbee, A. (May, 2001). "Turkey's Crisis" [Online].
Available: <http://www.oecdobserver.org/news/fullstory.php/aid/435.html>

Boratav, K. (September, 2001). "2000/2001 Krizinde Sermaye Hareketleri". [Online]
Available: <http://www.inadina.com/inadeski/sayi13/boratav.htm>

Calvo, G.A., Goldstein, M., & Hochreiter, E. (1996). "Private capital flows to emerging markets after the mexican crisis", Institute for International Economics, Washington, D.C.

Credit Issue-First Boston (2003). "Brazil, on Track for growth"

Economic News (1999). "Essence and Impact of Brazil's financial turmoil."

Eichengreen, B. and Michal, M. (December, 1998). "Capital Account Liberalisation and the IMF", Finance and Developmet. Vo.35, No 4

Erçel, G. (September,2000). "Küresel Sermaye Yönetimi Konferansı Bretton Woods'u Yeniden Olusturma Komitesi" [Online]. Available: 2000www.tcmb.gov.tr/yeni/evds/konusma/tur/2000/OZELYATIRIMCI.html

Feldstein, M., & Feldstein, K. (1998). "Averting Crisis in Brazil", The Boston Globe
Grieve S, J.A New Bretton Woods, Reforming The Global Financial System

Guitian, M. (1998). "The Challenge of Managing Global Capital Flows." Finance and Development, 35(2).

Hallwood, C.P., & Macdonald, R. (2000). "International Money and Finance." Blackwell publishers. Third edition

Independent Social Scientists Alliance (April, 2004). "Macroeconomic Developments in Turkey", 2003

Kar, M and Kara, A (2003). "Türkiye'ye Yönelik Sermaye Hareketleri ve Krizler" [Online]. Available:
www.dtm.gov.tr/ead/DTDERGI/ temmuz2003/sermaye%20hareketleri.htm

Krugman, P. (1999). "Balance Sheets, The Transfer Problem, and Financial Crises." Manuscript, Massachusetts Institute of Technology.

Langley, S. and Bolling,C. (March, 1999). "Brazil's Financial Crisis & The Potential Aftershocks." Agricultural Outlook

Levine, R., and Zervos, S., (1998). "Stock Markets, Banks, and Economic Growth." American Economic Review. 88:3, pp. 537-558.

Meyer, H.L (December 2001). [Online]. Available: <http://usinfo.state.gov>

Mildner, S. "Financial Crises Prevention: Should The Imf Support Capital Controls?" Research Institute of German Council on Foreign Relations. [Online]. Available at: <http://www.weltpolitik.net/texte/finance.pdf> . [April 10, 2005]

Prasad, E., Rogoff, K., Wei, S and Kose, A.M (March, 2003). "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence"

Reserve Bank of Australia Bulletin. (December 1998). "Capital Flows and Crises." [Online].

Sacks, J.D., & Radelet, S. (1998). "The East Asian Financial Crisis"

Schmuckler, S.L. "Benefits and Risks of Globalization: Challenges for Developing Countries"

Smith, M. and Smith, J.G (1999). "Global Instability, The Political Economy of World Economic Governance"

Stiglitz, J.E. (2000). "Capital Market Liberalization, Economic Growth and Instability". World Development, 28(6), pp.1075-1086.

The Economist (January, 1998). "Why did Asia Crash?"

Tower, I. (1997). "Mexico 1994 vs. Thailand 1997."

Tsagaris, P (June, 2001). "Turkey's Crisis." [Online]. International Socialist Review. Available: http://www.thirdworldtraveler.com/Europe/Turkey_Crisis.html

WorldBank. "Development Topics", www1.worldbank.org/economicpolicy/globalization

The Theory of Banking and Financial Crises: A Developing Country Perspective

Gulnaz K. Baltabaeva

International Ataturk Alatoo University

Abstract

How does a developing economy shift dramatically from a path of reasonable growth before a financial crisis, as was the case in Mexico in 1994, to a sharp decline in economic activity after a crisis? This paper explains this puzzle by outlining an asymmetric information framework for analyzing banking and financial crises. The framework shows why the banking sector is so important to the economy, particularly in developing countries, and provides a rationale for bank regulation and supervision. The framework is also used to show why banking and financial crises occur and why they can have such a devastating effect on the economy. An important policy implication is that an appropriate institutional structure is critical for preventing banking and financial crises in developing countries and for reducing their undesirable effects should they occur.

1. Introduction

As it is known, the financial economics is the youngest branch of economics that has been developed by economists over the past periods. The financial economics mainly concerns the banking and financial systems of a country: monetary policy, banks, stock markets, and origins of financial crises, investment, and so on. However, as the topic is on `a theory of banking and financial crises: a developing country perspective`, the paper discusses the role of financial crises in developing countries and policy measures and implications for recovering from financial crises.

2. A Theory of Banking and Financial Crises: A Developing Country Perspective

Financial crises and their subset, banking crises, have become worldwide phenomena in recent years. Although financial and banking crises have been costly to the economies of industrial countries such as Japan, the Nordic countries, and the United States, the damage that these crises impose on developing countries seems to be far greater. It shows that financial crises, as was the case in Mexico in 1994, is very damaging to both the economy and social fabric of the country.

In recent years the analysis based on asymmetric information, applied to elucidate the structure of the financial system and the rationale for bank regulation, has also been used to develop a theory of banking and financial crises (Bernanke 1983; Calomiris and Gorton 1991; and Mishkin 1991, 1994). The theory has been used mainly to explain banking and financial crises in industrial countries, particularly the United States. But the institutional framework in the U.S. is quite different from that in many developing countries, and thus the theory requires some modification for use in understanding banking and financial crises in developing countries.

Before beginning this analysis, we need to define financial crisis: a financial crisis is a nonlinear disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to economic agents who have the most productive investment opportunities. A financial crisis thus prevents financial markets from functioning efficiently, which leads to a sharp contraction in economic activity.

Understanding how banking and financial crises lead to contractions in economic activity requires an understanding of the factors that lead to banking and financial crises. Four categories of factors promote financial crises: increases in interest rates, increases in uncertainty, asset market effects on balance sheets, and bank panics.

2.1. *Increases in Interest Rates*

As demonstrated by Stiglitz and Weiss (1981), asymmetric information and the resulting adverse selection problem can lead to credit rationing in which some borrowers are denied

loans even when they are willing to pay a higher interest rate. The theory behind credit rationing can be used to show that increases in interest rates can be one factor that precipitates a financial crisis. If market interest rates are driven up sufficiently, there is a higher probability that lenders will lend to bad credit risks because good credit risks are less likely to want to borrow at the higher rates while bad credit risks are still willing to borrow. Because of the resulting increase in adverse selection, lenders will want to make fewer loans, possibly leading to a steep decline in lending that leads to a substantial decline in investment and aggregate economic activity.

2.2. *Increases in uncertainty*

A dramatic increase in uncertainty in financial markets, due perhaps to the failure of a prominent financial or non-financial institution, a recession, political instability, or a stock market crash, makes it harder for lenders to separate well from bad credit risks. The increase in uncertainty therefore makes information in the financial markets even more asymmetric and worsens the adverse selection problem. The inability of lenders to solve the adverse selection problem renders them less willing to lend, leading to a decline in lending, investment, and aggregate economic activity. As was the case in Kyrgyzstan on March 24, 2005, because of political instability, people from every region of Kyrgyzstan were gathered together and captured the state by assaulting the White House. Local people taking advantage of an opportunity, destroyed all the `Narodniy` shops which belonged to Akaev`s family and foreign supermarkets, restaurants, cafes, jeweler shops and others. The first president Askar Akaev, instead of protecting the country and foreign investors, left the country with his family. As a result, foreign investors are leaving the country and the volume of FDI is decreasing causing a decline in investment and economic activity.

2.3. *Asset market effects on balance sheets*

The state of the balance sheet of both nonfinancial firms and banks has important implications for the severity of asymmetric information problems in the financial system. Deterioration of balance sheets worsens both adverse selection and moral hazard problems

in financial markets, and if the deterioration is dramatic enough it is a major factor leading to banking and financial crises.

Stock market crashes can precipitate banking and financial crises through their net worth effects on the adverse selection and moral hazard problems. A stock market crash can increase adverse selection and moral hazard problems in financial markets because it leads to a large decline in the market value of firms' net worth. (This decline in asset values could occur either because of expectations of lower future income streams from these assets or because of a rise in market interest rates that lowers the present discounted value of future income streams.) The decline in net worth makes lenders less willing to lend because the lower net worth provides them with less protection, so that losses from loans are likely to be more severe. In addition, the decline in corporate net worth increases moral hazard incentives for borrowing firms to make risky investments because these firms now have less to lose if their investments go sour. Because borrowers have greater incentives to engage in moral hazard and because lenders are now less protected against the consequences of adverse selection, the stock market decline leads to decreased lending and a decline in economic activity.

In addition to a direct effect on increasing adverse selection problems, increases in interest rates can indirectly promote a financial crisis through their effect on firms' and households' balance sheets. A rise in interest rates, and therefore in households' and firms' interest payments, decreases firms' cash flow, which causes deterioration in their balance sheets (Hubbard 1995; Cecchetti 1995; and Mishkin 1996). As a result adverse selection and moral hazard problems become more severe for potential lenders to these firms and households, leading to a decline in lending and economic activity. There is thus an additional reason why sharp increases in interest rates can be an important factor leading to financial crises.

Another factor affecting balance sheets that can precipitate a financial crisis in developing countries but that is not operational in most industrial countries is unanticipated exchange rate depreciation or devaluation. Because of uncertainty about the future value of the domestic currency, the government and many banks and nonfinancial firms in developing countries find it easier to issue debt if it is denominated in foreign currencies. When debt contracts are denominated in foreign currency, an unanticipated depreciation or devaluation of the domestic currency increases the debt burden of domestic firms. Since

assets are typically denominated in domestic currency, there is no corresponding rise in the value of firms' assets. The result is deterioration in firms' balance sheets. The decline in net worth then increases adverse selection and moral hazard problems along the lines described above, leading to a decline in investment and economic activity.

2.4. *Bank Panics*

Asymmetric information is the source of bank panics, with depositors rushing to make withdrawals from solvent as well as insolvent banks because they cannot distinguish between them. Bank runs and panics are more likely to occur when banks' balance sheets are in a weakened state, making it more likely that the bank is insolvent.

Banks in many developing countries raise funds with liabilities denominated in foreign currencies. A depreciation or devaluation of the domestic currency can thus lead to increased indebtedness, while the banks' assets do not rise in value. The resulting deterioration in banks' equity capital then increases the possibility of bank failures and panics. Even if the depreciation does not lead directly to bank failures, it can lead to substantial declines in bank lending (Bernanke and Lown 1991; Berger and Udell 1994).

2.5. *Applying the Theory of Financial Crises to Past Episodes: Mexico's Experience in 1994-95*

An important factor leading up to the Mexican financial crisis was the deterioration in banks' balance sheets because of increasing loan losses. Mexican banks had been nationalized in 1982 and, not surprisingly, they directed a large share of their lending on government- on the order of 50 percent. When the banks were privatized in the early 1990s, they had no formal credit bureaus to monitor loans to households and small businesses to make sure that borrowers were not taking on excessive risk. Yet bank credit to private nonfinancial enterprises grew rapidly, going from 10 percent of GDP in 1988 to more than 40 percent of GDP in 1994. This lending boom, which exceeded the screening and monitoring capabilities of the banks, occurred as a result of both increased flows of savings into the banking sector and an increasing share of bank lending going to private firms. Central bank actions to protect the value of the peso also contributed to the rise in

Mexican interest rates. The rise in interest rates directly increased adverse selection in Mexican financial markets by making it more likely that those willing to take on the most risk would seek loans. Even more important, increased interest payments lowered households' and firms' cash flow, causing deterioration in their balance sheets. Because debt contracts in Mexican financial markets are very short in duration, the rise in short-term interest rates had a substantial effect on the cash flow and balance sheets of households and firms. As asymmetric information theory suggests, this deterioration in balance sheets increased adverse selection and moral hazard problems in Mexican financial markets, making it less desirable for lenders to lend.

The Mexican economy was hit by political shocks in 1994- specifically the Colosio assassination and the uprising in Chiapas- that increased general uncertainty in financial markets, while stock prices on the Bolsa fell nearly 20 percent between their peak in September 1994 and the middle of December 1994.

The political shocks of 1994 brought the Mexican peso under attack. Intervention in the foreign exchange market by the Bank of Mexico to support the commitment to a pegged exchange rate resulted in a substantial loss of international reserves. With the growing uncertainty in the foreign exchange market, the government found it harder to finance its debt with peso-denominated bonds (cetes) and so dramatically increased its issues of dollar-denominated bonds (tesobonos). Even though the Mexican central bank raised interest rates sharply, the hemorrhaging of international reserves forced the Mexican authorities to devalue the peso on December 20, 1994.

Asymmetric information problems were severe for both domestic and foreign lenders. By the beginning of the fourth quarter of 1994 outflows exceeded \$10 billion at an annualized rate. Consistent with the theory of financial crises, the sharp decline in lending helped lead to a collapse in economic activity, with real GDP growth falling from around 4-4.5 percent a year in the second half of 1994 to rates of around -10 percent in the second and third quarters of 1995.

The foreign currency-denominated liabilities of Mexican banks jumped from 116.4 billion pesos at the end of December 1993 to 213.9 billion pesos at the end of December 1994, primarily as a result of the decline in the value of the peso from 3.1 to the dollar to 5.3 to the dollar. Even more problematic for the Mexican banks is that many of their foreign currency-denominated liabilities were very short term, so that the sharp increase in

the value of these liabilities led to liquidity problems because they had to be paid back quickly. Collapse of the banking system would then have been inevitable in the absence of a government safety net. But the Mexican government intervened, providing the funds to protect depositors and thereby avoiding a bank panic.

3. Policy Measures and Implications for Recovering from Financial Crises

Since the consequences of financial crises are so disastrous, knowing what steps to take to expedite recovery from financial crises and minimize their effects on the economy is very important. Not surprisingly, the institutional structure of the financial system affects the measures that can be used by the authorities to stimulate recovery from a financial crisis.

It may be far more difficult for the central bank to promote recovery from a financial crisis in developing countries because of two institutional features of the financial system that preclude the use of expansionary monetary policy. Many developing countries have much of their debt denominated in foreign currency, and for many a past record of high and variable inflation has resulted in debt contracts of very short duration. As a result of these institutional features, pursuing an expansionary monetary policy to reflate the economy is likely to cause the domestic currency to depreciate sharply and expected inflation to rise dramatically. Expansionary monetary policy is not an option for stimulating recovery in most developing countries. Rather, monetary policy must be restricted to keeping inflation low and restoring confidence in the domestic currency. Developing countries need to create and sustain a strong bank regulatory and supervisory system and liberalize the financial system. Price stability can help promote financial stability because it leads to longer-duration debt contracts.

4. Conclusion

The analysis of banking and financial crises in developing countries using the asymmetric information framework thus leads to the following conclusion: having an independent central bank with a clear mandate for price stability is possibly even more important for

developing countries. But as with the worthy goal of financial liberalization, single-minded pursuit of price stability can be dangerous. Rapid disinflation leading to high real interest rates has adverse cash-flow consequences for financial institutions. If the financial system is fragile because of already weakened balance sheets, the disinflation could result in a major financial crisis and a blow to the economy. Thus, before engaging in an anti-inflation stabilization program, developing countries need to attend to the health of their financial system, making sure that the regulatory and supervisory process has been effective in promoting strong balance sheets for financial institutions. Otherwise, financial institutions may not survive the stresses of an anti-inflation stabilization program. Successful monetary policy in developing countries, therefore, requires successful regulation and prudential supervision of the financial system.

References:

Bernanke, Ben S. 1983. "Non-Monetary Effects of the Financial Crisis in the Propagation of the Great Depression." *American Economic Review* 73: 257-76.

Brimmer, Andrew F. 1989. "Distinguished Lecture on Economics in Government: Central Banking and Systemic Risks in Capital Markets." *Journal of Economic Perspectives* 3: 3-16

Calomiris, Charles W., and Gary Gorton. 1991. "The Origins of Banking Panics: Models, Facts, and Bank Regulation." In R. G. Hubbard, ed., *Financial Markets and Financial Crises*. Chicago: University of Chicago Press.

Cecchetti, Stephen G. 1995. "Distinguishing Theories of the Monetary Transmission Mechanism." *Federal Reserve Bank of St. Louis Review* 77 (May/June): 83-97.

Gorton, Gary. 1988. "Banking Panics and Business Cycles." *Oxford Economic Papers* 40: 751-81.

Mishkin, Frederic S. 1991. "Asymmetric Information and Financial Crises: A Historical Perspective." In R. G. Hubbard, ed., *Financial Markets and Financial Crises*. Chicago: University of Chicago Press.

Manchester School, 1994. "Preventing Financial Crises: An International Perspective." 62: 1-40.

The Effects of Recent Developments in Turkish Economy over the White Goods Market

Hakan Güngör^{*}

Izmir University of Economics

Abstract

This paper examines the effects of the recovery of the Turkish economy over the period 2001-2005 on the white goods sector by an econometric model. Firstly, the recent developments in the Turkish economy are presented by analyzing some major macroeconomic variables such as inflation, foreign trade, economic growth, and interest rates. Next, a regression test is run in order to understand the basic determinants for the sales of white goods sector in Turkey. In the regression analysis, data for monthly sales of the sector, interest rates, and per capita income will be used for the period 2001-2005. Moreover, the effect of real exchange rates and the seasonality factors over sales will be demonstrated. Based on the outcomes of the regression analysis, it is proposed that the demand for white goods in Turkey is sensitive to income changes and seasonality factors. Moreover, several implications concerning demand structure of white goods are presented. Finally, several monetary policies that may keep the demand of durable goods high will be proposed.

1 Introduction

Turkish economy experienced fluctuations and recessions in recent years. That is, macroeconomic dynamics have been instable especially since the 1990s. Specifically, the economic crises of 1994 and 2001 created financial and economic turmoil for Turkey. Therefore, the purchasing power of Turkish people diminished significantly after the crises (Karaca, 2003). Moreover, the general trend of the interest rates was upward in these years because of the instable structure of the Turkish economy. As a matter of fact, all of these

^{*} İzmir University of Economics, Balçova, İzmir, Turkey. For correspondence: hakan_1645@yahoo.com

negative aspects and changing dynamics of the economy gave rise to a decline in consumer confidence. That is, consumers engaged in less economic transactions because of the instability of the economy, since they mostly wanted to save for their future needs. Therefore, the aggregate demand in Turkey in these years was fairly low in particular sectors such as durable goods and automotives, which are price and income elastic (Karaca, 2003). For example, the decrease in the total sales of the white and electronic goods market was attributed mostly to low purchasing power, high interest rates, and high inflation that prevailed in the economy. However, since 2001, the sales of this sector have indicated an increasing trend because the Turkish economy started to recover from the serious effects of the economic crisis of 2000-2001 and the physical shock due to the 1999 earthquake. Total demand in the country and, in general, total sales of the white and electronic goods sector have increased since 2001. Rise in the purchasing power and consumer confidence enabled consumers to involve in more economic transactions (Koç & Yıldırım & Kurt, 2004). From this general perspective, the increase in the sales can be associated with the recovery of the Turkish economy. Thereby, decrease of interest rates, of inflation rates, and of consumer price index and increase in the purchasing power revived the economic activity in the white goods market in Turkey.

2 Recent Developments in the Turkish Economy

2.1 Domestic demand

Because of the unfavorable economic environment of Turkish economy, people had postponed most of their necessities before 2002. That is, private spending was low and people mostly preferred to save for their future (Karaca, 2003). However, domestic demand in Turkey started to increase parallel to positive developments in the economy. In 2003, for instance, domestic consumption expenditures increased by 5.6% (Monetary policy report 2004, 2004). The increase in 2004 was more obvious. In particular, private spending rose at a higher speed in the second quarter of the year. For instance, private consumption expenditures increased by 13.5%. However, private spending was not as high as in the third quarter of the year because public banks made some restrictions on credit

limits and interest rates for consumer credits somewhat increased (Monetary policy report 2004, 2004). Therefore, the growth of total industrial production decelerated in June-September period compared to the previous period of the year. This trend changed in the last quarter of 2004. In fact, investment expenditure tendency gained an upward trend again in September as the interest rates on consumer credits were declining. Therefore, sustainable production growth was maintained in last quarter of the year.

2.2 Inflation

Inflation is one of the critical macroeconomic variables that indicates the well being of an economy. In fact, Turkey experienced high inflationary periods during its history. Especially, the economic crisis of 1994 and 2001 harmed the Turkish economy severely. For instance, the wholesale price index (WPI) was 88.6 and the consumer price index was 68.5 in that year (Monetary policy report 2004, 2004). However, inflation has been demonstrating a downward trend in recent years because of the economic policies aimed to provide macroeconomic stability of Turkey. This macroeconomic stability is very important in association with Turkey's membership negotiations with European Union (EU) and its relations with International Monetary Fund (IMF) (Monetary policy report 2004, 2004). At the beginning of 2003 the government's year-end CPI target was 20%. However, the WPI was 13.9% and the consumer price index(CPI) was 18.4% at the end of the year (Bayraktar, 2004). This downward trend of inflation was attributed to the improvements of the expectations, supported stability of TL and increased foreign currency to the system. In 2004, this trend was maintained without any severe short run fluctuation. For instance, CPI fell to 9% in September. In fact, the factors that caused variation on inflation during 2004 were concerning the influence of foreign exchange (FX) rates' stability on inflation, the variation in petroleum prices, and revival of the domestic demand (Monetary policy report 2004, 2004). In particular, the increase of the international oil prices caused a rise for the cost of the manufacturing sector. Therefore, the WPI of Turkey rose by 9.4% in the third quarter of the year. However, year-end inflation was achieved in spite of the increase in WPI and it was seen that inflation is not a serious problem that had harmed the Turkish economy anymore.

2.3 Foreign trade

Turkey's foreign trade showed a dynamic pattern in recent years. In fact, before 2002, due to the bad economic environment, the exports and imports of Turkey were fairly low. For instance, the exports of Turkey in 2001 amounted 31.334 US\$ million and exports were 41.399 US\$ million (Bayraktar, 2004). However, in 2003 foreign trade volume demonstrated an overwhelming growth. That is, exports increased to 45.884 US\$ million and imports increased to 67.241 US\$ million in that year (Bayraktar, 2004). Therefore, the exports of Turkey became more competitive in the international markets due to the strong Euro, increase in the productivity, and decrease of real wages. Likewise, exports continued to increase in 2004 due to rise in the productivity because of favorable levels of unit costs and promising levels of unit wages (Monetary policy report 2004, 2004). In fact, exports increased by 32.3% in January-September period compared to the same period of 2003. In addition, increase of domestic demand gave rise to increase in imports. That is, total imports, including consumption and intermediary goods, rose by 42.4% in 2004. Therefore, Turkey's balance of payments account was at a deficit 4.9% at the end of the year.

2.4 Economic growth

In 2001, due to the devastating financial disaster, the Turkish economy shrunk severely. However, a positive economic growth has been achieved in the following years. In particular, GNP followed an upward trend since 2002. For instance, Turkish GNP of 2001 was 144.011 US\$ million (Bayraktar, 2004). However, this amount increased to 181.660 US\$ million in 2002 and 238.051 US\$ million in 2003. That is, sectoral productions of Turkish economy have increased since 2002. Especially, the production in automotive, food and beverages, rubber and plastic products, machinery, equipment, and radio and TV communication equipment sectors rose in 2003 (Bayraktar, 2004). Therefore, all of these sectors had to increase their capacity utilization levels. For instance, the production of automotive sector increased by 40% due to capacity investments in 2003. Moreover, white goods sector contributed significantly to the economic growth in that year. According to White Goods Suppliers Association of Turkey production rose to 27% and exports

increased to 36% in 2003. In addition, domestic sales increased by 19% due to the improvements in the domestic demand and promotional sales. In fact, this upward growth trend continued in 2004 as well. That is, productivity performance continued to rise. For instance, the GNP rose by 14.4% in the second quarter of 2004 (Monetary policy report 2004, 2004). Moreover, the industrial production of the January-August period rose by 12.6% compared to the same period of the last year. In addition, as of 2003, the revival of domestic demand contributed the growth process. Especially, domestic demand acquired a high speed in the second quarter of the year. For example, expenditures on durable consumption goods and private good reached the highest level in this year (Monetary policy report 2004, 2004). From this perspective, the sustainable and non-inflationary growth of Turkish economy continued because of all these reasons.

2.5 Interest rates

Because interest rates are very sensitive to the dynamics of an economy, they also fluctuated significantly in Turkey in the past. Especially, the interest rates of 1994 and 2001 were overwhelming. However, interest rates in Turkey, like inflation, showed a declining pattern in recent years. For instance, the real interest rate, which was around 30% levels before the Iraq war, fell to 13% in 2003 (Bayraktar, 2004). In fact the declining trend was originated from the decline of inflation and intense competition between private banks. Moreover, the period of debt maturities increased from 6 months to 16 months. Therefore, consumer and credit card loans rose by 91% in real terms. In 2004, the same trend continued. That is, interest rates for consumer credits declined during the year, except a little increase in the June-September period (Monetary policy report 2004, 2004). However, the market interest rates reached their lowest level in September. According to Central Bank of Turkey (CBRT) the factors that affected declined trend of the market interest rates are: (i) economic growth of 2004, (ii) completion of the 8th IMF review, (iii) low core inflation than expected in US; (iv) expectations concerning a date would be determined in December for Turkey's membership negotiations with the EU, (v) expectations for the new stand-by agreement with IMF. Because of the falling pattern of the market interest rates, the increase in borrowing from banks continued. In addition, stability and appreciation of the TL contributed to the increased demand of the real sector

for loans. As a result of the growth rate of consumer credits, investment activities kept their upward trend during 2004.

3 Demand for consumer durables

3.1 White Goods Sector in Turkey

The consumption of white goods in Turkey was low before 2002, in particular in years in which the crisis occurred (Karaca, 2003). For instance, domestic sales of white goods were 2,200,000 in 1994 and 2,417,000 in 2001, respectively. According to many economists, the low demand for home appliances originated from low purchasing power, high inflation, and interest rates in these years. However, domestic demand started to increase since 2001 due to the developments of the Turkish economy. In 2003 according to White Goods Suppliers Association, for instance, domestic spending on durable goods increased by 19% due to the improvements of the domestic demand and promotional sales on white goods (Bayraktar, 2004). Moreover, the production and exports of the sector grew by 27% and 36%, respectively, compared to 2002. The increase in 2004, however, was more obvious due to the stronger expectations that a date will be determined at the end of the year concerning its membership negotiations with the European Union (EU) and new stand-by agreement with International Monetary Fund (IMF) at the end of the year (Monetary policy report 2004, 2004). The increased demand encompassed a wider consumer group. For instance, total domestic on durable goods increased by 66% Washing machine was the most popular appliance in the domestic market. According to the Central Bank of Turkey, the increase in the domestic demand is associated with the strong position of TL against other foreign currencies, low inflation, increased consumer confidence, and low interest rates. Although the capacity utilization rates continued to increase, high investment expenditures in the sector contributed to the increase in the productivity. According to the State Institute of Statistics, the capacity utilization rate reached to 80.9% between January and September of the year (Monetary policy report 2004, 2004). Therefore, production increased by 38%. Moreover, the exports of the sector increased by 23% in 2004 and market share of Turkey in Europe for the sector reached 15%.

3.2 The model

The generally accepted model for the demand of consumer durables is the Hamburger model (Pesando & Yatchew, 1994). In fact, the model states that the demand for consumer durables (S) is affected by three independent variables: the real aggregate income (Y), the real interest rate (INT), and the price of consumer durables relative to the prices of all other goods and services (P). Therefore, the model becomes:

$$S = a + b(Y) + c(INT) + d(P) + u \quad (1)$$

The demand for durable goods is positively correlated with income whereas it is negatively correlated with both interest rates and the price level. Therefore, it is expected that a rise of income increases the demand for durables. On the other hand, increase of interest rates and price level in the economy decrease this demand.

3.3 Data and Methodology

By taking the Hamburger (1994) model as our base model, the total monthly sales of white goods (S) in Turkey between 2001 and 2004 will be examined. We will use three independent variables to explain the variation of the monthly sales. The first one is the variable (INT) that reflects interest rate on deposits of Turkey between 2001 and 2004. In fact, the variation of interest rates reflects the effect of economy's recovery over sales because the lower interest rates the more likely that people hold more money. So, they involve in more economic transactions and overall demand in the country increases in this way. That is, variation of the interest rates seems to affect the monthly sales of the white goods. It is worth to remind that we will not use inflation variable in the model because it is mostly positively correlated with the interest rates. Our aim is to prevent multicollinearity in the model. The second variable is per capita income (Y), reflecting the variation in the purchasing power of Turkish people in between 2001 and 2005. In fact, it directly explains the variation of the monthly sales because the demand for income-elastic

goods is affected from the changes in income. That is, increase in the people's purchasing power increases the overall demand in the country and the economic transactions taking place in the economy increase in this way. Apart from the Hamburger model, we will also use two more explanatory variables. The first one is the monthly real exchange rates (RER) of Turkey between 2001 and 2005. In fact, a portion of the goods for the white goods market is imported in Turkey. If real exchange rate increases, the demand for the imports increases because foreign goods become cheaper in this manner. Therefore, the variation of the exchange rate affects the demand for consumer durables, in particular for those consuming imported white goods. The second additional explanatory variable is a dummy variable (D1) that represent the condition that sales belongs to October, November and December. That is, seasonal factors affect the overall demand in Turkey. In fact, agriculture is the main means of existence in most parts of Turkey and the people dealing with agriculture usually take their vintages in the months of October, November, and December. Moreover, most people in industrial regions receive end-year promotions. Because their purchasing power increases, their demand for the home products increases in these months. Therefore, seasonal factors seem to have an effect over the sales of white goods in Turkey.

It is expected that the interest rate to be negatively correlated with the sales because the lower the interest rates the more willingness of people to involve in economic activity. So, we expect the expected sign of the parameter of INT to be negative. In contrast, we expect the expected sign of D1, RER and Y to be positive. In fact, the more income that people have, the more demand for the white goods. In addition, if the exchange rate rises, foreign goods become cheaper and people demand more foreign goods. Therefore, all three signs should be positive.

In this analysis, we will use time-series data. We will take the sample from January of 2001 to November of 2004. The sample size is 47 and we use the OLS method to run the regression function. Monthly sales of white goods (measured in of the amounts sold), monthly variation of the interest rates, CPI based real effective exchange rates, and per capita income (measured in \$) for this period are collected. Ordinary least squares method is used to estimate the coefficients of the explanatory variables. Finally, we estimate the following models to explain the monthly sales of white goods of Turkey:

$$S = a + b(Y) + c(INT) + u \quad (2.1)$$

$$S = a + b(Y) + c(INT) + d(D1) + u \quad (2.2)$$

$$S = a + b(Y) + c(INT) + d(D1) + e(RER) + u \quad (2.3)$$

Equation (2.1) is our baseline equation which estimates income and interest rate elasticities for Turkish demand of white goods. The effects of the seasonality factors are examined in equation (2.2). Finally, equation (2.3), the most complete model, investigates also the effects of exchange rate over the white goods sales of Turkey.

4 Regression Results

All the expected signs of the parameters comply with our previous expectations. The overall fit seems plausible for all three equations. Also, it is estimated that all the parameters are efficient and unbiased. Equation (2.1) is concerning the income and interest rate elasticity of sales of white goods. Firstly, it is expected that b to be positive and c to be negative because of the economic theory. Indeed, as income increases the sales increase and as interest rates increase the sales decrease because people prefer to invest their money to get higher returns instead of expending. Table 1 below summarizes the results.

Table 1: Regression Results:

<i>Variables/Model</i>	<i>2.1</i>	<i>2.2</i>	<i>2.3</i>
Y	404.47*** (34.52)	403.1*** (32.49)	369.5*** (43.5)
INT	-566.5 (592.91)	-449.4 (559.9)	-562.74 (566.22)
D1		143247.5*** (55996.7)	156970.2*** (57022.7)
RER			2274.7 (1967.5)
R-bar squared	0.816	0.837	0.838
Total observations	47	47	47

*** reject null at 1 percent significance level
Note: figures in parentheses are standard errors

According to Table 1, the estimation results indicate that Turkey's white goods sales behave partly according to predictions of theory; the demand for white goods is sensitive to the income changes, but it isn't affected from the changes of interest rate. Indeed from

Table 1, we can observe that b is statistically significant at the 1% significance level. That is, an increase in income level of consumers increases demand for white goods. On the other hand, the parameter of interest rate (c) is statistically insignificant even at the 10% significance level. In fact, insignificant coefficient for the estimate of INT creates some concerns regarding the equation (2.1). In fact, variation of interest rate should have a direct effect over the demand for consumer durables. Therefore, it is necessary to keep in mind that a sampling error or a specification error may have caused this kind of unexpected result. However, it is still possible to claim that purchasing power of people plays the most important role for their demand for durable goods. In other words, Turkish people decide mostly according to their income levels for their necessities of durable goods instead of considering terms of payment, directly influenced from the interest rates. Therefore, the higher the incomes of people, the higher the demand for durable goods.

In regression 2.2 we report in the Table 1, we observe that seasonality factors have a positive and significant impact on the Turkish demand for white goods because coefficient of the dummy ($D1$) is positive and statistically significant at 1%. This result demonstrates that the sales of white goods in Turkey are higher in the months of October, November, and December. That is, demand for durable goods increases in the last quarter of the year. The reason associated with a significant and positive seasonality effect is the agriculture sector. From a general point of view, most of the agricultural products' harvest time is in October, November, and December. Therefore, the people in Turkey usually postpone their necessities for durable goods to the end of the year because their purchasing power increases parallel to harvesting. In fact, the results implicitly imply that the agriculture sector is still very important in Turkey, though the policy maker has been following industrialization policies. In addition, it is possible to speculate that the end-year promotions and bonuses may contribute to higher demand for white goods in the last quarter of the year, in particular for the people working in public and private sector.

Equation (2.3) is our most complete which investigates the effects of real exchange rates on the demand for white goods in Turkey. According to Table 1, the insignificant coefficient of RER indicates that demand of white goods in Turkey is insensitive to the changes in CPI based real effective exchange rate. This result has an important implication because it implicitly demonstrates that the demand for white goods in Turkey must be domestically produced goods. In fact, the exports of Turkey in white goods totaled

7,211,000 whereas imports were 440,000. That is, Turkish people mostly do not prefer to buy imported white goods. In fact, this result may be originated from the high market shares of domestic firms like Arçelik, Beko, and, Vestel in the white goods market of Turkey. For instance, the annual growth of Arçelik in the domestic market is %29 in 2004. Also, it has been handling the biggest market share in the sector for years (Arçelik Şirket Raporu, 2005). Therefore, domestically produced white goods still keep their importance unlike other sectors such as electronics and cell phones.

5 Conclusion

Demand for white goods in Turkey has been demonstrating an upward trend since 2002. From a theoretical perspective, demand for durable goods is affected by income, interest rate, and price level changes in the economy. However, the empirical evidence in this paper shows that white goods demand in Turkey is significantly influenced from income changes and seasonality factors. On the other hand, demand is insensitive to changes in the exchange rates and interest rates. Therefore, demand for household appliances is demand elastic and people's preferences to buy these appliances increases in the last quarter of the year. Also, it can be inferred that the payment conditions, directly affected by interest rates, do not affect the demand significantly. In addition, we may implicitly imply from the regression that Turkey is an export oriented rather than import oriented country in the white good sector. This implication is also supported by the fact that Turkey's market share in Europe is 15% and it is the third supplier in Europe (Beyaz eşyada Avrupa'nın iki numarası olacağız, 2004). Finally, ongoing increase of domestic demand in the sector is expected to continue in 2005 parallel to positive developments in the economy, as the head of White Goods Suppliers Association stated "I think, developments that will stimulate the growth in the sector take place in the second half of the year" (Beyaz eşyada Avrupa'nın iki numarası olacağız, 2004). Therefore, the variables that affect the sales will change in the long run according to changing environment of the economic and social conditions of Turkey.

References

Bayraktar, D. (2004). Turkish economy: Favorable outlook for 2004. Retrieved March 20, 2005 from World Wide Web:

Pesando, J. & Yatchew. (1994) A. Real versus nominal interest rates and the demand for consumer durables in Canada. Retrieved March 20, 2005 from World Wide Web: <http://www.ebscohost.com>

Monetary policy report 2004. (2004). Retrieved March 20, 2005 from World Wide Web: <http://www.tcmb.gov.tr>

Karaca, O. (2003). Tüketimin erdemi. Retrieved March 20, 2005 from World Wide Web:

Koç, S & Yıldırım, M. & Kurt, M. (2004). Türkiye ekonomisi

International Credit Rating Agencies: Their Impact On Capital Flows To Developing Countries

İsmail Tartuk

Izmir University of Economics

Abstract

The impact of credit rating agencies on financial markets has become one of the most important policy concerns facing the international financial architecture. Ratings indicate a relative credit risk and serve as an important metric by which many investors and regulations measure credit risk. Together with BIS (Bank of International Settlements) proposals for new risk-based capital standards, it becomes very important to understand these agencies and their role in financial markets and especially those in developing economies. The goal of new policies should be to improve transparency, increase investor education, level the playing field for all investors, safely stimulate competition between rating agencies, increase investment in research and coverage of developing countries' financial markets and protect the independence and quality of credit ratings.

1. Introduction

One of the fundamental economic problems faced by developing countries is the difficulty in mobilizing funds to increase investment. Developing countries must first obtain a favorable rating of their creditworthiness by one or more credit rating agencies. A strong credit rating will play a major role in determining the cost and availability of credit flows, and the failure to maintain a strong rating will possibly lead to a reversal of capital flows, a disruption of the financial system and an overall economic downturn.

In 1990s, the bond market surpassed bank lending as the dominant source of private capital to developing countries. This had the effect of making credit ratings and credit rating agencies(CRA) even more important factor in determining total capital flows.

Ratings indicate a measure of credit risk in holding or purchasing the security instrument. The absolute level of credit risk for each grade can change over time and over the business cycle, and it can also differ across rating agencies. Higher ratings are given to sovereign debtors who have the highest ability and willingness to pay. Ratings and especially changes in ratings can have large effects on the prices of securities, capital flows and investor attitudes.

2. History

In 1909, John Moody issued the first credit ratings in the United States. The impact of rating agencies was to help level the playing field and improve the efficiency of capital markets. The role of credit ratings and rating agencies would go on to solve other asymmetric information problems that between investors and asset managers. The use of credit ratings by investment policies can limit the risk in the asset manager's investments at a low monitoring cost and thus benefit the investors.

According to BIS, there are 130 to 150 credit rating agencies worldwide. Many of these agencies are smaller and focus on a niche market based on sector or geography. The three most prominent credit rating agencies that rate sovereign countries are S&P(Standard&Poors), Moody's and Fitch Ratings. In 1997, the SEC (Social & Exchange Commission) proposed a procedure to formalize the process for recognizing a rating agency. The most important criterion used by the SEC to designate a firm as a NRSRO(Nationally Recognized Statistical Rating Organization) is that the agency must have national recognition from investors as a credible source of information.

Other criteria included the following:

- 1-) Organizational structure of the rating organization.
- 2-) Financial resources in order to determine if the agency could operate independently or would be under economic pressure from the companies it rates.
- 3-) Size and quality of staff to determine if ratings evaluations would be thorough and competent.
- 4-) Rating organization's independence from the companies it rates.

- 5-) Rating organization's rating procedure to determine if ratings could be consistent, credible and accurate.
- 6-) International procedures of organization to prevent the misuse of non-public information.

3. Major Agencies And Their Methodologies

A-) Standard&Poor's (S&P) was created in 1941 and now provide a wide range of information on financial products and markets. Standard & Poor's sells investment data, valuations, analysis, and opinions. Standard&Poor's contributed to the total with sales of almost \$1.5 billion and operating profit of \$345 million. In order to determine the credit rating of a sovereign government, Standard&Poor's looks at ten different categories and assigns a value to each category from 1 to 6 (1 being the best). Qualitative judgments are then used to assess the values and assign a rating.

B-) Moody's investor services is a subsidiary of Moody's Corporation. It has 17 offices worldwide and provides ratings on a 100 sovereign nation's debt. Moody's like S&P uses a combination of qualitative and quantitative factors. Quantitative measures are used to evaluate historical performance and trends. Weights on each variable depend on whether the country has a high income with a long history of institutional or whether the country is still in the midst of development. For example, fiscal policy is more of an important element in advanced countries while balance of payment trends is more important for developing countries.

C-) Fitch Ratings provides ratings and research to over 75 countries. Similar to the other agencies, Fitch Ratings covers a wide range of debt securities offered by corporations, financial institutions, municipal government, insurance companies and sovereign nations. At present, they have ratings on 69 sovereign nations.

After being asked to rate a sovereign, Fitch Ratings will send the sovereign officials a questionnaire for private information about the level of debt and the officials' views on its ability to pay the debt. The purpose of this exercise is to be able to gain sensitive non-public data, which is used as a basis for conducting interviews. Fitch Ratings will then look

into public data concerning the following areas: fiscal policy and execution, demographics, current account, openness of economy, ability to withstand shocks, and stability of political institutions.

In addition to economic risk, Fitch examines political risk with respect to internal and external conflicts. Fitch will look at internal politics to see if current politicians and parties can mobilize support for its policies. In the external political risk dimension, Fitch will evaluate the risk of a war through foreign policies and military buildups.

Although the agencies officially state that they look at a large array of factors when assigning ratings to sovereign borrowers, studies have shown that most ratings can be determined by a few economic variables. Cantor and Packer(1996) found that more than 90% of the cross-sectional variation in country ratings could be attributed to six factors: per capita income, GDP growth, external debt burden, inflation experience, default history and level of economic development. The results of Cantor and Packer's study, however, leave out crucial variables such as capital flows, foreign exchange reserves and the strength of the financial system(which could provide a possible explanation of why rating agencies fail to forecast crises).

4. Public Policy Concerns

4.1. Ratings Competition

One of the major policy concerns about the role of credit rating agencies is the dominance of industry by three major agencies. Although there are over 130 rating agencies worldwide, three major agencies dominate the market and there is mixed evidence of their performance. Especially, Fitch pursues an aggressive acquisition strategy to be able to more effectively compete with S&P and Moody's.

Although U.S. financial markets have an enormous impact on the shape of financial markets elsewhere in world, the SEC cannot strictly prohibit the use of ratings by other CRAs in other financial markets.

The ability of three firms to dominate a global market is not simply regulatory protection, but can more reasonably be attributed to the product of mergers and

acquisitions, increasing economies of scale for the large firms and the high fixed costs of building a national, if not global, reputation.

Aside from the argument about why the industry is dominated by three agencies, there are several reasons why more competition would improve the situation. The first reason is that more competition would improve the accuracy of ratings. Firms would invest more resources in the rating process in order to improve their quality, and that would result in better ratings for emerging market borrowers and overall more efficient markets. The second reason is that it would reduce economic rents from the market power exercised by the oligopoly, and this would result in lower fees. Increasing competition would decrease the value of those property rights and allow debtors and debt issuers to acquire credit ratings at a lower cost. The third reason is that anti-trust enforcement would discourage destructive forms of competitions such as “notching”.

Competition has also negative effects. According to a statement, Moody’s deliberately issued low ratings to U.S. municipalities that refused to retain the agency. Arguments concerning the collusion power exerted by Moody’s and S&P can also be found in an examination their ratings coverage. Ferri (2001) concluded the oligopolistic structure of the rating agency industry has led to an under investment with respect to rating issuers in less developed countries.

Even though it is concluded that a few firms currently dominate the industry, the BCBS believes the industry is expected to change in the next few years. The BCBS reports that there is anecdotal evidence that the total number of agencies will increase in the future, most notably in the less developed countries.

More competition will possibly lead to more “noise” from contrasting credit ratings. Different agencies will come out with different ratings. In the end, the net economic benefit from more ratings might not prove to be positive.

Another possible consequence from more competition is that it will lead to ratings shopping. In order to compete for clients, agencies will be tempted to hand out more favorable ratings and to compete for lower fees by lowering their research and analysis costs.

4.2. *Economic Impact Of Ratings*

Another major policy concern regards the impact of ratings on capital flows and the overall economic performance of developing countries. Critics of the agencies argued that ratings have a large economic effect because they are procyclical. They claim that ratings increase the magnitudes of the business cycles because sovereigns are upgraded during expansionary periods and downgraded during contractionary periods.

If accurate ratings can come out ahead of movements in the financial markets, the ratings can be very useful in curbing or dampening the current direction of capital. Conversely, if the ratings are inaccurate or are behind financial markets, the speed of capital flows will likely increase and exacerbate the cycle. It is also believed that agencies are, in fact, behind markets because the agencies primarily use publicly available data in making their ratings.

4.3. *Policy Proposals*

Not all problems dealing with rating agencies can be easily solved or reconciled. Ratings from NRSRO agencies are still the best independent source of credit risk and thus have value in capital markets. Consequently, more attention should be placed in modifying the process to reduce unwanted side effects rather than eliminating them all together.

An additional measure to reduce the impact of ratings is more transparency and public disclosures. Greater transparency on behalf of the agencies will let investors become aware of the details that influence the agencies' decisions. Investors can then more accurately reconcile the agencies' ratings with their own opinion and not have to be blindly let by the agencies.

Furthermore, the SEC and the rating agencies need to communicate with investors more clearly that ratings do not indicate price risk or market risk of the security. Ratings are merely a forward looking assessment, based on current information, of the ability and willingness of the debtor to fulfill its payment obligations-it is not a forecast of future performance.

Another policy recommendation concerns the need to assure equal access to information by all investors while also protecting against the conflict of interest caused by debtors and debt issuers paying for ratings.

Also, rating agencies should not consult and should have limits on other outside services to firms they are rating. Finally, senior management of credit rating agencies should not be allowed to sit on boards of companies that the agency rates.

The last recommendation is to formalize the NRSRO process. Currently, the responsibility lies within the agencies to report changes in structure or in the ratings process that could affect their NRSRO status; the SEC needs to have a more productive and more formal role in this process.

5. Conclusion

Rating agencies do serve a purpose in financial markets. Their value in assessing default risk and thereby affecting credit spreads plays a critical role in financial markets and especially the flow of capital to developing countries. Improvements can be made by encouraging more accurate ratings and required more timely ratings. Additional improvement comes through investor education about the method and meaning of credit ratings, and greater transparency by the agencies to level the playing field for all investors. Increasing competition may be one strategy to increase investment and more accurate ratings, but its potential negative consequences will need to be monitored and supervised to prevent “rate shopping”. Another strategy is to improve the NRSRO designation process; a formal regulation for NRSRO status can provide more stringent criteria for frequency of rating updates, disclosures, transparency and ethical practices

The Use of Barter to Finance Expenditures of the Enterprises

Melek Akın

Izmir University of Economics

Abstract

Due to Turkey's slow but recent, steady recovery from the financial crises of the past five years, enterprises have begun to closely examine their operating costs – especially in light of the relative scarcity of operating funds because of continuing decreases in sales revenues. At this point, the companies may be interested in learning about the rationale for the use of a barter and the trade credit system being offered by an international network of barter companies. Thus the objective of this research is to determine the extent of barter services being offered and provided to Turkish companies. Data gathering and methodology used include results from a review of sources from industry trade media and other published works by field researchers. With an examination of this strategic approach being offered by a Turkish company, TurkBarter, the applicability of their barter and trade credit program to the Izmir University of Economics (IEU) will be examined. This research report could suggest that a need may exist by IEU for this kind of barter finance tool as a source of funding for their traditional operations.

1. Introduction

A barter transaction is an agreement to swap goods and/or services for other goods and/or services of equal value; the agreement will usually stand by itself and, within the terms of the agreement, the total arrangement for payment is arrived at by each sides' satisfactory receipt of goods/services within the business transaction (Versariu, 2000).

For a long time, many organizations considered barter as a primitive and inconsequential practice between countries, lacking foreign exchange currency, to finance the large scale and acquisition of huge volumes of commodities, such as fuel and other scarce natural resources. Even more undeserving of management attention was that given

to the use of barter by which to acquire needed commodities or to dispose of surplus material.

It has been often described as being an inconsequential element within the procurement process. However, due to current economic recovery activities in Turkey, companies are looking at barter as a possible option for the recovery of assets and investment. It's argued that the use of barter in cost recovery initiatives can provide a useful means for containing costs. This is achieved primarily through the recovery of excess inventory and reduction of a firm's total inventory costs. They are also looking at this as a way to offset their normal expenditures in monthly operations to better enhance cash flow generation, improve return on investments (ROIs), and cost savings.

This research work begins with a general discussion of barter activities and includes a brief description of the applications of this strategy in Turkey.

2. Barter Activities

Much international business is done through what is referred to as countertrade, with barter being one type of countertrade. Barter activities are those activities that have been used in the acquisition of needed natural resources through trade between nations. With many reciprocal trade agreements in place between Turkey and its trade partners, these arrangements serve to offset the disadvantage of having non-readily convertible national currencies with which to trade in the international community.

Barter system, as being a model of finance which is not effected by any speculations, takes its original value from productivity, and ables to take the place of money as an exchange instrument and nonrenouncable worth of unit in economies. Examples of these trades can be illustrated by examining the international barter service organization, TurkBarter, in Turkey and how it acts as a broker between member businesses to facilitate the trade surplus of stock, perishable assets, time, space and skills which can be exchanged for other items without paying cash.

TurkBarter provides the following services:

- Maintains administrative processes for international membership of trade credit organization

- Controls the issuances of TurkBarter checks as instruments of payment and collection in the barter system
- Maintains international membership as a member firm of the Barter Common Market network thereby functioning as a finance system that satisfies needs through the use of a professional broker
- Officiates over a trade credit system that evaluates capacities and products/materials belonging to its members
- Maintains membership database with private account transactions while maintaining an online bidding auction (BarterBid) allowing members to buy goods
- Acting as a system advisor and trade broker, determines customer needs, develops strategies by which each member achieves benefits and advantages of the system

Maximizing the return of a systematic approach to barter depends upon various factors such as: the assessed value of the goods and services, their desirability, and the time available for disposal. For instance, some consideration must be given to certain costs such as:

- Disposal and Administrative Costs
- Cost of disposal administration. (This includes the costs of determining the fair market value, internal coordination, and other administrative efforts.)
- Cost of collection and transportation
- Cost of segregation, separation, or reconditioning.
- Premium/discounts for quality and desirability and volume.
- TurkBarter Agent commission and valuation costs. (Agent commission or valuation costs must also be considered as they will effect net revenue.)

2.1. Current Issues in Asset Recovery

In addition to cost containment, there are other factors driving the present interest in asset recovery. They arise from two main factors. The first is the increase in legal and regulatory procedures and the second is the availability of alternate channels of disposal.

2.2. *Bartering Surplus Materials and Excess Capacity*

A recent phenomenon in surplus material disposal and utilization of excess capacity is the ability to barter or exchange materials and services for other services such as media time or long distance telephone services (Plank, Reid & Bates, 1995).

The benefits of barter include:

- Dealing with excess inventory (which would otherwise left unsold or destroyed)
- Reducing cash expenditures for media, business travel expenses or other traditional services and increased liquid asset position
- Avoidance of loss or the need to incur costly write-downs of assets carried on the accounting records
- Reaching new customers, and getting the opportunity to expand the current market shares.
- Opening up opportunities to trade where money in the form of cash may not be available.

While the concept of barter appears inherently appealing, there are many limitations which are not often adequately discussed. These include:

- Barter agents are best equipped to dispose of excess finished goods inventory, such as watches or other items with a ready market. They are not well-equipped to handle old machinery or likely products.
- Barter contracts are usually complex and are usually part cash transactions. For example, if Company X has \$100,000 worth of material, an agent will exchange it for \$100,000 worth of trade credits. However, only a percentage of a purchase can be paid for with trade credits - the remaining portion must be paid in cash. If the trade credit margin is 25 percent (margins can be as low as 5 percent), Company X has to purchase \$400,000 of media time in order to use the \$100,000 in trade credits. Thus, barter may not make sense if the company does not require this amount of media time.
- The barter agent may charge premium prices for the media time exchanged for the goods. This is one way the barter agent can compensate for purchasing material at above-market prices. Organizations should carefully evaluate all available alternatives, including the option of selling the item at a loss and buying the media time through their regular channels.

- Surplus material might be used to compete with material sold through the regular distribution channels of the company and thus create a gray market. Care should be taken in drafting the contract to ensure that the barter agent disposes of the material in a new market (Maynard, 1994).

2.3. Trade Credit Program

Becoming a member within a trade credit barter program, two effective methods that help regain a significant portion of an original investment are:

- Bartering
- Exchange of materials and excess services capacity for credit

The first instance involves trading the product for merchandise or services that can be used in the future. Although no cash is seen immediately as a result of the "sale", cash is conserved when future purchases are made. This provides a return to the company for the inventory that was transferred.

Bartering companies typically offer a variety of products and services acting as a clearing house, matching needs of various companies with products available for trade. A particular advantage of these arrangements is that credit is often given for the full book value of inventory (Yates, 1994). This saves the need for write-offs and their negative effect on an income statement. The value of goods transferred is shown as a receivable on the organization's books which is satisfied by future purchases from the bartering company.

The disadvantage of this type of arrangement is that the bartering firm must be able to provide products and services that are needed, at an acceptable price and quality (Murphree, 1993). The risk, however, can be minimized by choosing trading companies which allow the products, quantities purchased, and price to be determined before the transfer of surplus material takes place. In this manner, risk and exposure is minimized since one knows in advance what will be purchased to recoup credits extended for excess inventory.

3. A First Review of Survey Results of SMEs at Aegean Free Zone

In the Spring of 2004 at the Aegean Free Zone in Gaziemir, Izmir, Turkey, a research staff engaged in a survey that questioned the invited participants at a Small and Medium Sized Enterprise (SME) session that included corporate and public official representatives such as Free Trade Zone (FTZ) representatives at ESBAŞ in Gaziemir, Aegean Region Chamber of Industry-EBSO, World Association for SME-WASME, Undersecretariat of the Prime Ministry for Foreign Trade-General Directorate of Free Zones, Corporate Affairs and Communications, United Nations Development Programme-UNDP, Exporters Assembly-TİM, Association of Automotive Parts & Components Manufacturers-TAYSA, TurkBarter, Magnesia Ltd. As a general survey of attitudes and feelings amongst those, the participants of the sessions were asked to comment on whether barter could be effective in:

- Dealing with obsolete or excess inventory
- Exchanging trade credits for accounts receivables payments
- Media / advertising
- Hotel accommodations
- Airline travel
- Courier and telephone services
- Shipping
- Printing
- First year insurance premiums
- Computers / copiers
- Office furniture & fixtures
- Raw material
- Others
- Facilitating the ease of business deals when hard currency is not available
- Trading services for other services
- Trading products for other products
- Other areas
- Knowledge of Barter Trade Company
- Participation in a Barter transaction within the past 5 years

3.1. General Findings and Conclusion from Survey of SMEs

With a 44% response rate (27 out of 62) from SMEs professionals and managers from both U.S., European, and Turkish SMEs as well as various government officials and ministerial departmental staff and interested local business persons responding to a barter research project survey in Izmir, only 78% (21 out of the 27 respondents) indicated that they are familiar with a form of international barter dealings with a barter organization but only 1 of these had been engaged in barter within the recent 5-year period. No other analyses nor review of the data were made for this research report.

However, a conclusion may be made that barter is familiar to many SMEs' businesses and to government officials but that there is very little experience with actual involvement in this issue, especially as it may provide a strategy for increasing levels of profitability and efficiencies, risk reduction and costs control.

4. An Application of the Trade Barter System at Izmir University of Economics

The below is an illustration about how a trade barter system such as that offered by the membership with TurkBarter might benefit a local university, Izmir University of Economics:

- It is suggested here that the university may make use of the barter system through selling its own services, sponsorships and various advertising alternatives. In short, IEU may deploy the barter system as a finance system by satisfying its needs through the purchase of various kinds of goods and services such as: multifunctional office machines, computers, office furniture, other office fixtures and equipments.
- In exchange for these acquisitions, University can take the advantage of accommodation, organization and seminar options in selected first class hotels and resorts throughout Turkey and all over the world in general.
- Other acquisitions may include needs met by insurance coverage, security arrangements, catering services and related equipment, cleaning materials and such.

- The University's media advertisements and sponsorships may likewise be bartered and barter dollar credits are banked in the system, allowing the use of these credits, for example, for the purchase of construction goods and services associated with the on-going new building facilities activities.

5. Summary and Conclusions

Within the corporate organization, there has been a push to manage the total life cycle costs. It is estimated that the Turkish industry has hundreds of millions of dollars tied up in non-working assets and in excess services capacity, but few businesses handle these materials and services in the most optimal way. The disposal of surplus assets and the utilization of excess capacity are the final step in the barter process.

The need for and identification of asset recovery procedures and utilization of excess services capacities are evolving and managers need to address a variety of issues and challenges. This research work has highlighted many of these issues and presented the challenges in asset recovery and effective utilization of excess services.

However, the continued development of this realization depends upon the ability of the barter participants to generate profits. There are considerable savings opportunities demonstrated through benchmarking research studies. One study found that for every dollar spent in asset recovery and successful excess capacity utilization using a barter trade credit program, the returns were almost 12 times the amount spent and the cost savings as a percentage of gross revenue was 26.5 percent (Yates, 1994).

Overall, trade credits seem to be a very effective way to provide value for idle assets and the effective utilization of excess services capacity. Involving suppliers in the process can lead to a very effective partnership arrangement that is beneficial to both parties. Buyers receive higher than normal value for surplus inventory and excess capacity, and suppliers receive assurance of future business. The process provides a continuing relationship with both parties, fostering mutual trust resulting in mutual advantage. In short, a partnership leading to higher "profits" for both parties.

Finally, the possible suitability for the University to become a member of a barter trade credit system has been suggested with the conclusion that advantages may accrue to

the operation managers that are tasked to achieve cost cutting initiatives while making use of excess materials and excess services capacity in training and education services.

However, it must be emphasized that while the financial benefits of an aggressive investment recovery and excess services capacity utilization program are impressive, there are other intangible benefits of equal, if not greater, importance. These intangible benefits range from environmental preservation to the goodwill generated by gift giving. Actions such as these make the world a better place in which to live and be an example for the recognition of global social responsibility and good corporate citizenship.

References:

Bankester, Rebecca R. (1993). "Obsolete By Nature: How To Cash In Inventory", EBN Purchasing Issues, March.

Bates, Frank (2005). Personal interviews with business professor instructor of Izmir University of Economics, Izmir, Turkey, January – March 2005.

Bates, Frank and Akin, Melek (2004). Unpublished and unofficial survey results on the opinions and perspectives from SMEs on the subject of barter while attending SMEs business sessions at the Aegean Free Zone in Spring 2004.

Barr, S. (1993). "Trading Places: Barter Re-enters Corporate America," Management Review, vol. 82, no. 8 (1993)

Chandrashekar, A. and T. C. Dougless, (1997). "Asset Recovery: New Dynamics for Purchasing Organizations," International Journal of Purchasing and Materials Management.

Maynard, R. (1994). "Can You Benefit from Barter?" Nation's Business, vol. 82

McDonald, J.J. (1995). "Barter Can Work," Chief Executive, 1995

Murphree, Julie (1993). "One Purchaser's Trash Is Another's Treasure", NAPM Insights, August

Plank, R.E., D.A. Reid, and F. Bates (1995). "Barter: An Alternative to Traditional Methods of Purchasing," International Journal of Purchasing and Materials Management, vol. 31, no. 2

Verzariu, Pompiliu (2000). The evolution of international barter, countertrade, and offset practices: A survey of the 1970s through the 1990s. U.S. Department of Commerce, International Trade Administration, Office of Finance and Countertrade, Washington, DC.

Yates, Rene A. (1994). "Investment Recovery: Partnering for Profits", NAPM 79th Annual International Purchasing Conference Proceedings, Atlanta, GA, May 01.

Websites: www.turkbarter.com

International Financial Flows and Growth: Turkish Case

Melih Bozkurt

Middle East Technical University

Abstract

The last decade witnessed several financial crises especially in developing world. Turkey was one of those, which opened their financial gates to the world in 1980's and affected from capital flows. In this study, the developing countries were questioned and their economic performances in last decade are demonstrated. The relationship between international financial flows and economic growth in the case of Turkey is aimed to be analyzed. The decomposition of capital account and Balance of Payments are employed to put Turkish case into question. By utilizing simple econometrics, an empirical part is used to reach concrete results about the relationship. According to results, the growth is negatively related to financial account of BOP reflecting all financial flows. Literature shows compatible results that are implying that the currency and banking crises of the 1990s did much to encourage the belief that capital account liberalization raises the risk of economic instability.

1. Introduction

From 1980s and onwards, most countries of the world have been opened to capital flows. With the liberalization of capital accounts, capital movements became freer, but also became less controllable. Starting from last two decades, the liberalization of capital account affected developing countries somewhat different from others. Turkey is also one of them, which opened its gates to capital movements to integrate its economy to the world.

The basic motive behind the capital account liberalization is the expectation for growth with foreign capital. This notion portrays international capital mobility an engine of growth. But problematic situations of developing economies due to financial flows and

currency crises in 1990s put this “engine foreign capital” notion into question. This perspective sees capital movements as a source of instability. When the case for Turkey is handled in terms of capital movements-growth relationship, the last decade is subject to this dichotomy thanks to economic crises occurred in this period.

This paper attempts to address these issues and investigates the relationship between capital flows and growth for Turkey considering last decades. The plan of the paper is as follows: in the next section, the characteristics of capital flows will be investigated. It is followed by the section discussing the Turkey case. The econometric methodology is introduced in section IV. The paper is concluded in section V.

2. The Characteristics of Financial Flows

2.1. The Diagnosis:

Throughout the age of globalization, it is observed that international capital flows have important effects on macroeconomic balances in developing countries. These flows affected the developing countries in the form of short term and speculative movements. The rush of investors to financial markets to make money by arbitrage is also an important feature of last decade. Together with these, the increasing volatility of financial markets was also obvious in developing countries. The decomposition of capital account has changed. During 1990's, the share of capital sourced by short-term borrowing increased whereas FDI share under capital account decreased (Berksoy, 1998). It is important to consider developing countries when investigating financial flows and their effect on economies especially for last decades. 1994-5 Mexico and Turkey, 1997-8 Far-East Asia and Russia, 1999 Brazil, 2000-1 Turkey and Argentina economic crises affected millions of people worldwide. The explanation for the vulnerability to crises seems to be related to a major change in the financial regime in the world, specifically, in the course of the nineties capital flows to developing countries increased dramatically and this was accompanied by internal and external financial liberalization, known as Globalization (Liviatan, 2002). There were many things in common in developing countries such as weak banking and financial system, ineffective regulations and legal system, huge deficits,

fiscal imbalances and moral hazard most of the time. Turkey was also one of them, which was seriously affected from capital movements in 1990s.

2.2. *Financial Flows and Growth*

The neoclassical theory says that the countries with limited resources can reach higher growth rates by using external financing via international financial flows, and theory behaves these flows as useful instruments. But, this approach supposes that the markets are efficiently operating and interest rates would be equalized among countries. Proponents of this view enlist history in their support. In the nineteenth century, some observe, foreign investment contributed to capital formation significantly in emerging markets by prompting far-reaching changes in financial structure and regulation. Foreign investment - as in the case of Argentina railways, where Englishman not only provided the capital but also scheduled and drove the trains- came packaged with technical expertise (Eichengreen, 2003: 13).

3. The Turkish Case

3.1. *The Decomposition of Capital Account (KAB):*

Capital Account for a country mainly consists of four main parts: Foreign Direct Investment (FDI), Portfolio Account, Other Inflows and Net error and Omissions (NEO). Capital account records all financial transactions of the country in these sub-accounts. The composition and the distribution of this account is important indicator of a country's financial position.

3.1.1. Foreign Direct Investment (FDI)

FDI reflects the net of physical investments made by foreigners to domestic country and domestic citizens' foreign investment. For Turkey, this account is always positive (see

table 3.1) but it never exceeded 0.5 % of GNP in 1990s. This is a somewhat puzzling observation given that Turkey has a very dynamic private manufacturing sector, and Turkey is a major manufacturing base for a number of important multinational corporations. Thus, although there may well be a reasonably good presence of international firms in Turkey, such presence has not brought about a large financial inflow (Celasun, Denizer and He,1999).

3.1.2. Portfolio Account

Portfolio account includes equity securities and debt securities. They are both in one year and longer maturities. Since portfolio reflects financial investments due to interest rate differentials, most of time they are subject to speculation and arbitrage. The liquidity and volatility in the nature of these investments differentiate them from physical investment capital.

Table 3.1: Capital Account For Turkey 1989-2004 (Million US Dollars)

	CAPITAL ACCOUNT FOR TURKEY 1989 - 2003														
	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
FDI	663	700	783	779	622	559	772	612	554	573	138	112	2769	862	418
Portfolio	1386	547	623	2411	3917	1158	237	570	1634	-6711	3429	1022	-4515	-590	2611
Other ST Inv.	-584	3000	-3020	1396	2994	-5190	3635	2665	-7	1313	1024	4200	-11321	-922	6087
NOE	971	-468	948	-1190	-2162	1832	2432	1499	-987	-667	1631	-2788	-2322	-137	4303

Source: Central Bank of Turkey and SPO

3.1.3. Other Inflows

Aside from FDI and portfolio investments, Balance of Payments includes other investments including trade credits, banking sector, IMF, General Government credits. Most of them are short term in maturity. By excluding trade credits and including portfolio investments of which is not medium and long term, all short term private capital make up the “hot money” resourcing from banks, individuals or corporate firms (Boratav, 2003: 25). This “hot money” is arbitrage seeking, stemming from interest rate differentials and open to speculations naturally as stated before. Then, it is named as hot due to its displacement and movements depending on these factors or channels.

3.1.4. Net Errors and Omissions (NEO)

The “Net Errors and Omissions (NEO) “ is the final account of Capital Account .It is very interesting for Turkey since it is expected to be a smallest account since it reflects the errors. But for Turkey, it’s a quite large and changing amount. NEO is the total of financial transactions that are remained from those counted above. The decomposition of NEO is uncertain.

3.2. Interest Rate Effects

With the liberalization of the capital account, a convergence can be expected between domestic and external interest rates. But country experiences of nineties show that domestic and foreign interest rates differ which causes international capital flows. It is clear to say that hot money, which makes greatest part of capital flows, is stemmed through interest rate channel and this explains its volatile and speculative nature.

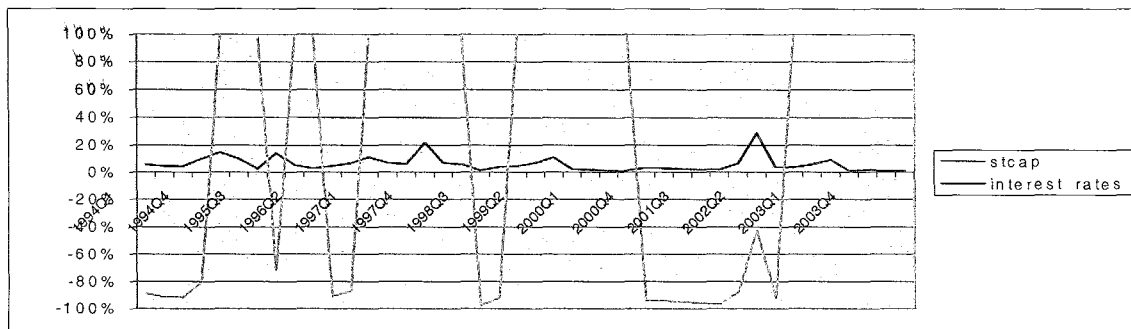


Figure 3.1: The Interest Rates and Short-Term Capital Source: Central Bank of Turkey

High short-term interest rates prepare an attractive environment for speculative arbitrage seeking short-term capital flows. Regardless of the initial level of interest rates and exchange rates, capital inflows to the developing countries apt to create an arbitrage margin by increasing domestic interest rates and appreciating real exchange rates later (Sarno and Taylor, 1999). Since the capital flows directed toward higher interest rates and they are staying in very short term, it is impossible to finance a physical investment where there is no return from the investment decision and needs to be funded for longer terms. The situation for Turkey, considering last two economic crises, is parallel to that of other

developing countries suffering from sudden short term financial flows relating to investors confidence to country by real interest rates.

3.3. *Exchange Rate Effects*

The second important channel for capital flows exchange rates. During last decade, it is observed that the real exchange rate of countries, which have positive capital inflows, has appreciated. RER is said to balance when there's no net capital movements (Ercan, 2000). Since the demand for domestic currency increases with capital inflows, this decreases nominal exchange or at least keeps same in terms of other currency. As Corsetti, Pesenti and Roubini (1998) state that virtually all analyses of crisis episodes emphasize that a real exchange rate appreciation may be associated with a loss of competitiveness and a structural worsening of the trade balance. This means a higher current account deficit (CAD) and signifies a danger in sustainability of CAD. Also, to finance the deficit, this time interest rates will probably go up to attract funds with a decreasing rate of domestic economic activity.

For Turkey, real exchange appreciates in the period between two economic crises. In 1990s, Turkish Lira (TL) appreciation has come with many problems in both fixed and flexible exchange rate regimes.

3.4. *Other Factors*

There are also many factors that affect relationship between financial flows and growth for Turkey. To begin, with public finance and fiscal imbalances are quite important for Turkey. While in most other emerging market economies, financial opening was accompanied or preceded by fiscal and structural reforms; this was not the case in Turkey. The new regime began under conditions of chronic and high inflation that averaged about 70 percent in the late 1980s (Celasun, Denizler and He, 1998). Turkey with increasing public sector borrowing requirement treated capital inflows so as to finance the deficits. It is clear that higher debts and higher interest payments (with a capital account which is mostly composed of short term funds) negatively affect GDP growth considering short

term borrowing requirement. Aside from fiscal imbalances, banking sector in Turkey, which went into crisis at the end of 1990s, is still weak. State banks' contingent liabilities and duty losses, private banks' open positions made the banking sector troublesome in 1990s. Turkish banks operated in a volatile macroeconomic environment where there was also high chronic inflation, moral hazard due to blanket coverage, inefficient and non-performing loans. There are also many factors such as tax and legal systems' problems, political environment, lack of regulations in financial system, unrecorded economy all of which can help to explain the relationship for Turkey better.

4. The Empirical Investigation

In this part by using econometric modeling, we try to investigate the growth- financial flows relationship for Turkey. By employing independent variables of financial account, FDI and short-term capital by using quarterly data of 1989-2003 for Turkey, GDP level and growth rates are regressed. All data is conducted from Central bank of Turkey. To find the effect of financial flows on this volatility and instability of growth, the first model is built like this:

Model 1: $GDPLEVEL = b_1 + b_2 \text{Financial Account}$

Since the financial account makes the body of capital account, in this model it is used as independent variable. Model is estimated as follows:

$GDP LEVEL = 812.52 - 0.554 \text{Financial Account}$

where Financial Account is not significant at 5% level. However, when the real exchange rate is added to model 1, the estimation is:

$GDP LEVEL = 8817.1 - 1.102 \text{Financial Account} + 168.10 \text{Real ER}$

(For 1994 and after)

where this time p-value for Financial Account is smaller than former model and having significance at 5% level. The GDP level best explained with a minimum p-value when interest rate is taken into the last model. Also when portfolio account is used as independent variable, the relationship is again negative and insignificant (see Table 4.1 below). Then, it can be said that there is a negative relationship between GDP level and financial account, which measures the net of financial flows.

To be clearer, GDP growth should be investigated. The following model (Model 2) employs GDP growth as dependent variable and the estimation with financial account as independent variable is as follows:

$$\text{Model2: GDPGROWTH} = 7.17 - 0.005 \text{Financial Account}$$

which is significant at 5 % level. If portfolio account is taken instead of financial account, the relationship negative but it is not significant even at 10% level (See Table 4.1 below). If the short-term capital (as defined in third section) is employed as independent variable, the relationship seems positive but not significant. No significant relationship is found between short-term capital (including portfolio and other short term accounts of capital account) and growth even including real exchange rate and/or interest rates (see table 4.1).

However, again when real exchange rate and interest rate is added to Model 2, this time GDP growth is better explained with lowest p-value of financial account:

$$\text{GDPGROWTH} = 11.4996 - 0.007 \text{Financial Account} + 0.423 \text{RealER} - 0.12558 \text{Interest}$$

(For 1994 and after)

When FDI is utilized as an independent variable to explain GDP level, there isn't observed a significant relationship. All regression estimations for GDP level and GDP growth rates are supplied in following table. The independent variables are in right column with their coefficients and level of significances (a (**)) sign means variable is significant at 5% level whereas a (*) sign implies 10 % significance).

Table 4:1: Regression Results

Dependent Variable	Constant	Coefficient and Independent Variable(s)
GDPLEVEL	812.5285	-.55444 FinAcc
GDPLEVEL	8817.1	-1.1021 FinAcc ** 168.1019 Real ER **
GDPLEVEL	36995.4	-1.0782 FinAcc** -119.1172 Interest
GDPLEVEL	17360.5	-1.1531 FinAcc** 121.0756 RealER 40.7880 Interest
GDPLEVEL	25696.2	-.68158 Portfolio
GDPLEVEL	25715.3	-.54587 FDI
LNGDP	10.1230	.2733 FDI
GDPGROWTH	7.1781	-.0053471 FinAcc**
GDPGROWTH	5.4116	-.00686 Finacc** 019030 RealER
GDPGROWTH	11.4996	-.0072675 Finacc** 042346 RealER - .12558 Interest
GDPGROWTH	4.8878	-.638 PORTFOLIO
GDPGROWTH	4.7399	1725 STCAP
GDPGROWTH	-2.5851	.5048 STCAP . 051594 RealER
GDPGROWTH	-1.7051	.448 STCAP .072401 Interest
GDPGROWTH	-14.8565	.5362 STCAP .097429 RealER .09781 Interest

Source: Our calculations.

The above calculations and estimations show that for Turkey, there is a negative relationship between growth and financial flows. Here, the important thing is that financial account of Balance of Payments measures all FDI, portfolio account, other short-term accounts and NEO inflows (both liquid and illiquid ones). Then, these estimations imply a general, including short and long term flows, negative relationship between with international financial movements and real GDP growth. In other words, the capital account liberalization in 1989, as opposed to neoclassical theory, operated in decreasing growth rate for Turkey. Authors also support this result. Yentürk (2003) asserts that the fundamental results that are expected with the liberalization of capital movements were not found for developing countries and foreign capital flows negatively affect investments and growth due to real appreciation of domestic currency, high interest rates, high public sector borrowing rate and fragility in banking sector and firms.

By using quarterly data from 1989 to 2003, the estimations could not say something obvious about the relation between growth and short term capital (STCAP) including portfolio and other short-term accounts. Finally, FDI which reflects physical investment is expected to be positively related with growth rate. But, the estimations, again, could not find a stable and significant relationship for Turkey during last decade.

5. General Assessment and Conclusions

The 1990s witnessed serious financial crises especially in developing world including Turkey. Important feature of the last decade with respect to capital movements is the speculative attacks of these flows. It is obvious that the volatile and arbitrage seeker structure of international flows resource from exchange rate and interest rate differentials among countries. Since international capital tends to enter the country, which has the highest return (so has higher risk), short-term movements became the main body of capital accounts. Also last decade witnessed number of emerging market crises that the basic motive in free capital movements for growth is put into question. It is also observed that FDI did not change too much whereas portfolio and other short term accounts sharply increased.

The two important factors- interest rate and exchange rate- are the key channels for understanding of arbitrage. Their result is clear: rising interest rates and appreciation in real exchange rates. These two both negatively affect investments and enlarge current account deficits. Additionally, there are also many factors in common for developing countries. The increasing current account deficit, which needs to be financed by capital inflows, creates danger when the capital is short term and volatile. When investors' confidence decreases due to increasing country risk, sudden withdrawal of funds may cause serious economic crises. There is a negative relationship between real GDP growth rate and financial flows. The following chart summarizes this relationship:

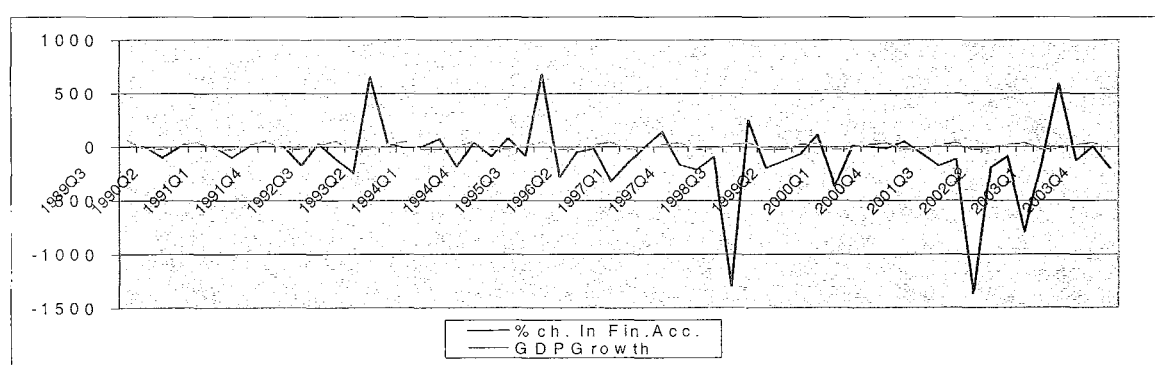


Figure 5.1: The relationship between real GDP growth (% change) and change in financial account (%)

Source: Central Bank of Turkey

As figure 5.1 shows, financial account change has high amplitude implying the volatility of flows for Turkey. Along with this, distorted macroeconomic environment increased vulnerability of Turkish economy to external shocks. Capital account liberalization also aimed to finance public sector deficits without crowding out private investment. The outcome was a rapid built of public debt and emergence of financial system which came to depend on arbitrage margins offered by high rates on government debt in comparison with international borrowing and domestic deposits at the cost of large currency risks (Akyüz, Boratav, 2002).

In summary, throughout the age of globalization, most economies of the world allowed freer capital movements as last two decades witnessed. They were mostly developing countries who suffered from sudden reversals of capital due to speculative and arbitrage seeking nature of the international financial flows. Turkey, developing country of long years, also had two important economic crises and macro reversals of which international financial flows played important roles. It seems like many economists will deal with the financial liberalization for growth and stability in the following years discussing whether it is a irreversible path or there can be important measures to be taken to tame the flows.

References:

Akyüz, Y. and Boratav, K. (2002). “The Making of the Turkish Crisis”.

Balkan, E, Biçer G.,Yeldan, E. (2002). “Patterns of Financial Capital Flows and Accumulation in the Post –1990 Turkish Economy”

Berksoy, T., Saltoğlu B.(1998). “Türkiye Ekonomisinde Sermaye Hareketleri”, İstanbul: ITO Publications.

Boratav, K., Yeldan, E and Köse, A. (2002). “Globalization, Distribution And Social Policy: Turkey: 1980-1998” in L. Taylor (ed) External Liberalization and Social Policy, London and New York: Oxford University Press.

Boratav, K. (2003). “Yabancı Sermaye Girişlerini Ayrıştırılması ve Sıcak Para: Tanımlar, Yöntemler, Bazı Bulgular” in F. Şenses, E. Yeldan and A. Köse (eds.), İktisat Üzerine Yazılar II İktisadi Kalkınma, Kriz ve İstikrar (Oktar Türel’e Armağan), İstanbul: İletişim Publications, 17–30.

Bruno, M. (1993). Foreword. In: Claessens, S., Gooptu, S. (Eds.), Portfolio Investment in Developing Countries. World Bank Discussion Papers, The World Bank, Washington, DC.

Celasun, O., Denizler, C. and He, D. (1999). “Capital Flows, Macroeconomic Management, and Financial System: The Turkish Case 1989–1997”.

Corsetti, G., Pesenti, P. & Roubini, N. (1998). What caused the Asian Currency and Financial Crisis? Part 1: A Macroeconomic Overview, National Bureau of Economic Research Working Paper Series, (1-37).

Doğruel, F. and Doğruel S. (2003). “Türkiye’de Büyüme ve Makroekonomik İstikrar” in F. Şenses, E. Yeldan and A. Köse (eds.), İktisat Üzerine Yazılar II İktisadi Kalkınma, Kriz ve İstikrar Oktar Türel’e Armağan, İstanbul: İletişim Publications, 401–428.

Eichengreen, Barry (2003). Capital Flows and Crises, Cambridge, Mass. : MIT Press.

Ercan, Hakan (2000). Açık Ekonomi, İstikrar Tedbirleri ve Sıcak Para: Türkiye, Ankara: Milli Prodüktivite Merkezi Yayınları .

Liviatan, Nissan (2002). ”Lessons for Turkey From International Experience With Financial Crises and Disinflation” .

Stiglitz, Joseph (2000). “Capital Market Liberalization, Economic Growth and Instability” World Development, 28(6): 1075–1086.

Taylor, M.P. and Sarno, L., (1999). “Hot Money, Accounting Labels and the Permanence of Capital Flows to Developing Countries: An Empirical Investigation” Journal of Development Economics, 59 (2), 337-364.

Yeldan, Erinc (2001). Küreselleşme Sürecinde Türkiye Ekonomisi: Bölüşüm, Birikim, Büyüme, İstanbul: İletişim Publications.

Yentürk, N. (2003). “Birikimin Kaynakları” in F. Şenses, E. Yeldan and A. Köse (eds.), İktisat Üzerine Yazılar II İktisadi Kalkınma, Kriz ve İstikrar (Oktar Türel’e Armağan), İstanbul: İletişim Publications, 463–504.

Web Sites:

www.imf.statistics.org

www.cbirt.gov.tr

www.die.gov.tr

www.unctad.org

www.worldbank.org

**On the Role of Institutional Investors in Corporate Governance:
Evidence from Voting of Mutual Funds in Israel**

Yaron Amzaleg

Uri Ben-Zion

Ahron Rosenfeld

Ben-Gurion University

Abstract

Institutional investors are an important group of shareholders that can potentially help solve the free rider problem of monitoring and reduce the agency costs to the firm. Special conditions existing in Israel, where mutual funds are obligated to vote and report their voting to the Israeli Securities Authority. This paper analyzes the voting of mutual funds through a sample of 5,007 voting events in 672 proposals raised in shareholder meetings. According to the findings of the study, voting decisions of the mutual funds are suspiciously related to the firm. The funds voted almost consistently with the management in some firms and less in others, which lead to suspicion, that potential business or other relations between the firm and fund managers affect voting.

1. Introduction

In the presence of separation between ownership and control, a general agency problem is likely to exist. One important aspect of the agency problem involves actions that serve the interests of the controlling shareholders and expropriate outside shareholders. Some of those decisions, referred to here as "bad", need to be approved by the board and at the general meeting. A small shareholder, who normally has little incentive to participate and vote in the meeting, relies on monitoring done by large shareholders such as institutional investors. An institutional investor can respond to "bad" proposals in two ways: Vote with its feet by selling its holdings in the firm (Pound, 1988) or take an active role and constrain

the actions of management.¹ One form of activism is voting against "bad" proposals.² A direct test of the "good monitor" hypothesis in voting requires data on the actual votes of institutional investors.³ However, as Brickley, Lease and Smith (1988) note, "Unfortunately, such data are not available." In the absence of such specific data, the evidence presented in the literature is based on the relations between institutional investor holdings and aggregate voting results. The results are inconclusive. Some, like Brickley, Lease and Smith (1988), find a positive correlation between the proportion of votes against "bad" proposals and the proportion of equity held by institutional investors, while others do not find such a correlation.⁴

This study tests the "good monitor" hypothesis directly by using unique micro-level data on the actual votes of Israeli mutual fund managers in shareholder meetings. The law obligates Israeli mutual fund managers to vote and report their vote to the Israeli Security Authority (ISA) in all proposals considered potentially harmful to their residual claimants. This study analyzes voting reports of 38 mutual fund managers in 792 management-sponsored proposals from 1999 through 2001. The proposals cover a wide range of topics, including transactions with related parties, compensation to major shareholders employed by the firm, restructuring of options and dividend distribution. Our univariate findings

¹ Gillan and Starks (1998) argue that the institutional investor's problem is whether to become an informative dealer with better information over the market or to use this information to control the manager. While it may seem possible for the institutional investor to do both, Wahal (1996) reports that this is generally not the case. Specifically, he shows that an active fund does not reduce its holdings in poorly performing firms, while other passive investors do.

² Throughout the paper, we use the notation "good" to indicate proposals with low potential of expropriation of minority shareholders. Although we recognize that "good" proposals are for the most part neutral by nature, analysis of the mutual fund's voting in these proposals may provide a benchmark as to how fund managers vote in "bad" proposals.

³ The theoretical debate includes arguments for and against high involvement of institutional investors in the voting process. Heard and Sherman (1987) argue that due to the free rider problem an increase in public holdings through institutional holdings can improve the voting process, since as an agent of many small unmotivated shareholders, the institutional investor has an incentive to invest in the voting process. Furthermore, as a long-term player, the institutional investor might help management improve long-term performance [Gillan and Starks (2000)]. Jarrell and Poulsen (1987) argue that sophisticated, well-informed shareholders such as institutions are likely to vote more consistently in accordance with their economic interests than less-informed shareholders. In contrast, others such as Romano (1993) and Black (1997) argue that the institutional investor lacks the expertise to properly evaluate management decisions. Further arguments are that an institutional investor may be subject to the internal agency problem [Scism (1993)], to pressure from the firm's management [Hwang et al. (1997)], or even to political and public pressure [Smith (1996)].

⁴ Gordon and Pound (1993); Gillan and Starks (2000) find a positive correlation between holdings by institutional investors and the aggregate votes for proposals raised by outside shareholders (as an example of a "good" proposal). In contrast, Romano (2002) finds no significant relationship between institutional investors' holdings and the level of support in a proposal raised by outside shareholders. Black (1997) argues that institutional investors vote on thousands of proposals every year, but invest little effort in how to vote.

indicate that mutual funds tend to vote in favor of most of the "bad" proposals.⁵ This evidence does not support the "good monitor" hypothesis in the strong sense, however, documented variation in voting across funds and across firms, calls for a multivariate approach. Using logistic regression, we find that the odds of voting against "bad" proposals decreases with the size and holdings of the fund in the firm. Firm characteristics also seem to have significant effect on how funds vote. Specifically, we find that the odds of voting against "bad" proposals decreases with firm size, past performance and ownership concentration.

We further address the issue of agency problem inside the institutional investor. We find that, after controlling for firm and fund characteristics, voting by the funds tend to be highly firm oriented. This finding supports the hypothesis that unobservable (e.g., potential business) relations between the management of the firm and the fund affect the latter's voting. Following Brickley, Lease and Smith (1988), we divide the funds into two categories: sensitive and non-sensitive to pressure by firm management. Inconsistent with their findings, we find that bank funds are more likely to vote against "bad" proposals.

The rest of the paper is organized as follows: Section Two outlines the main hypothesis of the paper. Section Three describes the sample design and provides some descriptive statistics of the data. Section Four presents the findings, and the conclusion is presented in Section Five.

2. Theory and Hypotheses

The basic theoretical setup for this study is the agency conflict due to separation of ownership and control. To resolve this problem and reduce the agency costs to the firm, special market and organizational mechanisms have evolved. One important internal mechanism is direct active monitoring by shareholders known as shareholder activism. Theory suggests that a shareholder will become active when the expected benefit of the active monitoring action exceeds the costs. The free-rider problem of monitoring suggests that only large (i.e., private or institutional) shareholders have the proper incentive to

⁵ The Israeli market consists of approximately 600 mutual funds managed by about 40 mutual fund managers. Although we analyze the voting by fund managers, the term 'fund' is used for the sake of simplicity.

become active. One group that has become an important factor in corporate governance is institutional investors.⁶

An important means of exercising the controlling rights attached to share ownership is voting in shareholder meetings. When an intermediate (i.e., an institution) is involved, the actual owners of the shares (i.e., the beneficiaries) cannot exercise their right as owners and vote. Under their duty of care, institutional investors have a responsibility to vote for them. Under the duty of loyalty, they have to vote according to the economic interests of their beneficiaries. In the absence of monitoring costs, we would consider an institutional investor a "good monitor" when it votes against all value decreasing (e.g., "bad") proposals.

However voting is not costless. To vote according to the economic value of a proposal, an institutional investor needs to allocate valuable resources to studying the proposal and to assessing its economic value to the firm, and vote accordingly. For a diversified institutional investor, this procedure repeats itself hundreds of times every year. The benefits from voting could be low and vary across firms and topics. This view suggests several testable hypotheses concerning voting by institutional investors.

A single shareholder owning the firm enjoys the full product of his/her costly monitoring action. Thus, s/he selects the intensity of monitoring at a level at which the marginal expected product of monitoring equals the marginal costs. A partial owner (θ) will invest less in monitoring as s/he bears all the costs and enjoys only (θ) percent of the product. Shleifer and Vishny (1986) and many others argue that owners of large blocks of shares have greater incentives to monitor management.⁷ We test two hypotheses concerning the effect of the fund's holdings on its voting, under two alternative definitions of "active voting". The first definition is consistent with previous studies and suggests that any vote other than an abstention (equals to not showing) is an active one.⁸ The second definition suggests that only voting against "bad" proposals constitutes active monitoring. Following this line, we expect a negative correlation between the fund's share in the firm

⁶ Gillan and Starks (2000) provide an historical review of institutional investor activism in the US.

⁷ For further discussion on the presence of large shareholders as a controlling mechanism, see for example Coffe (1991); Huddart (1993); Gorton and Kahl (1999).

⁸ Brickley et al. (1988) and others consider any vote as active, however under the special voting regulations defined by Israeli Companies Law, Section 275 (a) abstain votes have the same effect as no votes. The fund participates in the meeting as it must under section 77 of the Israeli law of mutual investing, however it can remain passive by abstaining. This is discussed further in the next section.

(θ) and the odds of abstaining. We further expect a positive correlation between the fund's share in the firm (θ) and the odds of it voting against "bad" proposals.

The cost-benefit framework can be used to develop hypotheses about which firms are more likely to be targeted by active institutional investors.⁹ If firm performance (i.e., stock price) reflects managerial performance, there should be a negative correlation between the odds of voting against "bad" proposals and past performance.¹⁰ Another important aspect is ownership structure. Stulz (1988), Mikkelsen and Partch (1989) and others argue that the level of inside ownership is negatively related to the probability of being subject to takeover, since it reduces the probability of success. Accordingly, we expect a negative relationship between the odds of voting against "bad" proposals and inside ownership.

3. Sample Design and Data Description

The initial sample includes 5,038 reports from October 1999 to December 2001.¹¹ These reports cover 819 proposals in 482 shareholder meetings. For a proposal to be included in the sample, it must appear in more than one mutual fund manager's report (this requirement excludes 23 proposals and 23 voting events). An additional 4 proposals (8 voting events) are excluded because of incomplete data. The final sample for this study consists of 792 proposals in 451 meetings of 301 public Israeli firms from October 1999 to December 2001. As, in all cases, more than one fund votes on each proposal, the number of voting events (5,007) exceeds the number of proposals (792). Data on assets and identity (i.e., a bank or private investment company) of a fund comes from the fund's annual report and from the database of "PREDICTA". Data on the firm's ownership structure, accounting

⁹ The theoretical framework for the hypotheses concerning shareholders activism is takeover activity. See, for example, Smith (1996) and Wahal (1996).

¹⁰ Empirical findings concerning the relationship between shareholder activism and firm performance are inconclusive. Wahal (1996) analyzes the stock price performance of sample firms over a two-year period prior to targeting by pension funds and finds that they generally underperform the market. Huson (1997) reports a change in CalPERS strategy, where bad performances (net losses) become a major factor in determining intervention targets. On the other hand, Smith (1996) finds that CalPERS did not select the target bases on prior performance.

¹¹ The selection of this sample period was dictated primarily by data availability. Section 77 was issued in 1994 and was reasonably enforced only about two years later. In those years, the reports were issued on paper and destroyed after about one year. The sample period includes the earliest dates available when this study was initiated.

performance, capital structure, stock price and market value comes from firm's annual report and from the "TAKLIT-HON" and "PREDICTA" databases.

Table 1 outlines the distribution of proposals and voting by topic. It shows that approximately 32% of the proposals are related to direct compensation (i.e., bonuses, grants and loans) to a major shareholder employed by the firm. The proportion of votes against such proposals is 32.7%, and it seems to be higher than the average of 28.1% for all proposals. A high proportion of votes against such proposals is also reported in issuing of options and stocks to a major shareholder (38.7% votes against) and in changes in firm charter (36.6% of the voting events).¹² In contrast, we find a high proportion of votes in favor of dividends (89.3%), and "standard" proposals (74.9%).

Table 1 Voting of Mutual Fund by Topic of Proposal between 1999 and 2001

Topic of Proposal	# of Voting Events	# of Votes "Against"	# of Votes "For"	# of Votes "Abstain"
Changes in firm charter	423	36.6	43.3	20.1
Approval of private issue of options and/or restricted stocks to major shareholder	659	38.7	46.6	14.7
Approval of direct compensation to major shareholder employed by the firm	1851	32.7	51.0	16.3
Approval of insurance against personal lawsuits for Executives and Directors	725	25.5	49.1	25.4
Approval of transactions with major shareholders	551	21.1	61.7	17.2
Approval of nomination and compensation of outside directors	41	19.5	58.5	22.0
Approval of duality in CEO/COB position	117	18.8	65.0	16.2
Restructuring of options held by major shareholders	186	11.3	69.4	19.3
Dividend distribution	351	9.1	74.9	16.0
Standard proposals (approving of annual reports and accounting firm)	351	9.1	74.9	16.0
Total^a	5,007	28.1	54.2	17.7

^a: The sample consists of 5,007 voting events of 38 mutual fund managers from October 1999 to December 2001.

¹² Under voting regulations, approval of changes in the firm charter requires special majority of 75% of the total votes. The documented high level of votes against such proposals seems to contradict the prediction of strategic voting theory. The latter generally predicts a positive slope coefficient between majority rule and the proportion of votes in favor. See, for example, Maug and Rydqvist (2004) for further discussion on strategic voting.

Table 2 describes the fund managers in the sample by banks and non-banks.¹³ It reports the total value of assets and the percentage of total assets held in stocks. It also provides information about the average holdings and voting reports of each group.¹⁴ Panel A of Table 2 shows that the nine bank fund managers account for approximately 89.6% of the total mutual fund assets.¹⁵ The nine bank funds report 1,838 voting events during the sample period, while the twenty-nine non-bank funds report 3,169 voting events. Panel B describes the distribution of the assets, holdings and voting of the mutual funds by banks and non-banks. It shows that, on average, a bank fund is significantly larger than a nonblank fund, however the percentage of assets that a bank fund holds in stocks is significantly lower than a non-bank fund (15.5% compared to 47.9%). The average holding of firm shares per proposal is higher for a bank (0.75% of firm shares) compared to a non-bank fund manager (0.32% of firm shares).

Table 2 Descriptive Statistics of Bank and Non-Bank Mutual Funds

Panel A: Summary Statistics of Bank and Non-Bank Fund Managers						
	No. of Mutual Funds		Total Assets		Voting Events	
Fund Manager	#	%	Millions of USD	%	#	%
Banks	9	23.7%	12,043	89.6%	1,838	36.7%
Non-banks	29	76.3%	1,398	10.4%	3,169	63.3%
All	38	100%	13,441	100%	5,007	100%

¹³ Due to the specific characteristics of the Israeli capital market, where commercial banks are an important player in all the aspects of the market, it seems natural for us to classify the fund managers into banks and non-banks. We use this classification of fund further in Section 4.3.

¹⁴ Detailed data description of voting and holdings of each fund manager by name and identity is presented in Table A1 in the Appendix.

¹⁵ Mutual funds account for approximately 9.7% of public holdings in all publicly traded firms in the Israeli market. The value of their assets in December 2000 was 13.4 billion USD.

Panel B: Distribution of Fund Managers by Banks and Non-Banks					
		Fund Assets		Fund Holdings	
Fund Manager		Total Assets (Millions of USD)	% of Fund Assets held in stocks	% of Outstanding Shares held by fund	% of Outsider Holdings held by Fund ^a
Bank	Mean	1,338.1	15.8	0.75	2.64
	Median	1,488.9	15.5	0.57	1.87
Non-bank	Mean	48.2	47.9	0.32	1.25
	Median	32.7	39.3	0.13	0.50
All	Mean	353.7	40.3	0.42	1.58
	Median	53.8	29.6	0.21	0.76

^a: The average holdings by outside shareholders (i.e., pension funds, mutual funds, private investment companies, insurance companies, etc.) is 26.2% of outstanding shares

4. Empirical Results

We begin by classifying the proposals into "good" and "bad" proposals by topic.¹⁶ Proposals to approve annual reports approve the accounting firm, and dividend issues are classified as "good", while all other proposals are classified as "bad". This criterion results in classifying 655 proposals as "bad" and 137 proposals as "good".¹⁷ The use of topic as a proxy for the economic value of the proposal is consistent with previous research.¹⁸

Table 3 describes the voting of mutual funds in "good" and "bad" proposals. It shows that funds only vote against 30.1% of the "bad" proposals. It further shows that the funds vote with management in 51.8% of the bad proposals. These findings are inconsistent with the "good monitor" hypothesis since the proportion of votes against "bad"

¹⁶ The topic of proposal is a proxy for the costs of funds in evaluating its economic value, as well as of the potential conflict of interests from the point of view of outside shareholders. Consistent with this view, Gillan and Starks (2000) find that market reaction to a proposal differs across topic. Romano (2002) finds that the level of support in a proposal raised by shareholders relates to the topic of the proposal. Previous empirical studies tend to control for topic simply by focusing on specific topics, such as poison pills (Bizjak and Marquette (1998)), executive compensation (Johnson and Shackell (1997) or anti-takeover amendments (Brickley et al. (1988)).

¹⁷ The low number of "good" proposals in the sample is a result of the fact that the reporting of mutual funds in "good" proposals is not mandatory.

¹⁸ For example, Brickley et al. (1988) focus on anti-takeover amendments as an example of "bad" proposals. Gillan and Starks (2000) find that market reaction to a proposal differs across topics, and Romano (2002) finds that the support of shareholders in a proposal is related to the topic.

proposals is found to be significantly lower than the expected 100% level.¹⁹ In contrast, some of the results indicate a distinction between voting in "good" proposals and voting in "bad" proposals. Specifically, we find that the proportion of votes against "bad" proposals is significantly higher than the proportion of votes against "good" proposals (30.1% in "bad" proposals compared to 8.8% in "good" proposals).²⁰

Table 3

Mutual Fund Voting in "Good" and "Bad" Proposals during 1999-2001

	All Proposals	"Bad" Proposals	"Good" Proposals
<u>All Funds</u>			
For (%)	54.2	51.8	78.1
Against (%)	28.1	30.1	8.8
Abstain (%)	17.7	18.0	13.2
Number of Votes (All Funds)	5,007	4,553	454
<u>Bank Funds</u>			
For (%)	38.6	34.9	75.4
Against (%)	42.1	45.3	9.6
Abstain (%)	19.3	19.8	15.0
Number of Votes (bank Funds)	1,838	1,671	167
<u>Non-Bank Funds</u>			
For (%)	63.3	61.7	79.8
Against (%)	20.0	21.2	8.4
Abstain (%)	16.7	17.1	11.8
Number of Votes (Non-bank Funds)	3,169	2,882	287

Table 3 further compares the voting of bank funds and non-bank funds in "good" and "bad" proposals. It shows that bank funds vote significantly more against "bad" proposals than non bank funds.²¹ We find that bank funds vote against 45.3% of the "bad"

¹⁹ One problem of the pooled average voting presented in Table 3 is that funds participate in different numbers of meetings (See Table A1 in the Appendix for a detailed description of the distribution of votes across fund managers). This might result in over weight of more active funds. For each fund manager, we also calculate the proportion of votes in favor of and against "bad" proposals. We then average these proportions across the 38 mutual fund managers and compare the (equally weighted) average proportion of votes against with the (equally weighted) average proportion of votes for "bad" proposals. We find in "bad" proposals the average proportion of votes against to be lower than the average proportion of votes for by 2.51 percentage points (31.2% against compared to 33.7% for "bad" proposals). The result of this weighted average test is also inconsistent with the "good monitor" hypothesis.

²⁰ In a test for the difference between two proportions, the Z-statistic is 9.58.

²¹ In a test for the difference between two proportions, the Z-statistic is 16.78.

proposals, while non-bank funds only vote against 21.2% of the "bad" proposals.²² We find that both bank and non-bank funds vote more frequently against "bad" proposals than against "good" ones. Bank funds vote against 45.3% of "bad" proposals compared to only 9.6% of the "good" ones. Non-bank funds vote against 21.2% of all "bad" proposals, compared to 8.4% of the "good" ones. While these findings might suggest that a bank fund is a better monitor than a non-bank fund, it could also be the result of differences in size, holdings or other fund characteristics that can affect voting decisions.

5. Conclusions

Shareholders are the final watchdogs of management decisions. Costly contracting and the free-rider problem of monitoring make it difficult for shareholders to monitor all decisions made by management. Institutional investors are an important group of shareholders that can potentially help solve the free-rider problem of monitoring and reduce the agency costs to the firm. While monitoring and voting by institutional investors is an important issue in corporate governance, previous studies have not examined the voting of institutional investors directly, as actual votes are generally not observable. Special conditions existing in Israel, where mutual funds are obligated to vote and report their voting to the Israeli Securities Authority (ISA), create an opportunity for researchers to study the voting of institutional investors using unique micro-level data.

This paper analyzes the voting of mutual funds in a sample of 5,007 voting events in 672 proposals raised in shareholder meetings. We classify the proposals into "good" and "bad" by topic: Proposals to approve transactions with a related party such as business transactions, direct compensation issues and private issuing of shares and options are classified as "bad" (value decreasing), while others such as dividend and "regular" proposals are classified as "good" (alleged neutral). A "good monitor" is expected to vote in favor of all "good" proposals and against all "bad" ones. Our evidence does not support the "good monitor" hypothesis in this sense. We find that in most cases mutual funds vote with management (52% of the proposals) and that they only object and vote against 30% of

²² These findings are consistent with those of Hauser et al. (1999); and Magen and Rosenfeld (1997), who find that bank fund managers tend more frequently to vote against the proposals than other fund managers in shareholder meetings.

the "bad" proposals. Where "good" proposals are concerned, funds generally vote in favor and only vote against about 8% of the proposals.

We further estimate a logistic model, where the dependent variable is a dummy variable equal to one when the fund manager votes against the proposal and zero otherwise. The estimation results suggest that the odds of voting against "bad" proposals to be about 7.1 times higher than the odds of voting against "good" ones. We also find the odds of voting against "bad" proposals to be negatively related to fund size and holdings in the firm, as well as to firm performance and insider holdings. We also find that mutual funds managed by commercial banks vote significantly more frequently against "bad" proposals than private mutual funds.

This paper contributes to the literature on the internal agency problem between the manager of the institutional investor and its beneficiaries. The evidence shows that the voting decisions of mutual funds are suspiciously related to the firm. After controlling for firm size, performance and ownership structure, we find the voting of mutual funds to be highly clustered by firm. The funds vote almost consistently with the management in some firms and not in others. This leads to suspicion that fund voting is driven by potential business or other relations with the firm.

The findings in this study present for the first time important evidence on the voting of institutional investors in shareholder meetings, with aspects and potential implications on corporate governance literature as well as on extension of voting regulations to other institutional investors and other countries. Further research will focus on the initial participation decision of institutional investors and on differences in voting patterns of institutional investors across different topics of proposals.

References:

- Amzaleg, Y., Ben-Zion, U., and Rosenfeld, A., (2004). "Institutional investors and corporate governance: evidence on the participation of mutual fund managers in shareholders meeting in Israel", Working paper, Ben-Gurion University.
- Bizjak, J., and Marquette, C., (1997). "Are shareholder proposals all bark and no bite? Evidence from shareholder resolutions to rescind poison pills", working paper.
- Black, B.S., (1997). "Shareholder activism and corporate governance in the United States", Working paper, Columbia University.
- Brickley, J., Lease, R.C., and Smith, J.R., (1988). "Ownership structure and voting on anti-takeover amendments", *Journal of Financial Economics* 20, 267-291.
- Bushee, B., and Neo, C., (1999). "Unintended consequences of attracting institutional investors with improved disclosure", Harvard University Working Paper.
- Carlton, W.T., Nelson, M.J., and Weisbach, M.S., (1998). "The influence of institutions on corporate governance through private negotiations: evidence from TIAA-CREF", *The Journal of Finance* 53, No 4, 1335-1362.
- Coffee, J.C., (1991). "Liquidity versus control: The institutional investor as corporate monitor", *Columbia Law Review* 91, 1277-1368.
- Del Guercio, D., and Hawkins, J., (1999). "The motivation and impact of pension fund activism", *Journal of Financial Economics* 52, 293-340.
- Gillan, S.L and Starks, L.T., (2000). "Corporate governance decisions and shareholders activism: the role of institutional investors", *Journal of Financial Economics* 57, 275-305.

Gordon, L. A., and Pound, J., (1993). "Information, ownership structure, and shareholder voting: Evidence from shareholder-sponsored corporate governance proposals", *The Journal of Finance* 48, No 2, 697-718.

Gorton, G., and Kahl, M., (1999). "Block holder identity, equity ownership structure and hostile takeovers", NBER Working paper No. 7123.

Hauser, S., Rosenberg, J., and Ofir, S., (1999). "Testing the benefits from imposing the participation of mutual funds in shareholders meetings", ISA publication, Hebrew.

Heard, J.E., and Sherman, H.D., (1987). "Conflicts of interests in proxy voting system", Investor Responsibility Research Center, Washington, D.C.

Huddart, S., (1993). "The effect of a large shareholder on corporate value", *Management Science* 39, 1407-1421.

Hwang Chuan-Yang., Nachtmann, R., and Rosenfeld, A., (1997). "Institutional ownership and acquiring firm performance", *Advances in Financial Economics* 3, 187-209.

Ingle, C., and Van-Der Walt, N, T., (2004), "Corporate Governance, Institutional Investors and Conflicts of Interest", *Corporate Governance: An International Review*, Vol. 12, No. 4, 534-551.

Jarrell, G., and Poulsen, A., (1987). "Shark Repellents and Stock price: The Effect of antitakeover amendments since 1980", *Journal of Financial Economics* 19, 127-168.

Jensen, M., and Warner, J., (1988). "The distribution of power among corporate managers, shareholders and directors", *Journal of Financial Economics* 20, 3-24.

John, K., and Klein, A., (1995). "Shareholder proposals and corporate governance", Unpublished working paper. New York University.

Johnson, M., and Shackell, M., (1997). "Shareholders proposals on executive compensation", University of Michigan Working Paper.

Karpoff, J., (1996). "The impact of shareholders activism on target companies: A survey of empirical findings", Unpublished Working Paper. University of Washington.

Magen, R., and Rosenfeld, A., (1997). "The involvement of institutional investors in the firm decision making process", Unpublished Working Paper. Ben-Gurion University.

Maug, E., and Rydqvist, K., (2004). "Do shareholders vote strategically? Evidence on the advisory role of annual general meetings", Humboldt-University of Berlin, Working Paper.

Mikkelson, W.H., and Partch, M.M., (1989). "Managers' voting rights and corporate control", *Journal of Financial Economics* 25, 263-290.

Pound, J., (1988). "Proxy contests and the efficiency of shareholder oversight", *Journal of Financial Economics* 20, 237-266.

Romano, R.C., (1993). "Public pension fund activism in corporate governance reconsidered", *Columbia Law Review* 93, 795-853.

Romano, R.C., (2002). "Does Confidential Proxy voting matter?" NBER Working paper 9126.

Scism, L., (1993). "Relationship investing' shows strains", *Wall Street Journal*, Nov 26.

Shleifer, A., and Vishny, R.W., (1986). "Large shareholders and corporate control", *Journal of Political Economy* 94, No 3, 461-489.

Smith, M., (1996). "Shareholders activism by institutional investors: Evidence from CalPERS", *The Journal of Finance* 51, 257-262.

Strickland, D., Wiles, K., and Zenner, M., (1996). "A requiem for the USA: Is small shareholder monitoring effective?", *Journal of Financial Economics* 40, 319-338.

Stulz, R.M., (1988). "Managerial control and voting rights; financial policies and market for corporate control", *Journal of Financial Economics* 20, 25-54.

Wahal, S., (1996). "Pension funds activism and firm performance", *Journal of Financial and Quantitative Analysis* 31, 1-23.

Woidtke, T., (2002). "Agents watching agents?: evidence from pension fund ownership and firm value", *Journal of Financial Economics* 63, 99-131.

Appendix

Table A1 sorts all 38 funds in our sample by bank (9) and non-bank (29) and describes for each fund the value of assets and the percentage of total assets held in stocks. It also provides information about the number of proposals on which each fund voted, the average level of holdings as well as the percentage of outsider ownership held by the fund at the time of the meeting. In the last column, we describe fund voting, by calculating the proportion of votes against out of total votes for each fund.

The nine bank funds in our sample voted on 1,671 "bad" proposals and voted against an average 55.8% of them. The twenty-nine non-bank funds voted on 2,879 "bad" proposals. They voted against an average 23.5% of them. Bank funds are usually larger than others. About 88 percent of all fund assets are held by banks. The average level of holdings for a bank fund is 0.73% of all firm shares, which is on average about 2.63% of the shares held by outside shareholders. The level of holdings by non-bank funds is significantly lower. On average, each non-bank fund holds about 0.28% of all of a firm's outstanding shares and about 1.04% of the shares held by outsiders. Section 275 A of the Companies Law requires a special majority of at least one third of outside shareholders to approve any proposal where there is a suspicion of conflict of interest. Thus, it seems that each fund holding on average 1.64% of the votes required is a considerable factor in the voting process.

Table A1

The Fund Holdings and Voting During 1999-2001

		Fund Assets ^a		Proposals		Holdings		Voting
	Fund Name	Value of Fund Assets (Millions of USD)	% of Total Assets held in stocks and Options	# of Proposals	% of Proposals in Extraordinary Meetings	Average Holdings from Total Stocks (%)	Average Holdings from Total Stocks (%)	Proportion of Votes against “Bad” Proposals (%)
Panel A: Bank Mutual Funds								
1.	IGUD	98.3	25.7	216	48.6	0.04	0.14	40.3
2.	OZARIT	98.0	9.0	79	40.5	0.21	0.64	59.2
3.	ILANOT	1,488.9	11.8	18	44.4	0.38	1.56	88.2
4.	DIKLA	741.8	20.2	119	49.6	1.12	3.95	50.9
5.	LEUMI-PIYA	2,197.5	18.5	167	52.1	2.51	8.45	71.2
6.	LAHAK	3,151.3	6.5	348	44.8	0.57	1.87	20.3
7.	EMDA	378.2	15.5	222	43.2	0.22	0.85	63.7
8.	POALIM	2,069.3	20.6	521	46.8	0.71	3.12	33.1
9.	PSAGOT	1,819.2	14.3	148	49.3	0.98	3.17	74.8
Bank Total / Average*		12,043	15.8*	1,838	46.6*	0.75*	2.64*	55.7*
Panel B: Non-Bank Mutual Funds								
1.	EVERGREEN	48.5	72.5	56	62.5	0.79	3.08	28.3
2.	I.B.I.	181.8	32.8	288	49.3	0.13	0.50	10.3
3.	INVESTEK	59.6	25.0	185	50.3	0.04	0.15	9.8
4.	IPAX	67.0	52.1	61	45.9	1.18	4.21	18.8
5.	ALUMOT	8.2	26.3	71	50.7	0.01	0.05	44.8
6.	ALTOSHLER-SHACHAM	67.9	23.4	30	36.7	0.46	1.57	10.3
7.	ANALYST	123.3	76.5	207	63.8	0.29	3.61	27.5
8.	AFIKIM	27.5	29.0	42	66.7	0.21	0.75	52.8
9.	EPSILON	107.8	49.3	84	51.2	0.12	0.4	20.9
10.	BLOCH-ROTSHEIN	39.1	75.3	67	53.7	1.50	5.84	10.0
11.	GMUL-SHAR	56.3	30.1	64	43.8	0.01	0.03	35.0
12.	DOVRAT-SHREM	46.3	27.6	210	45.2	0.21	0.77	12.6

Table A.1. Continued.

	Fund Name	Fund Assets ^a		Proposals		Holdings		Voting
		Value of Fund Assets (Millions of USD)	% of Total Assets held in stocks and Options	# of Proposals	% of Proposals in Extraordinary Meetings	Average Holdings from Total Stocks (%)	Average Holdings from Total Stocks (%)	Proportion of Votes against "Bad" Proposals (%)
13.	MERCAZIT	0.2	28.1	306	47.4	0.06	0.27	26.5
14.	HAREL	32.7	63.3	163	46.0	0.04	0.14	25.8
15.	CAPITAL	14.3	37.3	64	59.4	0.13	0.53	18.2
16.	JERUSALEM.	18.8	11.2	134	53.0	0.02	0.09	5.1
17.	KIVUN	4.1	99.3	115	62.6	0.25	0.88	25.7
18.	MODELIM	13.3	83.6	93	53.8	0.03	0.11	1.3
19.	MORIZ & TOCHLER	51.8	13.7	92	48.9	0.51	2.14	23.3
20.	MEITAV	69.7	49.4	197	56.3	0.50	1.75	21.4
21.	MIRIT	0.2	90.9	19	64.7	0.14	0.27	66.7
22.	KOOR	55.8	9.3	159	47.2	0.03	0.13	41.8
23.	NESOA-ZANEX	268.2	10.0	137	43.8	0.08	0.25	19.8
24.	SOLOMON	10.8	39.3	107	63.6	0.47	0.78	22.8
25.	SIGMA	3.3	86.5	47	48.9	0.01	0.05	4.4
26.	SAPANUT	6.2	72.1	49	49.0	1.03	2.96	31.0
27.	QUATRO	0.01	36.8	34	47.1	0.02	0.07	30.0
28.	ROTCHILD	0.03	90.1	44	61.4	0.07	0.19	8.1
29.	RAMKO	14.6	49.1	44	56.8	0.91	4.56	29.7
Non-Bank^b		1,397	47.9*	3,169	52.7*	0.32*	1.25*	23.5*
Total / Average*		13,440	40.3*	5,007	51.3*	0.42*	1.58*	31.2*

^a: As of December 31, 2000^b: Not including two non-bank fund managers (ZELER and SIMODAN) which had only one voting event during our sample period.

Future Contracts and the Turkish Experience

Nazmi Akyüz

Izmir University of Economics

Abstract

This paper will clarify the notion of future contracts, their history, emergence and their development. In addition, the positive effects of future contracts in various countries and the economic stability that they provide for these countries will be examined. This paper will also discuss the potential positive effects of future contracts since they have been initialized in Turkey by comparing them to successful operations in other countries. This paper will clarify the necessity of future contracts for overcoming instability of not only supply, demand and price in agricultural sector in Turkey, but also interest rates and foreign exchange rates that cause the recent crisis in Turkey. It will also examine in detail and examples the common stock operations under the title of types of future contracts. From this perspective, this paper will confirm the necessity of a derivatives exchange which was established in Izmir named as Turkish Derivative Exchange, pertaining distinctive features for Turkey compared to Istanbul Stock Exchange. As a result, this paper emphasizes that Turkish Derivative Exchange is crucially needed for Turkey.

1. Introduction

Future contract is a contract which brings about the obligation to buy and sell an economic and financial indicator, stock market instrument, commodity, valuable metal or currency on a future date, at a price, quantity and quality determined beforehand.

The basic role of the futures markets in the economy is to provide an opportunity for market participants to hedge the risk of decrease or increase in price. Exchanges created the future contracts. In future contracts both the buyers and the sellers agree to take and make deliveries at a specified price at the end of the contract date.

2. History of Future Contracts

The history of current future contracts goes back to hundred of years. However the emergence of first futures were considered the 1800s. Chicago has a particular importance in the history of future contracts. Chicago, which has received the city as a title in 1837, has had a strategic significance. Therefore, the city could meet the opportunity to develop rapidly and become the center of the trade. The agricultural products that have grown nearby were carried and stocked in the region in order to be traded.

Because of the instability regarding the supply and demand of the agricultural product, the prices were all the way down or vice versa depending on the seasonal effect. When the supply was much greater than the demand, the producers were encountering loss, and when demand was greater than the supply, the product didn't exist within the market. Since the warehouses weren't adequate and there were hardships of transportation, the conflicts in market had increased severely.

In order to avoid the detrimental effects of the conflicts in the market, the merchants began signing contracts concerning the future. First recorded future contract was signed in March 13, 1851 for the delivery of the 3000 kg of corn.

However, the future contracts held between the two parties which based on trust couldn't satisfy the needs of the merchants because the party who didn't favor the price changes wouldn't meet his liabilities towards the other party. Consequently, the merchants gathered in 1848 and established Chicago Board of Trade (CBOT) in order to centralize the transactions and amplify the trade activities.

In future contracts, the parties had solely determined the quality, quantity, price, port of destination, and maturity whereas in future contracts these issues are standardized. In future contracts the only variable is the price, which is determined spontaneously due to buying and selling of the product. As a result, the investors have entered the market.

Although the future transactions consisted of only the agricultural products until 1970s, after 1970s the necessity of constituting a new future transactions regarding the foreign currencies and the interest rates have occurred because of the alteration in the foreign currency and interest rates. First of all, future transactions concerning the exchange rates have taken action, and right after that interest future transactions were in action. Later

on, future markets were established in Europe and they have been performing an expeditious progress up to now.

The hedging need against the risk arising from the exchange rates, interest rates, and price instabilities have intensified due to the liberalization of world trade and increase in world trade volume. This need has facilitated the boosting of the volume of the future markets.

Today, future markets are regarded as one of the most substantial bodies of the liberal economic system. Looking at the developed economic systems, we can easily realize they consist of future markets.

3. Types of Future Contracts

3.1. Agricultural Future Contracts

This section will comprise of the information about the future contracts based on the agricultural products. Besides, using the cotton and wheat that are being transacted in the Turkish Derivative Exchange (TurkDEX) as examples, the methods of delivery and the purchasing and sale of future contracts will be fully explained.

The major cause for the future markets to come into existence is the excessive instability in prices of the agricultural products. About more than a century, only the agricultural products were subject to be transacted in the future markets.

In agricultural products, the only factor affecting the supply and demand is not the price. Climate conditions are a major player in the supply and demand of the agricultural product as well. Likewise, the amount and the quality of the harvest are affected by the climate. For instance, the wheat, which had received abundant rain during its growth, will be larger in amount, whereas dry weather conditions cause the amount of the wheat to drop drastically. Another important factor altering the production amount is the product preferences of the farmers. If the production in the previous year wasn't efficient, then the farmers are more likely to prefer another product for the next year. Farmers' preferences are in direct proportion with the supply of the product in the market.

Agricultural products are supply-oriented, because the production occurs only once a year. Prices function as the proportion mechanism in the consumption based product markets. To put it in another way, if the prices are high the demand for consumption decreases providing the supply of the product to expand to the next season. On the other hand, if the prices are low from the

Producers' point of view, then the reaction will be the decrease in the harvests. When the future supply of an agricultural product is unknown, then the prices will tend to increase. As the production amounts become clear, then a relaxation in the prices may be observed. However, if the amounts are indicating that the supply will be insufficient, then it is expected that the prices will rapidly go upwards.

3.1.1. Purchase and Sale of Future Contracts on Agricultural Products

Different than the other market tools, the agricultural products have unique features and therefore, one must know the time of planting, growing and harvesting while transacting on that particular product. So, keeping track of the harvest seasons would help the decisions to be accurate at the time of engaging in a future contract. In agricultural products, both the increase in the consumption and the presence of substitute products influences the price. For example, just after it is understood that the soybean consists valuable nutritional content, the demand for soybean has increased directly reacting on the price. In short, one should consider the factors affecting the price of a certain product, and watch out for the special seasons of that particular product. That's why; each product should receive much attention to the factors affecting the supply of that product such as their planting, growing, and harvesting seasons in world markets.

Currently Turkey has a future market on cotton and wheat. In cotton and wheat future contracts, the features of the contract must be specifically defined. The achievement of the price harmony between the base quality, which is agreed upon, and other qualities would facilitate market contributors to define prices by either with premiums or discounts. Consequently, it becomes possible for buyers and producers to be protected against the risk. Besides, seasons regarding the production (i.e. planting, growing, harvesting) within a country's climate in order to state the months of maturity.

As it observed in other countries, wheat and cotton future contracts are held against the speculative and arbitrage risk in our country, too. The ones with protection purpose are designed in order to avoid the unfavorable results of the price instability. The people who benefit from this type of protection are especially the merchant producers and industrialists. On the other hand, traders engage these contracts for the purpose of speculative acts in order to profit on a long-term basis. Another reason behind engaging future contracts is arbitrage. Arbitrage is the benefit achieved resulting from the difference in prices in different markets without making any investments.

3.1.2. Delivery of Agricultural Products on Future Markets

In future markets delivery is achieved upon the physical delivery of the product or upon the cash agreement. In physical delivery held until the end of the maturity date, unless the contract is closed by reverse contract, parties are liable to receive and deliver the product. However, this type of delivery comprises of only the 3% of all the future contracts on agricultural products in the whole world. Other deliveries are handled by cash agreement. In this type of delivery, the parties finalize their positions by closing the price with the negotiation price at the last day of the maturity. Thus, the parties meet their liabilities by paying the price differences to the opposing party instead of delivering the product physically.

To sum it all up, we can conclude that with future contracts, it is possible to reduce the negative effects of the seasonal factors to minimum and transform agricultural products into an investment tool as a consequence of setting prices for the future, planning the natural production, managing the risk, and enlarging the contribution base.

3.2. *Foreign Exchange Future Contracts*

When we look at the exchange regime applied in international markets, we realize the rise of the USA as an economic power while the European countries suffer severely from the burden of the losses of the World War 1. In a short time of period, US dollar replaced the British sterling in international trade. The Bretton Woods system that had been signed right

after the World War 2 has fixed all the world currencies with respect to gold, and thus, the US dollar. Because of the impossibilities of payments resulted from the gold standard, the countries has changed their existing regimes to floating exchange regime in 1971. However, new risks have arisen from the decrease and increase of the exchange rates. Especially, the party who unfavors the price changes has resulted in the future contracts in foreign currency.

We have three different foreign exchange markets in Turkey. These are the exchange markets among the banks, central bank foreign exchange market and spot foreign exchange market. In exchange markets among the banks, banks have the opportunity to see each other's bid and ask rates, and transact accordingly. In central bank foreign exchange market, buyer and seller banks define the prices by the supervision of the central bank, and they do not know who the buyers and sellers are. In purchase and sale of the foreign exchange, central bank is a mediator and a guarantor. Spot foreign exchange market is an environment with no organization and center where persons and legal entities enter into foreign exchange transactions.

In all of these three markets with instant price determinations, it is important for the contributors to know what will be the future rates. For instance, when an exporter signs a contract with 3 months of maturity at a price of x assuming that the future rates will be y . If the exchange rate is equal to or greater than y on the maturity date, then the exporter benefits. However, if the exchange rate is below y , then the exporter encounters the risk of loss. In order to hedge him against these types of risks, both the exporter and the importer have to make future contracts. Therefore, the future contracts depending on the foreign exchange is very beneficial.

3.2.1. The Uses of the Foreign Exchange Future Contracts

Foreign exchange future contracts are used for three main purposes:

- hedging
- speculation
- arbitrage

The Future contracts against the hedging risk bear a significant importance. The advantage for the manufacturer is the hedging against the risk of the increase in the imported raw

material, for the exporter, is the hedging in case of a fall that can be faced in the exchange rate, for the firm owner, is the hedging from the risks resulting from his obligations in foreign currency. In Turkey, the reasons of crisis which devastate both the exporter and the importer would be eliminated by the help and contributions of Turkish Derivative Exchange (TurkDEX). By the establishment of the TurkDEX, they will hedge themselves, minimize their losses, and maximize their profits by transacting in the TurkDEX.

Foreign exchange future contracts with arbitrage purpose are for risk-free profiting. For instance, if the dollar exchange rate is 1.3 YTL in spot markets, when the dollar exchange rate with 1-month maturity is 1.4 YTL and the transportation cost is \$60, there is a \$40 of risk-free profit gained from the arbitrage opportunity. Thus, the arbitrage opportunity is achieved from the difference in prices of different market without making any investments.

In futures contracts with the speculation purpose, the exchange rate or interest gain in the spot markets are taken into consideration as a base and it is compared to the future contract about how much it advantageous is. The benefit you provide from the future contract is the possibility of investing the remainder in spot markets after investing the 1/10 of the foreign currency you would like to buy as deposit. Future contract is evaluated at the end of the day, the profit and loss are reflected on the person's account after they are calculated. As a consequence, you can earn by just depositing the security and it indicates the advantage of future contracts for speculative purposes.

The result drawn from the above text are:

- No matter what the purpose of the foreign exchange future contracts is, it provides hedging from the risk that can be encountered from the present to the future all for the people who are in a relationship with the foreign currency such as the exporter, importer, banks, manufacturer, etc.
- It offers a competitive advantage to enterprises when an efficient risk management is achieved by using the same tool their competitors use.
- The stability in the foreign exchange rates is another benefit these contracts provide. As these contracts become more widespread, the effects of the changes in the supply and demand of the foreign exchange will reduce, and the demand for foreign currency in order to be hedged from the risk will be felt more slightly.

- From the economic managers' point of view, foreign exchange future contracts are regarded as an early warning signal.
- From the investors' point of view, it facilitates the management of large positions with small deposits and it gives the investment costs the opportunity to decrease.
- From the financial markets' point of view, it makes the investment tools easier to emerge and let the market's debt to increase.

3.3. *Interest-Rate Future Contracts*

In general sense, we know that future contracts are the liability to buy or sell the market tool, product or the foreign currency which are defined in terms of future date, price, quantity and quality. In interest future contracts, treasury bonds and treasury bills may be bought or sold as well as it may be any other interest rate is accepted in the market. In interest rate future markets, the three most common underliers are listed below:

- Treasury rates: It represents the interest rate, which the government is liable for in terms of the interest rate in its own currency. Since it bears no risk not to be able to repay the liabilities, which are in its own currency, the treasury interest rates are defined as risk-free.
- LIBOR rates: The large banks exchange different currency deposits of 1, 3, 6 and 12 months. These banks use buying rate to accept the deposit, and the selling rate to open a deposit account. The buying rate is defined as LIBID. The selling rate is defined as LIBOR. LIBOR is a very common rate. Since the bank who is liable bears the risk of not meeting its obligations, the LIBOR risk-free interest rate is higher than the Treasury rate. However, banks and other foundations use the LIBOR as risk-free interest rate, because the financial institutions invest their additional funds in this market, and they buy the funds, which they are in shortage of again in this market. LIBOR is also considered as the capital's opportunity cost.
- Repo rates: Repo is an agreement made upon the acceptance of the securities owner to sell the securities to another institution in order to buy them back at a higher price. The difference between the repo's buying and selling price is called the repo interest rate. The most commonly used repo is the overnight repo, which is gone over everyday. There are repos, which cover longer periods.

3.3.1. How Interest-Rate Future Markets Work

If we consider the future contracts whose underlier is Treasury Bill as an example, in this contract the investor who takes long position is obliged to buy the treasury bill at the end of its maturity date which the price, and the quantity is determined beforehand. Likewise, the investor who takes short position is obliged to buy the Treasury bill when it matures, too.

3.4. *Short Term Future Contracts*

Treasury bills: The interest rate future contracts in world markets are generally depended on an index. The index, the price that is quoted, is estimated by subtracting the nominal value from the discount rate. For example, the price index formula of the contract, which has value of \$100.000 and maturity of 90 days transacted in Chicago Mercantile Exchange in International Money Market in the US, is; $IMM\ index = 100 - \text{discount rate}$

The profits and losses of the investors are calculated at the end of the day with respect to the changes in the IMM index. Let's suppose that there is a discount rate of 8.32% in contracts of treasury bills with 90 days of maturity. Accordingly, the IMM index would be 91.68. The reason of this transformation is to obtain the purchase price to be lower than the sale price. Generally, since there is this relationship among the markets, investors can supervise easily by the price indexing system occurred by an interest future contract.

3.4.1. Eurodollar Future Contracts

The dollars, which is deposited in banks outside the US or in participation of the US banks in foreign countries, is called the Eurodollar. The underliers are the deposit, which is invested with 3-month-maturity in the Eurodollar future contracts transacted in CME's IMM.

3.5. Long Run Future Contracts

Treasury bonds: In future contracts, generally the treasury bonds with 2, 5, 10, 15 years of maturity is used most commonly as an underlier. Most well known future contracts are the contracts transacted in the CBOT. These are distinguished among themselves according to their maturities such as maturities with 2, 5, 10 years are called the treasury notes, where maturities with more than 15 years are called the treasury bonds. The treasury bond whose maturity is more than 15 years is transacted intensely in immense volumes. The quotations of these contracts are handled the same way as the treasury bonds. A contract comprises of the delivery of a treasury bond with a \$1000000 nominal value. Thus, a \$1 change in quoted contracts result in a \$1000 change in the value of the contract.

In these contracts, the treasury bonds that have more than 15 years to its maturity on the day of its delivery and cannot be callable up to that date are delivered. When an interest rate future contract matures, the bonds must be determined for the delivery and this makes the interest rate future contracts more complicated than the future contracts.

4. The Necessity of the Interest Rate Future Contracts and Its Contribution to Country Economy

- In Turkey, the investors' options are limited to stock exchange market, treasury bill and bond and bank deposits. By the interest rate future contracts, the investors are offered a new option and this will result in the financial investments to increase.
- The risk of investment funds is controlled and they can grow further by the help of more efficient management.
- The volume of current markets depending on the interest will increase as the interest contracts are offered to the market. The demand for the market will enlarge as the protection against the risk in cash markets becomes possible with future markets.
- When the markets work well, the demand for the treasury bill will certainly increase, and this will provide the treasury to take loans easily and inexpensively.
- The variety in financial tools and the increasing transaction volume will be the reason of the increase in the incomes of those institutions and institutions with stronger financial base will emerge. Of course, this will reflect the economy in a positive way.

- The foreign investors had seen Turkey as a risky country, and they limited amounts of their investments of capital market tools in Turkey. As the interest rate future contract and the other future contracts are offered by the TurkDEX to the market, a tool will be in action which the
- Investors and industrialists use in their own countries and they can control their risks under the umbrella of the future market.
- The businesses performing in the real sector take loans in order to finance their projects can protect themselves against the risk resulting from the change in the interest rates.

5. Future Contracts on Equity Index

In stock exchange market, the movements and the assumptions for the future movements are always in daily talk. The appreciation and depreciation of stocks either directly or indirectly affects almost every people. When we recall that contribution in the stock exchange in the US is about 80%, we expect that the movements in the markets would affect an ordinary citizen. Of course, the daily movements are not so important. The short-term movements offer opportunities to the speculators, but it's not important for an ordinary citizen who has long-term investments. For the ordinary citizen, the floating of the stocks of two companies is not important, as well. Because the citizen invests in the market by the mediation of the funds. However, the general appreciations and depreciations of the stocks would influence all the people's wealth that has investments both in stock markets or retirement funds.

Equity index future contracts are used most efficiently for the protection of varied portfolios against the risk of general market changes, because these portfolios reflect the general changes in the economy, like the stock indices. Thus, we can conclude that there is a high correlation between the value changes of the portfolios and the price changes in the market. The risk resulting from the highly varied portfolios value change can be eliminated by the buying and selling of future contracts provides a high correlation.

Generally, the assumption about stock is the future movement of the stock indices. Since 1982, the stock indices provide protection against the portfolio and speculation risk.

6. Why Do We Need Equity Index Future Contracts in Turkey?

First of all, stocks are one of the alternative investment tools. Today, the investors who have accounts within the Takasbank are approximately 1.6 million. Banks, intermediary institutions, portfolio management companies have immense positions in the real and legal entities' portfolio with A-type funds. In order these portfolios to be managed more efficiently; the solution to the future price risks is equity index future contracts. Besides, the costs of investment in spot markets are higher than the future markets. In future markets, it is possible to manage large positions with a small deposit. Likewise, you can start the position only by buying and selling in the stock market where there is no possibility of sell open, but you can start the operation by buying and selling methods in future markets. In order to sell in future markets, you don't have to own any underliers.

While you are able to buy and sell a stock within the session today in ISTANBUL STOCK EXCHANGE, you can buy and sell the index by the mediation of the index investment funds within the limited time. It is possible to buy and sell the index during the session more efficiently and easily with equity index future contracts.

Besides, it provides the opportunity to evaluate rationally the present and future of the equity index future contracts prices with different maturities. The stock amount, which is to be bought or sold in spot market, is limited to public offer, while there is no limitation in the demand and supply of this market.

7. Conclusion

Future contracts, which have a hundred year of history, are crucial instruments that are used extensively in future markets. Future contracts are widely used for hedging, speculation and arbitrage purposes. Foreign exchange future contracts provide hedging against the risk that can be encountered from the present to the future for all, who are in a relationship with the foreign currency. Foreign exchange future contracts offer a competitive advantage to enterprises when an efficient risk management is achieved. From the economic managers' point of view, foreign exchange future contracts are regarded as an early warning signal. From the investors' point of view, it facilitates the management of

large positions with small deposits and it gives the investment costs the opportunity to decrease. From the financial markets' point of view, it makes the investment tools easier to emerge and let the market's debt to increase. The stability in the foreign exchange rates is another benefit these contracts provide. As these contracts become more widespread, the effects of the changes in the supply and demand of the foreign exchange will reduce, and the demand for foreign currency in order to be hedged from the risk will be felt more slightly.

On the other hand, Turkey went through severe financial crises in the years 1994 and 2001 because of instability in the economic conditions. Financial crises resulted with short-term capital outflow, an increase in interest rates and depreciation of TL. Therefore, Turkdex was established 2005 to keep economic variables stable.

References:

Brief Introduction to Turkdex

Kolb, Robert W. Futures, Options, and Swaps

Türev araçlar Lisanslama Rehberi

Websites:

www.ama-assn.org/ama/upload/mm/369/ceja_report_054.pdf

www.cbot.com

www.duke.edu/~charvey/Classes/ba350_1997/futures/lecture.htm

www.eubfn.com/arts/caboto2.htm

www.turkdex.org.tr

www.vob.org.tr

An Econometric Research on the Implications of Globalization on Economic Growth

Pelin Bulut

Izmir University of Economics

Abstract

Globalization is a widely debated topic in many ways. Even though there exists some studies on the measurement of globalization for many countries, the relationship between economic growth and globalization is still investigated and is open to debate. In this study, this relationship will be investigated from an econometric framework for a group of slow globalizers including Turkey. Having found little support about the correlation between globalization and economic growth, this study aims to investigate this relationship by narrowing the analysis to slow globalizing countries. The main reason to narrow the subject is that the effects that stem from whether they are rapid or slow globalizers would be neutralized. Another reason can be identified as, to look for an explanation of economic growth from a globalization view in terms of whether it corresponds to a rapid or, as in this study, a slow globalizer.

1. Introduction

Globalization, which can shortly be defined as the integration of world economies and the elimination of barriers, is a widely debated topic in many ways. Besides its social, cultural and technical effects, how this concept influences economic growth is also wondered. Even though there exist some studies on the measurement of globalization for many countries, the relationship between economic growth and globalization is still investigated and open to debate. In this study, this relationship will be investigated in an econometric framework for a group of slow globalizers including Turkey.

Being an economic consulting firm, A.T. Kearney Co. has been conducting studies upon various globalization concepts as well as the measurement of this concept since the year 2000. For the measurement process, the company used 14 variables in the recent study

of 2004, which are grouped into four categories, namely "economic integration, personal contact, technological connectivity, and political engagement." According to the results of this globalization index, Turkey is ranked as 55 in globalization among 62 countries. However this index do not tell anything on the consequences of globalization about growth. For instance the index does not answer whether being the 55th country in rank is an indicator of lack of economic growth. As pointed out by Collins and Miller (2000), the study tells about "the degree of engagement" with the economies of the world much more than " the manner of engagement". Accordingly, as they declared even though it indicates that there is a positive correlation between international trade and economic growth, it is not a proof of that "trade causes faster economic growth". They also exemplified the words of Rodríguez and Rodrik (1999) since the studies of these two economists also indicated "little evidence" about the correlation between open trade policies and economic growth.

Having found little support for the correlation between globalization and economic growth, this study aims to investigate this relationship by narrowing the analysis to slow globalizing countries. The main reason to narrow the sample is to eliminate, the effects that stem from the pace of globalization. With only a subgroup of homogenous countries, which are all slow globalizers, the effects of the variables that measure the effects of globalization on economic growth, could be analyzed easier and the relationship between the two could be seen in a more concrete way. Another reason can be identified as, to look for an explanation of economic growth from a globalization view in terms of whether it corresponds to a rapid or, as in this study, a slow globalizer.

2. The Model

The **globalization index** of A.T.Kearney consists of 14 variables, which are collected from four baskets. These variables measure the characteristics of each basket, for instance economic integration of a country is measured by trade flows of the countries, foreign direct investment, portfolio capital flows, and investment income. The other baskets are also measured by their variables. Table 1 presents the specifics of each basket.

Table 1: The Baskets:

i) Economic Integration: Trade, Foreign Direct Investment, Portfolio Capital Flows, and Investment Income.
ii) Personal Contact: International travel and tourism, international telephone traffic, and remittances and personal transfers (including remittances, compensation to employees, and other person-to-person and nongovernmental transfers)
iii) Technological Connectivity: Internet users, Internet hosts, and secure servers
iv) Political Engagement: Memberships in international organizations, personnel and financial contributions to U.N. Security Council missions, international treaties ratified, and governmental transfers.

To investigate the effect of globalization on economic growth, the relationship between GDP and one variable from each basket that make up the globalization index were analyzed. In this manner, it is possible to isolate the different components of globalization on economic growth. These variables that are used for the measurement purposes are: *GDP* (denoted as *GDP*) is the dependent variable. The independent variables used in this study, which selected from each basket are, *Number of Internet Hosts* (denoted as *host*), *Total International telephone traffic* (denoted as *tel*), *Membership in international Organizations* (denoted as *mmbr*), and *Total Trade* (denoted as *trade*). Even though the variables are selected from the index, the dependent variable of this study (i.e., GDP) and what A.T. Kearney investigated plus the methodology are different from each other.

Nominal GDP values are used in this study and to ensure data consistency all data are used from the same source: A.T.Kearney. The main reason to use nominal values and not any growth rate is not to leave out any data of countries. Besides, the countries include both time series and cross section characteristics, and are homogeneous which are all slow globalizers.

The generic form of the equation that I used in my analysis is:

$$GDP = f(\text{host}, \text{tel}, \text{mmbr}, \text{trade})$$

Where all are expected to yield positive signs. The main motivation behind including these four variables is their representative power of their groups. Were the number of variables included larger, the outcome would be unrealistic which would manifest themselves in many values of the econometrical analysis such as extraordinary high R^2 value.

The relationship between GDP and independent variables are measured from 1998 to 2002 and for ten countries; namely Bangladesh, Brazil, Egypt, Indonesia, India, Iran, Kenya, Turkey and Venezuela. In the globalization index, these countries are labeled as ‘the Bottom 10’ since they are at the bottom of the list that includes 62 countries. The original ranking of these as they appear is given in the Table 2.

Table 2: The Ranking of the Countries

Ranking	Country
53	Brazil
54	Kenya
55	Turkey
56	Bangladesh
57	China
58	Venezuela
59	Indonesia
60	Egypt
61	India
62	Iran

For estimation method, ‘Pooled Time Series and Cross-Section Data’ was used since the variables include both cross section and time series characteristics. As a result of Pooled Least Squares and GLS methods, following estimation results are found.

Table 3: The Estimation Output

Coefficients	Pooled Least Squares	GLS (Cross Section Weights)
HOST?	111321.6* (57365.96)	-129442.5*** (31429.88)
TEL?	71.89220 (46.26838)	5.519680 (12.89441)
MMBR?	7.75E+08 (3.77E+09)	-93085393 (3.83E+08)
TRADE?	1.128593** (0.468364)	1.730293*** (0.296124)
R-squared	0.781673	
R-squared (weighted, fixed effects)		0.989111
Prob (F-statistic)	0.000000	0.000000
Values in parenthesis are standard errors. ***significant in 1%, ** significant in 5%, * significant in 10%		

For the confidence levels as denoted at the bottom of the table, variables host and trade are significant at various confidence levels as figured. The result for variables are as expected except, mmbr is not significant in any levels examined. The variable tel also seems insignificant, though at a lesser extent. As pointed out by the variables, host and trade can explain the behavior of GDP since an increase in these variables lead also an increase in GDP, as expected. However this is opposite to mmbr variable, which could not explain the membership in international organizations concept for these countries. So looking at this table would make us think that among these variables, trade and number of Internet hosts affect GDP significantly while the other two fail to explain the phenomenon. However R-squared is favorably high (0.78) and more importantly, prob(F-statistic) is 0.000000 which shows that this equation explains GDP quite well.

Serial correlation does not exist since Durbin-Watson statistic in the pooled least squares is 1.89, which is very close to 2. Thinking that these data also comprise cross-section data characteristics and may contain heteroskedasticity thereof, I applied GLS with fixed effects. Durbin-Watson value of weighted analysis is 2.84, which signals the serial correlation. The presence of serial correlation shows that for GDP, some more variables are needed (i.e., omitted variables problem) and we must have indeed expected to confront with this problem as in general we use different variables to explain GDP. But for the purposes of this study, which wants to measure GDP looking at specified variables from specified categories, the absence of serial correlation in pooled least squares method is enough for us.

3. Conclusion

Looking at the statistical outcomes, even with five variables of globalization index, a good statistical fit is obtained, which shows the importance of these variables even for the countries that are at the bottom of the list. So economic growth is directly related to globalization for these countries. On the other hand, claims on the vitality of globalization for these countries would not be totally accurate. From the econometrical framework, even though the equation has a good fit and explains GDP well, two of the variables appeared as insignificant, one of which is a direct indicator and even one of the symbols of globalization: Memberships in international organizations. This was a remarkable outcome

of the study that appears as evidence for the defenders of the idea that globalization will not bring happiness to developing countries. In point of fact, there is also significant support for the insignificance of membership in international organizations in terms of its effects on economic growth. Some economists, such as Stiglitz (2002) noted in his book 'Globalization and its Discontents' declares that policies of some institutions such as IMF, World Bank do not contribute to the economic growth and well being of such countries as the ones that are covered in this research. For these countries, membership to such organizations do not bring happiness at all, as he noted, for developing countries policies of such institutions will not result in sustainable economic growth, if not causes damages to their economies. So only for developed nations is this issue of particular importance, not for developing ones yet. As this study shows, even though membership factor may not satisfy the expectations of developing countries for economic growth, components of globalization are of quite importance for these countries. This is self evident since only selecting four variables from each basket gave the result of good fit, which could be quite natural if all the variables were chosen. So this contradiction between the importance of globalization and insignificance of some of its major indicators for these countries, also reminds us Stiglitz's thoughts as not the globalization but the way that it is handled affects such countries badly.

Even with these four explanatory variables, the importance of the concept for these countries has emerged clearly. As the statistical outcome implies, there is a correlation between globalization and economic growth. Again, it is hard to assert that globalization is the savior of these countries in terms of economic growth, and it cannot be concluded that globalization will enhance economic growth all the time but it is undeniable that globalization is an important catalyst on the way which goes to economic growth.

References:

Collins J, & Miller J.(2000). "Know-nothings and know-it alls: What's wrong with the hype about globalization" Real World Macro, Eighteenth Edition

Rodriguez F, Rodrik D. (1999). Trade Policy and Economic Growth: A Skeptic's Guide to Cross-National Evidence .NBER Working Paper No. 7081

Stiglitz, J.E. (2002). Globalization and its discontents. New York: W.W. Norton, 282 pages.

A.T.Kearney/Foreign Policy Globalization Index online available at:

Websites:

http://www.atkearney.com/shared_res/pdf/2004G-index.pdf

<http://www.atkearney.com/main.taf?p=5,4,1,94>

The Trade Liberalization Policy Followed by the WTO and IMF in 90s and Its Implications for the Developing Countries

Renata Avelar Giannini

**Universidade Estadual Paulista
“Júlio de Mesquita Filho” (UNESP) - Brazil**

Abstract

This research has its main goal analyzing the trade liberalization policy and its consequences for developing countries economy. The author analyses the introduction of the liberalization ideology on the developing countries economic growth strategy during the “Washington Consensus” and, in parallel, the prescriptions of the International monetary Fund (IMF) and the creation and objectives of the World Trade Organization (WTO). As an example of the bad consequences provoked by these ideas, follows the Mexican, East Asian and Latin American crisis, concluding that the trade liberalization policy contributed for economic retraction in these countries and turned its social situation sometimes even worse.

1. Introduction

The greatest point of this paper is the way globalization has been managed, and the consequences that a bad administration of this global phenomenon has caused to developing economies. During the nineties, the United States of America proposed a world vision based on the trade liberalization for all countries not discerning the developing countries from the rich ones. The USA and other European countries promoted the open-market ideology, seeking the access for its companies not measuring the impact that these politics could infer on the developing model of the emerging countries and also for its population.

At this period, there was a big confidence on trade liberalization policy, thought in a short term, and not attempting to the fact that its application could take the global economy to an unstable period. In a short term, globalization incited a six-time growth on finances flows from the developed countries to the emerging markets. However, with the financial crisis by the end of those years, finance flows decreased and in some parts of the world money traveled over the opposite way.

The global financial crisis from 1997-1998 combined the minor commodities price deflation and the minor inflating fall of inflationary pressure with the increase of domestic interest rate, promoting big domestic instability and economic retraction. By the end of the 90 decade, it was perceptible the failure of this policy, promoting the anti American feeling and the disbelief on the trade liberalization ideology.

2. Washington Consensus and the Trade Liberalization

The international system, during the studied period, was characterized by an advanced internationalization or globalization of capitalism, associated to the increase of domestic sensibility to the world economic changes. The national States, confronted to this reality were obligated to decide how they would connect themselves to the new world order, what required the redefinition on internal and external power coalitions. Forehead of this necessity, these sovereign States decided for the Washington Consensus non-interventionist ideas.

In January 14th 1993, The Institute for International Economic brought together government, multilateral banks and private companies executives with academics and representatives of eleven different countries from Asia, Africa and Latin America to an international seminary entitled “The political Economy of Policy Reform”.

At this conference, a unique economic plan, conceived by the International Monetary Fund, the World Bank and American Treasury, was presented and had as its main goal the homogenization of the national economic policy in more than sixty countries all over the world. For its accomplishment, three different stages were predicted:

- (i) This stage was dedicated to the macro economic stabilization, emphasized the primary fiscal surplus, involving the intergovernmental fiscal relations revisal and the rebuilding of social security.

(ii) The second step took under consideration what the World Bank calls “structural reforms”, related to trade and financial liberalization, the markets deregulation, and the state companies privatizations.

(iii) The third one consisted in tacking back investments and economic growth

This kind of strategy foresees perverse social and economic effects consequents of the austere and liberal measures applied to the national economies and population. For that reason it becomes difficult the permanence of a firmly established government, which is the primarily condition for the credibility considered by the most important international actors in that context, the “risk analyzers” from the big companies, responsible for the “globalized” capital movement direction.

The new stabilization politics, based and made viable by the singular circumstances lived by the financial markets on that period, despite of the immediate inflation control, begeted new macro economic inconsistencies capable of destroying the economic miracle of the last years. It becomes clearly perceptible the insusceptibility of the commercial deficits originated by the speculative and volatile nature of the capitals that went for those countries and the overvaluation of local money, promoted by the high level of domestic interest rate and simultaneous decrease of the collection, assumed as a condition of competitively and exportation rate increase.

The impact of the trade liberalization consequences for the developing countries brought financial crisis to Mexico, East Asia, Latin America (Brazil and Argentina) and Russia, showing that something was wrong with the effectiveness of this ideology. As we’ll see on the next session, the IMF and the WTO were the stage of the trade liberalization ideology spread that affected the developing model of the emerging markets and decreased the economic growth rate of the developed country.

3. The International Monetary Fund and the World Trade Organization

By the end of the Second World War, the United States emerged as a great potency and struggled for the international monetary system control. Their claim met the nations interest in creating an international organization capable of “organizing” national economies and promoting foster economic growth. So in 1944, during the Bretton Woods

Conference, the IMF was founded with the objective of promoting foster global monetary cooperation, secure financial stability and sustainable economic growth.

During the 90 decade, and the consequents crisis occurred on the developing countries, the prescription of this organization characterized by a fiscal and monetary austerity constituted a remarkable continuity of the trade liberalization ideas, contributing for the economic retraction combined with bad social situation of the population.

By the other side, the idea of an international organization to assume the accomplishment of the international commercial game was present since the creation of the IMF. During Uruguay Round, initiated in 1986 and finalized in 1994, the World Trade organization was founded, reducing the trade barriers on merchandise and expanding trade liberalization agenda for services, intellectual property and investments.

The Uruguay Round opened these completely new areas for trade liberalization in an unbalanced way. The USA pressured the other countries to open their markets on the areas they were strong, like financial services. Nevertheless, they resisted to the efforts of the rest countries attempt of imposing them the same conditions in other sectors, like the civil construction industry building, maritime services and agricultural products.

The inequitable trade liberalization concurred for global instability. The financial services liberalization nettled the international banks control of the banking system in many developing countries, like Argentina and Mexico. The same way, the intellectual property liberalization increased the medication prices for the poor countries and prejudiced the innovation rhythm. Agricultural products from the emerging markets suffered with the subsidies and trade barriers promoted by the United States. As we can attest, the global trade system modification, supported specially by the developed countries, with the USA as its great defensor, let the international community to the confront of various economic crisis, first with the Mexican crisis in 1994-95, followed by the East Asian crisis, the Russian crisis and finally, the Latin American Crisis.

4. The Mexican Crisis

During the past eighties, Mexico was an example of a successful application of the trade liberalization model. The country had liberalized its market, reducing trade barriers and another governmental restrictions. The “export promotion strategy” adopted by Mexico in

December 1982, had notably increased the country's participation in world trade, although it has not significantly raised productivity or real per capita income. With the "structural reforms" it was expected that the country would enter upon a rapid growth path. So far, none of these goals have been met. Productivity has not grown in any significant measure and the Mexican economy has become less competitive.

Following the "consensus ideology", Mexico's administration promoted de privatization of its banking and highway systems. In December of 1994, when the market changed its mood and foreign creditors refused rolling new loans and the extra dividend fell down, the internal creditors buy out their money provoking the default of exchange rate. Mexico's growth was based on external indebtedness and it was clear that in its economy prevailed a high degree of capital mobility and financial globalization. Under these circumstances, shifts in foreign capital flows and anticipation of a banking-system bailout produced large imbalances between stocks of financial assets and foreign reserves, threatening the sustainability of currency pegs.

After that, the government, the IMF and American Treasury drawn themselves into the attempt of the establishment of the Mexican peso value, within the context of a freely floating exchange rate regime. The crisis was ended but its questionable if its main reason was the IMF and American Treasury's prescription, analysts believes that the commerce with the United States boosted with the North America Free Trade Area constitution.

5. The East Asia Crisis

Following Mexico's step, on July 2, 1997, with the collapse of the Thai baht's peg, the financial markets of East and Southeast Asia - in particular, Thailand, Malaysia, Indonesia, the Philippines, and Korea - headed in a similar, downward direction during late 1997 and early 1998. The regional markets faced increasing pressure in the aftermath of the devaluation of the baht, and this pressure was reflected in the subsequent unraveling of the managed currencies in Malaysia and Indonesia. As the crises became full-blown, intense foreign exchange and stock market turmoil spread in the entire region, culminating in the collapse of the Korean won. News of economic and political distress, particularly bank and corporate fragility, became commonplace in the affected countries, and it appeared as

though anything that brought one market down put additional pressure on the other markets as well.

At the core of the crisis were large-scale foreign capital inflows into financial systems that became vulnerable to panic. A combination of panic on the part of the international investment community, policy mistakes at the onset of the crisis by Asian governments, and poorly designed international rescue programs turned the withdrawal of foreign capital into a full-fledged financial panic, and deepened the crisis more than was either necessary or inevitable.

At this case one more time, IMF prescription predicted the same fiscal and monetary austerity promoting the decrease of those countries' economic growth levels. In Indonesia, in addition of the internal instability related to the end of food and fuel subsidies, the IMF closed sixteen banks and announced the closing of others non-declared, advising depositor they would have a limit time to buy out their money. This action provoked an Indonesian banking system run converting into a serious economic depression.

Under the same context, Thailand that closely followed IMF's advisers had its Gross Domestic Product just regained nowadays. After this crisis the IMF assumes its errors and mistakes, nevertheless, when Brazil and Argentina fell into a severe financial crisis, again the same fiscal and monetary austerity was prescript, and the result, as we'll see is the increase of unemployment rate, the decrease of its GDP and political and social turbulences.

6. The Latin America Crisis

Brazil

On ninety decade, Brazil reflected an economic stagnation panorama with a remarkable growth default and increase of inflation levels. Side by side with this, the continuous unsuccessful of the financial stabilization politics motivated the debates related to new methods that could bring stability and economic growth. At this context, we can observe that Brazilian administration adopted the Washington Consensus ideology through the Real Plan, a new economic strategy based on the primarily ideas of trade liberalization.

The Real Plan, had great victories related to inflation stabilization, with overvaluation of the new local money- the real- and the trade liberalization. However, the consumption of imported products raised affecting trade and service balance. Following IMF's prescription, government increased domestic interest rate as a measure of attracting foreign investments. Nevertheless, just short term and speculative capital was attracted. With the international crisis, in Mexico, East Asia and Russia, this capital traveled away from Brazil, destroying the state financial balance, disassembling the capacity of domestic production and spreading internal unemployment. At the end, the countries' administration was obligated to promote the devaluation of the real and free exchange rate. With the deterioration of Brazilian social conditions, the government appealed to the IMF that prescripts recessive conditions and safeguards to the global financial capital taking for granted Brazilian population interests.

Argentina

In Argentina, the establishment of the currency board in 1991 helped develop the Argentine financial system. Despite its strengths, the financial system remained vulnerable to real exchange rate misalignments and fiscal shocks. After 1998, Argentina fell into a currency growth-debt trap. It tried to break away by focusing on growth, but failed to address the currency and debt components of the trap, dramatically raising uncertainty. Under the Convertibility Plan, Argentina saw a marked improvement in its economic performance, particularly during the early years. Inflation, which was raging at a monthly rate of 27 percent in early 1991, declined to single digits in 1993 and remained low. Growth was solid through early 1998, except for a brief setback associated with the Mexican crisis, and averaged nearly 6 percent during 1991–98. Attracted by a more investment-friendly climate, there were large capital inflows in the form of portfolio and direct investments.

These impressive gains, however, masked the emerging vulnerabilities, which came to the surface when a series of external shocks began to hit Argentina and caused growth to slow down in the second half of 1998. Fiscal policy, though much improved from the previous decades, remained weak and led to a steady increase in the stock of debt, much of which was foreign currency denominated and externally held. The convertibility regime ruled out nominal depreciation when a depreciation of the real exchange rate was

warranted by, among other things, the sustained appreciation of the U.S. dollar and the devaluation of the Brazilian real in early 1999. Deflation and output contraction set in, while Argentina faced increasingly tighter financing constraints amid investor concerns over fiscal solvency.

The crisis resulted from the failure of Argentine policymakers to take necessary corrective measures sufficiently early, particularly in the consistency of fiscal policy with their choice of exchange rate regime.

The IMF on its part erred in the pre-crisis period by supporting the country's weak policies too long, even after it had become evident in the late 1990s that the political ability to deliver the necessary fiscal discipline and structural reforms was lacking. Given the extensive dollarization of the economy, the costs of exiting the convertibility regime were already very large. The IMF supported Argentina's efforts to preserve the exchange rate regime with a substantial commitment of resources, which was subsequently augmented on two occasions. This support was justifiable initially, but the IMF continued to provide support through 2001 despite repeated policy inadequacies. In retrospect, the resources used in an attempt to preserve the existing policy regime during 2001 could have been better used to mitigate at least some of the inevitable costs of exit, if the IMF had called an earlier halt to support for a strategy that, as implemented, was not sustainable and had pushed instead for an alternative approach.

7. Conclusion

As we can see from the last crisis examples, its perceptible the bad social economy effects that come with the trade liberalization policy. Although much worse for the developing countries, its effects also affect the rich economies. On those countries, its perceptible the increase of the economic growth rate during the first years (a longer time compared to the developing countries), although after a certain period we can find economic growth stagnation and deterioration of the social situation.

The peripheral States joint the new politics ideas principally because of the constraint of their external deficits, and following this reason by the economic stabilization plans supported on the exchange overvaluation, high domestic interest rate and trade opening.

References

Baer, Werner (2001). *The Brazilian Economy: Growth and Development*. West Port: Praeger.

BATISTA, Paulo Nogueira Jr. (1996) O Plano Real à luz da experiência mexicana e argentina. In: *Revista Estudos Avançados*, vol.10, no28, 1996.

DOLLEY, Michael; KLETZER, Keneth M.; FERNANDEZ-ARIAS, Eduardo. (1994). Recent capital inflows to developing countries: is the debt crisis history? NBER Working papers #1994. Access in April 6, 2005: <http://ideas.repec.org/p/nbr/nberwo/4792.html>

FIORI, José Luís. (1997). *Os moedeiros falsos*. Petrópolis/RJ: Vozes.

PEREIRA, Luiz Carlos Bresser. (2001). O segundo Consenso de Washington. *Folha de São Paulo*. São Paulo, 11 maio 2001. Tendências e debates.

SAVASINI, José A. A.; MALAN, Pedro Sampaio; BAER, Werner. (1979). *Economia Internacional*. São Paulo: Saraiva.

SINGER, Paul. (1999). A raiz do desastre social: a política econômica de FHC. In: LESBAUPIN, Ivo. *O desmonte da nação: balanço do governo FHC*. Petrópolis: Vozes.

STIGLITZ, Joseph. (2003). *Os exuberantes anos 90: uma nova interpretação da década mais próspera da história*. São Paulo: Companhia das Letras.

TROSTER, Roberto Luis; Mochón, Francisco. (1999). *Introdução à economia*. São Paulo: Makron Books.

VINES, David; CORBETT, Jenny. (1999). Asian Currency and Financial Crisis: lessons from vulnerability, crisis and collapse, *World Economy*. Access in April 6, 2005: <http://www.blackwell-synergy.com/links/doi/10.1111/1467-9701.00198>

How does FDI affect the Economic Growth?

Seda Artkır

Izmir University of Economics

Abstract

This paper is an empirical study on the role of foreign direct investment (FDI) on economic growth. The model is based on endogenous growth theory. Cross-sectional data will be employed by utilizing Heston-Summers-Aten (2002) data set. By using this data, the estimated coefficients on FDI and trade, by themselves are positive but statistically insignificant. The interactive term of FDI and trade is positive and statistically significant. FDI interacts positively with domestic investment in advancing economic growth. The estimated coefficients indicate that host countries benefit positively both from FDI, itself and through FDI's positive interaction with trade and domestic investment. The interaction between human capitals, although positive, is not statistically significant. A country's economic growth is also affected by its macroeconomic policies and institutional stability. The estimated coefficients for inflation rate, government consumption and tax on income, profits and capital gains are negative and statistically significant.

1 Introduction

If we are dealing with today's world we have to put a stress on the four very important historical events. In historical order they are: 1789 French Revolution, the two world wars, 1917 October Revolution and 1929 Great Depression. The French Revolution had caused the capitalism be appeared as governmental (prosperity) system. Capitalism is as for its essence open to the crises and this had showed up its face mostly at two world wars times and the stagnation between two of them. At this process the Soviet Revolution is becoming very important, because it was the first time that an alternative system to the capitalism has occurred.

The world has lived 75 years with socialism as an experience but Soviet type of socialism had ended up at the end of the 20th century. After the WWII the world has become balanced system and now it had transformed into one-sided polarized world. The appearance of capitalism had become more financial step by step after its production and consumption face part in the economic platforms.

Today's world is a global world whether it is chosen or not. Production and consumption must be held globally. On the other hand all countries cannot benefit from this process equally. This game is obviously a zero sum game; whenever one is a winner and one is loser.

What we are going to put a stress on with this paper is the effect of the capitalism, which is becoming more financial on the growth. At this point the works that are; Balasubramanyam, Salisu and Sapsford's "Foreign Direct Investment and Growth in EP and IS Countries" which is published in The Economic Journal in 1997, Borensztein, Gregorio and Lee's "How Does Foreign Direct Investment Affect Economic Growth?" published in the Journal of International Economics in 1997, Maki and Somwaru's "Impact of Foreign Direct Investment and Trade on Economic Growth: Evidence From Developing Countries" published in American Agricultural Economics Association in 2004 will be based on.

This paper has four parts. Above is this introduction part . In the second part the based articles and their conclusions will be analyzed, third part try to analyze if there is a negative effect on growth with the variable explainatories; FDI, terms of trade (export and import) and current account balances, in the further step we will criticize those articles with a conclusion.

2 How does FDI affect developing countries in growth process?

The effects of the FDI on growth process have been a subject of arguments for a long time in economics literature. This paper based on these kinds of articles. Balasubramanyam et al. (1996) takes "endogenous growth theory" as a base point in the article. The article explains econometrically how do countries with different terms of trade levels affected by

FDI and by taking FDI's advantages to economic growth as a base analyze in “Bhagwati hypothesis” frame.

2.1 Methodology

As it is told before this paper is econometric based and the used growth model is:

$$Y = g(L, K, F, X, t) \quad (1)$$

Y = Real GDP

L = labor,

K =domestic capital stock,

F = foreign capital stock,

X = export,

t = time trend that shows technologic developments (1970 – 1985)

On the other hand the formed econometric model is:

$$y = \alpha + \beta l + \gamma k + \psi f + \Phi x \quad (2)$$

In this regression while small letters showing the growth rates of each variables, β , γ , ψ and Φ are the elasticity coefficients of labor, domestic capital, foreign capital and export. Writers brought these two different models together and create a new model:

$$y = \alpha + \beta l + \gamma(I/Y) + \psi(FDI/Y) + \Phi x \quad (3)$$

According to “Bhagwati hypothesis” the coefficient of $FDI/NGDP$ is not only positive but also it is expected numerically higher in export promotion (EP) countries than import substitute (IS) countries. Also it is expected that FDI have more accelerating effect than domestic investment in growth process at least for EP countries; because formed spillovers and labor stock according to externality caused by technologic development related with FDI (on contrary to domestic investment).

In relation with this sub-hypothesis the elasticity of the outputs in foreign stock is more than in domestic stock. From another perspective as it seen from the dependent variable in equation (3) estimated value of FDI is more important than domestic investment on growth rate when taken as individual contribution. So that at least in EP country groups the β coefficient of FDI is numerically higher than domestic investment (DI).

2.2 Results

It is difficult to find data while making a research in this subject. The figures published in IMF balance of payments statistics has varied.

- (i) EP countries are the countries, which have relatively higher ratios of imports to the GDP; because higher ratio points out relatively very lower level of import shield.
- (ii) In respect to results of regression; FDI used more in EP countries as an accelerating power of growth process than IS countries.
- (iii) Also it is seen that additions to the capital stock and labor power held by foreigners are the most effective tools in EP countries' growth performance with increasing export.

In addition to that, according to World Bank classification the estimated regressions have the same previous results. With the sub-hypothesis it also shows that the partial derivative of foreign capital growth in output growth exceeds domestic stock growth in EP countries.

Borensztein, et al. shows that FDI's technical transfers are more efficient for the growth rather than DI in their article. While doing this; they add that FDI's productivity is backed up by the minimum threshold stock of human capital. For this reason, FDI can only have an effect on the economic growth when countries have enough absorbing powers to the developed technologies.

2.3 Methodology

$$g = c_0 + c_1 FDI + c_2 FDI * H + c_3 H + c_4 Y_0 + c_5 A$$

FDI: Foreign Direct Investment

H: Threshold stock of human capital

Y_0 : Initial GDP per capita

A: The set of other values, which effect economic growth (government consumption, exchange rates above black market premium, politic rights measure, one proxy for financial growth, inflation rate and institutions quality).

FDI has a positive effect on the economic growth; but according to the host countries' threshold stock of human capital. On the other hand FDI has a negative direct effect with a low threshold stock of human capital. FDI has a positive but not a strong effect on the domestic investment, this is probably because of the similar complement factors eliminate the domestic rivals.

2.4 Results

- (i) When the controls over the labor stock, government consumption and market premium for exchange rates are made; FDI has a positive effect on the economic growth but the coefficient is not statistically significant.
- (ii) The relation between FDI and labor stock is positive and statistically significant, when secondary school graduated labor stock is added to the regression and analyzed one by one FDI resulted in negative and statistically insignificant but still the relation is positive. This regression's coefficient values will show that FDI is affected positively if the secondary school education ratio is over 0.52
- (iii) The countries at the average proper labor stock level are increased step by step linear positively.
- (iv) When African and Latin American countries are added as dummy; their coefficients are statistically significant, but negative, and with the institution quality it is positive.
- (v) In contrary; in politic instability, financial growth, inflation rate measurement there is statistical insignificance.
- (vi) FDI has a big role in the import of the machines and tools as a technologic development of international movements and at the same time it transacts information, business experience and methods.

(vii) The host country has to have a significant level of education in order to use these techniques, developed technologies productively. Otherwise the developing countries won't step into any further level by using the traditional methods or depend on the DI mandatorily.

Maki et al. (2004) as it is inspired by the Balasubramanyam, et al.'s 1996 article, analyze the positive effects of FDI on (i) output increase, (ii) technology transfer, (iii) local investment subsidy, (iv) employment creation (skilled, unskilled), (v) export increase. On the other hand FDI is known as a preventive factor for economic growth according to following angles (i) negative effect to host country's terms of trade, (ii) decrease in domestic savings, (iii) squeeze the stock market, (iv) create instability in balance of payments. For this reason it is necessary to make an analyze FDI effects on economic growth of developing countries.

2.5 Methodology

In this article the econometric based growth model is:

$$g = a + b_1 \text{ FDI} + b_2 \text{ TRD} + b_3 \text{ HC} + b_4 \text{ K} + b_5 \text{ G0} + c_1 \text{ FDI*TRD} + c_2 \text{ FDI*HC} + c_3 \text{ FDI*K} + d_1 \text{ IRT} + d_2 \text{ TX} + d_3 \text{ GC} + e$$

g: GDP per capita

FDI: Foreign direct investment

TRD: terms of trade

HC: human capital

K: domestic capital investment

G0: Initial GDP stock

IRT: inflation rate

TX: the tax on income, profits, and capital gains in the host country expressed as percentage of current revenue

GC: Government consumption

This model is the expended form of the previous article's model with the years of 1990s, which contains accelerated FDI and increasing trade.

2.6 Results

(i) The separately estimated coefficients of FDI and trade are positive but statistically insignificant. The coefficients of FDI and trade that are interrelated estimated are positive and significant.

(ii) FDI is the main channel for the transfer of the technology to the developing countries.

(iii) From the side of economic growth, FDI interrelates with domestic investment positively (%88 significance level), initial income coefficients and domestic investment are insignificant. Estimated coefficient indicated that host country takes advantage of both for itself, domestic investment and positively interrelation with FDI.

(iv) Interrelation with human capital is positive although statistically insignificant.

(v) A country's economic growth also depends on macroeconomic policy and stock stability. three data according to this policy are; (a) inflation rate (b) public investment, (c) income, capital and profit taxes whose estimated coefficients are negative and statistically significant. this means that, low inflation is the disciplined macroeconomic policy of host country, low taxes will make the domestic and foreign investments more profitable and low government dispenses will leave more space for investments.

(vi) With these fiscal and monetary policy variables introduced to regression the previously significant FDI and the effect of trade to growth now shows contrary effect. On the other hand HC and DI continue to have positive and statistically significant coefficients.

(vii) At the same time FDI interrelates positively with trade, HC, and DI. However only the interaction with trade remain significant. That shows; trade and FDI are complementary to the rate of incomes to growth in developing countries. This result shows that the new technology which came with FDI interacted with trade accelerates the economic growth.

(viii) They can't say that FDI crowds out the DI in developing countries. Even more with the usage of SUR method that contains trade, HC, initial income levels, and under control of several macroeconomic policies indicates that there is a positive effect on DI with FDI. In other words FDI crowds in DI or opens ways to it.

At that point, if “endogeneity problem” has been taken into account; FDI, itself, maybe influenced by innovations in the stochastic process governing growth rates. For example, market reforms in host countries could increase both GDP growth rates and the inflow of FDI simultaneously. In this case, the presence of correlation between FDI and the country- specific error term would bias the estimated coefficients.

This problem occurs by using instrumental variables, which would be highly correlated with FDI (or trade) but not with the error term. They use lagged values of FDI, lagged values of trade, and log value of total GDP as instruments in a TSLS model show that the instrumental variable estimation yields qualitatively similar results as those obtained by the SUR method.

FDI and trade, by themselves, are positive but statistically insignificant. The interactive term of FDI and trade is positive and statistically significant. This alternative estimation also suggests that their results are robust.

3 Is there any negative effects of FDI on GDP growth?

After these three articles, I have a strong urge to analyze what if there is a negative effect of FDI on host countries' GDP growth. So to find that out; I have taken 37 developing countries same as the above workings and made a cross sectional analyze according to years of 1996 through 2000, year by year and my results was not as I thought. In my opinion there would be a significant negative effect of FDI with the variables of export, import and current account balances. But as the estimated regression outputs below shows there is no significance level statistically framed. The data is taken from IMF statistics and GDP from Penn World Table.

My equation is:

$$\text{LOG(GDP)} = 8.764842258\text{e-}11*\text{M} + 9.388570064\text{e-}11*\text{X} - 6.29059345\text{e-}11*\text{FDI} - 6.189274647\text{e-}11*\text{CAB} + 8.089446947$$

LOG(GDP): Logarithmic form of GDP

M: imports of host country

X: exports of host country

FDI: Foreign direct investment

CAB: current account balances

Dependent Variable: LOG(GDP)

Method: Least Squares

Date: 04/09/05 Time: 18:00

Sample: 1 37

Included observations: 37

Variable	Coefficient	Std. Error	t-Statistic	Prob.
	t			
M	8.76E-11	3.46E-11	2.536814	0.0163
X	9.39E-11	3.62E-11	2.590228	0.0143
FDI	-6.29E-11	5.46E-11	-1.152953	0.2575
CAB	-6.19E-11	4.29E-11	-1.443435	0.1586
C	8.089447	0.149616	54.06791	0.0000
R-squared	0.213537	Mean dependent var	8.114907	
Adjusted R-squared	0.115229	S.D. dependent var	0.756355	
S.E. of regression	0.711445	Akaike info criterion	2.282051	
Sum squared resid	16.19693	Schwarz criterion	2.499743	
Log likelihood	-37.21794	F-statistic	2.172124	
Durbin-Watson stat	1.772657	Prob(F-statistic)	0.094611	

As the probability of FDI is very high there is no significance, also the probability of CAB is high but the coefficient signs are meaningful as negative. I have tried with a lagged value of FDI but it also didn't give a significant result. There is no heteroskedasticity and we are not looking at the Durbin – Watson test since it is not a time series data.

So according to trade books, the negative effects of FDI cannot be explained by these variables above. But I still have question marks in my mind about how I can show the negative effects econometrically with which instrumental variables. It is strongly encouraged to do a panel analyze or a time series with TSLS (two stage least squares) method.

4 Conclusion

All three articles talked about positive effects of FDI, and in which conditions, how much effective and productive it is. In the light of this information we can say that in economic frame it is generally accepted that FDI has an acceleration effect by; know- how,

technology, business experience, connection to the foreign markets, increase social and environmental standards channels. It also supports competition globally. However it shouldn't be misunderstood that FDI is the main channel of the solution to the economic growth problems. It could and should be a contribution value instead of a primary source of finance. Shouldn't take into account as a government consumption or official growth assistant but in consideration of maximizing profit and minimizing cost it should be the key: FDI for growth.

The makers of the FDI attractive policies should be aware of "access to the customer and a stable economic/politic environment" are more important than cost control of investors. None of the subsidy levels or Exchange rate policy can take place of stability, transparency to the foreign firms, and economy eliminated from import tax or export subsidies. That shows already self-satisfactoried economy structure and focused on increasing skills of labor. For this reason as it is proved that the public intervention should be hold at a minimum level and all the other conditions should be used to increase the global competition and professionalize the business environment.

References

Appleyard, D. R. & Field, Jr. A. J. *International Economics*. Fourth Edition. 2001. McGraw-Hill Higher Education

Balasubramanyam, V. N., Salisu, M., Sapsford, D. Foreign Direct Investment and Growth in EP and IS Countries. *The Economic Journal*. Vol.106, No.434 January 1996. 92-105.

Borensztein, E., Gregorio, J. D., Lee, J-W. How Does Foreign Direct Investment Affect Economic Growth? *Journal of International Economic*. 1997.

Maki, S. S., Somwaru, A. Impact of Foreign Direct Investment and Trade on Economic Growth: Evidence From Developing Countries. *American Agricultural Economics Association*. Econ.86(3) August 2004:795-801.

Öğütçü, M. Foreign Direct Investment and Regional Development: Sharing Experiences from Brazil, China, Russia and Turkey. *DAFFE / INV / RD* (2002) 38.

Examination of Capital Asset Pricing Model in ISE

Volkan Coşgun

Izmir University of Economics

Abstract

Capital Asset Pricing Model (CAPM) is an important analysis tool in calculating systematic and non-systematic risk. The main objective of this paper is to examine the capital asset pricing model based on the Istanbul Stock Exchange closing prices and returns. Daily closing prices and daily returns of the some selected stocks and ISE100 index will be employed in this study. According to first outcomes of this study, it is expected that the required performance of the stocks which is outcome of CAPM does not reflect the stock prices occurred in market. Capital Asset Pricing Model cannot function smoothly on ISE due to the assumptions of while applying the model.

1. Introduction

The relation between risk and return exists in the form of a risk return trade off, by which we mean it is only possible to earn higher returns by accepting higher risks. (McMenamin, 1999) The first theory about risk and return was suggested by Markowitz in 1952. The Markowitz model creates the efficient frontier of portfolios and the investors are expected to select a portfolio, which is most appropriate for them, from the efficient set of portfolios available to them. In 1964 Capital Asset Pricing Model (CAPM) was developed by Sharpe, Litner, and Mossin.

2. CAPM Model

According to CAPM, the total risk of a security or portfolio consists of two risk types. Systematic and unsystematic risk. Systematic risk can not be diversified away. It arises from market factors such as macroeconomic conditions (inflation, interest rates, balance of payments), war, political events. The systematic risk is the component of the total risk that cannot be eliminated through portfolio diversification. Unsystemic risk are company unique risks and that can be diversified by creating a well diversified portfolio. As the number of shares in portfolio increases, the unsystematic risk decrease. Capital Asset pricing model assumes that

- All investors share the same beliefs about the distribution of returns. Every one have the same information.
- Asset returns are distributed by the normal distribution.
- Investors are risk averse individuals who maximize the expected utility at the end of period wealth. Investors have the same one period time horizon.
- There exists a risk free rate and all investors can borrow or lend at the risk-free rate there is no transactions costs.
- There is a definite number of assets and their quantities are fixed within a one period world.
- There is no inflation (no unanticipated inflation).
- There exist large number of small investors (no one investors can impact the price on his or her own).
- Markets are in equilibrium.

3. Beta Coefficient

Beta Coefficient, b , is a relative measure of risk, it is represented by the symbol β . It shows the responsiveness of the security price in response to the change in market return. For example, if beta coefficient of an asset is 2 ,it is expected that it will be twice as responsive

as the market. Beta is measured by using least square regression analysis. Covariance of the return on asset j , kj and the return on market portfolio, km divided by variance of the market portfolio return.

$$\beta = \text{Cov}(r_i, r_m) / \sigma^2 \quad (1)$$

Stocks are classified as aggressive, average, defensive according to their beta values. Stocks with beta value higher than 1 are regarded as aggressive, they are more risky than market average, with beta value equal to 1 are regarded as average, they are neutral risky and stocks with beta value lower than 1 are regarded as defensive, they are less risky than market average.

The Capital Asset Pricing Model can be divided into two parts risk free of interest, it is required return on risk free asset, its typically treasury notes and the risk premium is the amount that is expected to be earned to compensate holding risky assets. As the asset is riskier, the higher market return investors demand.

$$E(r_i) = r_f + \beta * [E(r_m) - r_f] \quad (2)$$

4. The Data and the Methodology

This paper employs daily returns and closing prices of 21 selected stocks and ISE100 index for the period January 1998 to December 2004. Selected stocks has large market capitalization and has significant influence on the ISE100 index. Selected stocks are given in Table A.1 in the Annex (since Doğan Yayın Holding and Turkcell were listed in Istanbul Stock Exchange (ISE) after 1998, calculations about these shares are starting from a year after their initial public offering). The capital increases and dividend payments are adjusted to the data. Discount Rate of Turkish treasury bills are employed as risk free rate. All calculations are in local currency in New Turkish Lira. Data Sources are Matriksdata Server, Istanbul Stock Exchange, Undersecretariat of Treasury. The yearly returns of the ISE100 and selected stocks are calculated by the formula given below:

$$r_t = (V_t - V_{t-1}) / V_{t-1} \quad (3)$$

where

r_t = actual rate of return during period t

V_t = value of stock at time t

V_{t-1} = value of stock at time $t-1$

The following regression is used to compute beta values for each of the securities for the periods. For each of the stocks, the values of beta is computed for the period 1998-1999, 1999-2000, 2000-2001, 2001-2002, 2002-2003, 2003-2004.

$$k_j = a_j + b_j k_m + e_i$$

$$\beta = \text{Cov}(r_i, r_m) / \sigma^2$$

The expected returns of the each stock is computed by using the formula in equation (2).

5. Results

The estimation of beta values was carried out by using daily return data for seven years on a yearly basis. As indicated earlier the slope of the estimated regression line, is the beta value that measures the risks. The beta values are given at table A.2 in the Annex. The beta values of stocks are ranging from 0.65 to 1.44. Most of the stocks beta value ranging between 0.95 and 1.2 for the period of study. As Odabaşı suggested beta coefficient are time varying in Turkey. It is observed that beta values are instable. Generally more than half of the beta values are observed to be greater than one for the period.

Data in table A. 2 indicates that banking sector stocks have higher beta coefficient than other selected stocks over the period from 1998-2005 and industry sector stocks tend to have beta values under one. Banking sector is more sensitive to the changes in market conditions, changes in economic indicators. Whereas industry sector stocks are less sensitive to the changes in market conditions.

Equation (2) has been applied to find the expected returns of individual stocks. While calculating expected returns, the beta coefficient of previous year and the return of ISE100 in current year and average discount rate of the current year as risk free rate were

employed. The annual return are given in table A.3 and the expected returns of each stock is given at table A.4 in the Annex.

The expected returns of the each year is highly variable due to the variations in the market return and risk free rate. To compare the expected return and actual return the difference between actual and expected returns has been computed. The difference between expected and realized return for all of the shares is given at table A.5 (see the Annex). Thus, significant differences has been observed between expected and realized returns. Difference is likely to be high when there is a big increase in the ISE 100 index. In some cases CAPM Extreme differences like 500 % has been observed in 1999.

Thus the expected returns obtained by CAPM could not explain the actual returns in ISE for the period between 1998 and 2005. The empirical evidence from the developed equity markets generally shows only a weak relationship between betas and returns (Fama and French 1992).

The assumptions of CAPM should be investigated to find the causes why CAPM could not work well in Istanbul Stock Exchange. CAPM assumes that there is a large number of small investors, but according to the Association of Capital Market Intermediaries Institution, top 10 investor in ISE are holding the 35 % of stock total portfolio. According to ISE foreign investors are holding more than % 50 of total shares. So investors and their expectations are not homogenous.

Another assumption of CAPM is there exists a risk free rate and all investors can borrow or lend at the risk-free rate. This not practical both in Turkey and other countries, individuals cannot lend at risk free rate and there is transaction costs. It assumes that there is no inflation, but in Turkey there was considerable inflation rates during the period of study.

Another assumption of CAPM is markets are in equilibrium. Whereas, emerging equity markets usually exhibit high-expected returns, high volatility, and low correlation with the developed countries' equity markets (Harvey, 1995).

This research showed that firm unique risks have more influence than the market related risks. Thus, multifactor models which include P/E(price/Earnings ratio),M/B (Market to Book Value ratio) may better explain the relationship between expected and actual return.

6. Conclusion

In this study I have examined the relationship between returns and beta values of 21 selected stocks from ISE for the period between 1998 and 2005. The expected returns obtained by using CAPM and the actual returns were compared. Thus , the CAPM could not explained the actual returns of the individual stocks for the period between 1998 and 2005.

Appendix

Table A.1: Selected Stocks

AKBNK	AKBANK
AKGRT	AKSİGORTA
ARCLK	ARÇELİK
DOHOL	DOĞAN HOLDİNG
DYHOL	DOĞAN YAYIN HOL.
EREGL	EREĞLİ DEMİR ÇELİK
FINBN	FİNANSBANK
FROTO	FORD OTOSAN
GARAN	GARANTİ BANKASI
HURGZ	HÜRRİYET GZT.
ISCTR	İŞ BANKASI (C)
KCHOL	KOÇ HOLDING
MIGRS	MİGROS
PTOFS	PETROL OFİSİ
SAHOL	SABANCI HOLDİNG
SISE	ŞİŞE CAM
TOASO	TOFAŞ OTO. FAB.
TCELL	TURKCELL
TUPRS	TÜPRAŞ
VESTL	VESTEL
YKBNK	YAPI VE KREDİ BANK.

Table A.2: Beta Values

Stock	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005	1998- 2005
AKBNK	1	1.2	0.98	0.99	1.03	0.96	1.17	1.03
AKGRT	0.98	0.9	1	0.97	0.95	0.86	0.9	0.96
ARCLK	0.94	0.93	1.01	1.07	1.07	0.99	0.9	1
DOHOL	1.08	1.03	1.21	1.25	1.35	1.26	1.3	1.19
DYHOL	1.06	1.14	1.18	1.4	1.08	1.07	1.16	
EREGL	1.07	0.94	0.96	1.04	1.02	0.94	0.87	1
FINBN	0.91	0.88	0.86	0.96	1.24	1.04	1.06	0.96
FROTO	0.91	0.91	1.05	0.99	0.9	0.8	0.95	0.95
GARAN	1.13	1.11	1.06	1.12	1.26	1.12	1.28	1.14
HURGZ	1	0.91	1.08	1.2	1.1	0.96	1	1.05
ISCTR	1.01	1.16	1.04	1.04	1.12	1.18	1.28	1.09
KCHOL	1.03	0.99	1.04	1.07	0.97	0.96	1.13	1.03
MIGRS	0.88	0.75	0.87	0.85	0.83	0.65	0.66	0.82
PTOFS	1.01	0.96	0.76	0.88	0.86	0.79	0.88	0.89
SAHOL	1.09	1.08	0.98	1.02	0.92	0.99	1.13	1.03
SISE	0.94	0.86	1.07	1.07	1.03	0.87	0.95	0.99
TOASO	0.84	1.05	1.13	1.02	0.92	0.93	1.05	1
TCELL	1.15	0.82	1.08	1.06	1.06			
TUPRS	1.14	0.89	0.9	0.95	0.99	0.87	0.69	0.96
VESTL	0.97	0.95	0.95	1.09	1.05	0.89	1.05	0.99
YKBNK	1.25	1.23	1.12	1.18	1.45	1.11	1.35	1.22
Number of Stocks								
b<1	8	12	8	7	9	14	8	8
b=1	2	0	1	0	0	0	1	3
b>1	9	8	12	14	12	7	12	10

Table A.3: Annual Returns

Stock	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003	2003- 2004	2004- 2005
XU100	-30	451.44	-46.11	45.59	-26.34	75.73	30.42
AKBNK	-16.5	404.89	-51.51	76.06	20.65	98.89	42.14
AKGRT	-32.77	566.53	-18.48	25.5	-19.11	143.29	16.1
ARCLK	-13.16	537.23	-55.89	101.59	34.19	67.34	3.77
DOHOL	-11.48	1012.66	-61.17	-14.25	-26.92	109.48	26.55
DYHOL	711.59	-29.72	-24.43	17.63	180.76	12.96	
EREGL	-63.89	762.84	-45	30.36	-8.22	144.12	43.93
FINBN	-8.21	350	-56.23	79.2	-24	132.22	109.86
FROTO	-63.91	652.35	-3.51	41.2	-9.68	163.87	17.85
GARAN	-18.75	413.74	-60.11	98.52	-20.37	95.69	48.95
HURGZ	28.83	309.67	-43.8	70.05	44.48	88.99	8.7
ISCTR	-47.27	581.16	-31.14	6.9	-49.42	125.44	47.61
KCHOL	-48.9	616.42	-49.26	75.04	-10.39	63.89	4.57
MIGRS	60.16	193.35	-36.03	49.84	-29.99	37.25	40.63
PTOFS	-19.75	755.28	-51.7	140.56	-45.23	19.37	1.02
SAHOL	-14.16	503.05	-46	79.94	-27.5	91.41	-4.91
SISE	-51.56	507.46	-43.84	18.37	-22.91	75	86.28
TCELL	15.84	-20.82	38.61	95.26			
TOASO	-69.31	491.55	-39.86	185.74	-36.79	137.34	-12.32
TUPRS	41.3	320.71	-64.19	76.4	-30.96	56.52	28.7
VESTL	46.48	372.73	-46.68	55.79	-19.23	84.38	-14.05
YKBNK	-10.97	635.37	-61.02	90.71	-69.44	90.16	37.89

Table A.4: Expected Returns

Stock	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
AKBNK	-30.05	520.35	-44.62	46	-29.39	74.62	31.41
AKGRT	-27.07	418.8	-46.52	47.2	-21.62	71.16	29.84
ARCLK	-21.62	427.28	-46.83	41.73	-32.4	75.36	29.83
DOHOL	-41.58	460.22	-63.48	31.79	-58.18	83.85	32.11
DYHOL	470.52	-57.5	36.03	-62.5	78.36	30.81	
EREGL	-40.72	430.19	-42.39	43.57	-27.82	73.79	29.69
FINBN	-16.67	409.37	-34.65	47.78	-48.34	76.89	30.76
FROTO	-17.16	421.54	-50.68	46.18	-17.43	69.3	30.15
GARAN	-49.4	489.1	-51.14	38.96	-50.12	79.62	32
HURGZ	-29.75	421.95	-52.79	34.89	-35.38	74.49	30.42
ISCTR	-31.04	505.4	-49.33	43.52	-37.37	81.37	32.02
KCHOL	-34.08	449.02	-49.41	41.74	-23.64	74.55	31.17
MIGRS	-13.1	364.51	-34.84	53.87	-11.25	64.79	28.5
PTOFS	-31.31	439.3	-25.82	52.37	-14.19	69.15	29.7
SAHOL	-43.41	478.91	-44.77	44.56	-19.32	75.39	31.16
SISE	-21.59	404.04	-51.69	41.9	-29.48	71.77	30.13
TCELL	42.47	-39.66	69.99	30.86			
TOASO	-6.93	469.8	-56.77	44.4	-19.58	73.4	30.73
TUPRS	-50.92	414.32	-37.66	48.45	-25.36	71.72	28.62
VESTL	-25.33	434.63	-41.85	40.77	-30.94	72.26	30.69
YKBNK	-66.24	530.99	-55.9	35.83	-66.52	79.15	32.4

Table A.5: Realized Returns - Expected Returns

Stock	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
AKBNK	13.55	-115.46	-6.89	30.07	50.04	24.27	10.74
AKGRT	-5.7	147.73	28.04	-21.7	2.51	72.13	-13.74
ARCLK	8.46	109.95	-9.06	59.86	66.58	-8.02	-26.06
DOHOL	30.1	552.44	2.3	-46.05	31.26	25.63	-5.56
DYHOL	241.08	27.78	-60.46	80.13	102.39	-17.85	
EREGL	-23.17	332.65	-2.61	-13.22	19.6	70.32	14.24
FINBN	8.46	-59.37	-21.58	31.42	24.34	55.33	79.1
FROTO	-46.75	230.81	47.17	-4.98	7.75	94.58	-12.3
GARAN	30.65	-75.36	-8.96	59.56	29.74	16.07	16.95
HURGZ	58.58	-112.28	8.99	35.17	79.87	14.5	-21.72
ISCTR	-16.23	75.76	18.19	-36.62	-12.04	44.07	15.59
KCHOL	-14.81	167.41	0.15	33.3	13.24	-10.67	-26.61
MIGRS	73.26	-171.17	-1.18	-4.03	-18.74	-27.54	12.14
PTOFS	11.56	315.98	-25.88	88.19	-31.04	-49.79	-28.68
SAHOL	29.26	24.14	-1.23	35.39	-8.18	16.02	-36.07
SISE	-29.97	103.42	7.85	-23.54	6.56	3.23	56.15
TCELL	-26.63	18.84	-31.37	64.39			
TOASO	-62.38	21.76	16.9	141.34	-17.22	63.94	-43.05
TUPRS	92.22	-93.6	-26.52	27.94	-5.6	-15.21	0.08
VESTL	71.81	-61.91	-4.83	15.02	11.71	12.12	-44.73
YKBNK	55.27	104.38	-5.12	54.88	-2.93	11.01	5.49
Number of Stocks							
Underestimated	12	8	9	12	14	15	10
Overestimated	7	12	11	9	7	6	11

References

Association of Capital Market Intermediaries Institution, 2004, “Yatırımcı Profili”,
http://www.tspakb.org.tr/docs/sp_raporu_yatirimci_profil.pdf

Balaban E. (1995). “Some Emprics From Turkish Stock Market”,
<http://www.tcmb.gov.tr/yeni/evds/teblig/95/9508.pdf>

Fama, E. F. & K. R. French (1992). “The Cross-Section of Expected Stock Returns,”
Journal of Finance 47.

Galagedera D., A review of Capital Asset Pricing Model,
<http://econwpa.wustl.edu/eps/fin/papers/0406/0406010.pdf>

Harvey, C. (1995). “Predictable Risk and Returns in Emerging Market,” Review of
Financial Studies 8.

Gitman L. (2003). “Principles of Managerial Finance” Pearson Education, Boston.

Menamin J. (1999). “Financial Management: An Introduction” Routledge, London.

Odabaşı A. (2003). “An investigation of Beta Instability in Istanbul Stock Exchange.
<http://odabasi.boun.edu.tr/research/BetaInstability-ISE.pdf>

Sharpe, W.F. (1964). Capital asset prices: a theory of market equilibrium under conditions
of risk, Journal of Finance, 19.

Istanbul Stock Exchange,<http://www.imkb.gov.tr>

Assumption of CAPM

<http://andromeda.rutgers.edu/~goldbaum/Financial/HO/AssumptionsCAPM.pdf>

Methods of CAPM,

http://www.managingvalue.net/methods_capm.html

Matriksdata Server, <http://www.matriksdata.com>

Financial Crises in Emerging Markets and Their Implications for the Poor

Zarina Turgunalieva^{*}

International Ataturk Alatoo University

Abstract

Mainly this paper outlines a set of financial crises in emerging countries that has crucial implications for the poor countries. Also, the paper shortly considers on the policies that can help make the financial crises less likely in emerging market countries. To justify these implications and shortly reviewed policies, the paper firstly explains what a financial crises is, the factors that promote a financial crises and the dynamics of a financial crises, and some financial policies may help to prevent financial crises.

1 Introduction

Today's financial crises are defined by fundamental elements that are of financial nature. It is really different from crises that happened before 1980s when world was shocked in terms of demand and cost. In 1980s state-oriented economic development models converted into free trade of commodity and service. Thus, the peak establishing a worldwide absolute reputation seemed to be reached.

However, in 1980s, we can observe several crises in currency exchange and banking in countries with high economic performance due to money and market movements expanding the scope of free trade and foreign competition. Those countries under the influence of financial crises had to go through financial liberation process.

The prevention of the crises in emerging countries is one of the most important item on the agenda of policymakers around the world because of crisis's harmful effects and increased frequency.

^{*} We are grateful to International Ataturk Alatoo University and Izmir University of Economics for their financial support. For contact: zturgunalieva@yahoo.com

In Section 2, this paper identifies what a financial crisis is in emerging market countries and types of crisis. In Section 3, we shortly review the factors that promote a financial crises and the dynamics of a financial crises. Section 4 discusses the implications of financial crises and their long-term consequences. The last section uses the framework developed to examine what particular financial policies may help to prevent financial crises.

2 What Is a Financial Crisis?

2.1 Definition

A financial crisis is a disruption to financial markets in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities (Mishkin 2001).

A financial system performs the essential function of channeling funds to those individuals or firms that have productive investment opportunities. In order to do it; participants in financial markets must be able to make accurate judgments about which investment opportunities are more or less creditworthy. Thus, a financial system must confront problems of asymmetric information, in which one party to a financial contract has much less accurate information than the other party. Asymmetric information leads to two basic problems in the financial: adverse selection and moral hazard.

Adverse selection occurs before the financial transactions take place, when potential bad credit risks are the ones who most actively seek out a loan. For example, those who want to take on big risks are likely to be the most eager to take out a loan, even at a high rate of interest, because they are less concerned with paying the loan back. Thus the lender must be concerned that the parties who are the most likely to produce an undesirable or adverse outcome are most likely to be selected as borrowers. Lenders may thus steer away from making loans at high interest rates, because they know that they are not fully informed about the quality of the borrowers, and they fear that someone willing to borrow at a high interest rate is more likely to be a low-quality borrower who is less likely

to repay the loan. Lenders will try to tackle the problem of asymmetric information by screening out good from bad credit risks. But this process is inevitably imperfect, and fear of adverse selection will lead lenders to reduce the quantity of loans they might otherwise make.

Moral hazard occurs after the transaction takes place. It occurs because a borrower has incentives to invest in projects with high risk in which the borrower does well if the project succeeds, but the lender bears most of the loss if the project fails. A borrower also has incentives to misallocate funds for personal use, to shirk and not work very hard, and to undertake investment in unprofitable projects that serve only to increase personal power or stature. Thus, a lender subjected to the hazard that the borrower has incentives to engage in activities that are undesirable from the lender's point view: that's, activities that make it less likely that the loan will be paid back. Lenders do often impose restrictions (restrictive covenants) on borrowers so that borrowers do not engage in behavior that makes it less likely that can pay back the loan. The potential conflict of interest between the borrower and lender stemming from moral hazard again implies that many lenders will lend less than they otherwise would, so that lending and investment will be at sub optimal levels.

2.2 Types of Crises

Economic or financial crisis can be distinguished into different types.

- A *currency crisis* occurs when a speculative attack on the exchange value of a currency results in evaluation (or sharp depreciation) of the currency, or forces the authorities to defend the currency by expending large volumes of international reserves or by sharply raising interest rates.
- A *banking crisis* refers to a situation in which actual or potential bank runs or failures induce banks to suspend the internal convertibility of their liabilities or which compels the government to intervene to prevent this by extending assistance on a large scale.⁸⁰ A banking crisis may be so extensive as to assume systemic proportions.
- *Systemic financial crises* are potentially severe disruptions of financial markets that, by impairing markets' ability to function effectively, can have large adverse effects on the real economy. A systemic financial crisis may involve a currency

crisis, but a currency crisis does not necessarily involve serious disruption of the domestic payments system and thus may not amount to a systemic financial crisis.

- A *foreign debt crisis* is a situation in which a country cannot service its foreign debt, whether sovereign or private.

Crises of all types have often had common origins: the buildup of unsustainable economic imbalances and misalignments in asset prices or exchange rates.

3 Factors Promoting Financial Crises

To show up how a financial crisis comes about and causes a decline in economic activity, we need to examine the factors(conditions) that promote financial crises. After, we will shortly review how given factors interact dynamically to produce financial crises.

Above we told about the asymmetric information problems. Here four types of factors that can be causes to increasing them, thus to a financial crisis:

- 1) deterioration of financial sector balance sheets
- 2) increases in interest rates,
- 3) increases in uncertainty, and
- 4) deterioration of nonfinancial balance sheets due to changes in asset prices.

Argentina, Turkey, Malaysia, Brazil and Indonesia are known as new emerging markets of capitalist world. Going through the process of change in terms of adjustable-pegged exchange rate or full-pegged exchange rate is a characteristic that these countries have in common. Crises come into being as soon as emerging markets take the plunge to onto the international platform ruled by capitalist countries within the framework of money-capital and commodity movements.

3.1 Dynamics of Financial Crises

Financial crises in emerging markets undergo several stages. There is an initial stage during which a deterioration in financial and nonfinancial balance sheets occurs, and which promotes the second stage, a currency crisis. The third stage is a further deterioration of financial and nonfinancial balance sheets that occurs as a result of the currency crisis, and this stage is the one that tips the economy over into a full-fledged financial crisis with its devastating consequences.

Initial stage: Runup to the currency crisis (the first stage leading up to a financial crisis in emerging market countries has typically been a financial liberalization, which involved lifting restrictions on both interest-rate ceilings and the type of lending allowed and often privatization of the financial system. As a result, lending increased dramatically, fed by inflows of international capital).

The second stage: currency crisis (the deterioration of financial and nonfinancial sector balance sheets is a key factor leading to the second stage, a currency crisis. A weak banking system makes it less likely that the central bank will take the steps to defend a domestic currency because if it raises rates, bank balance sheets are likely to deteriorate further).

The third stage: currency crisis to full-fledged financial crisis (once a full-blown speculative attack occurs and causes a currency depreciation, the institutional structure of debt markets in emerging market countries- the short duration of debt contracts and their denomination in foreign currencies –now interacts with the currency devaluation to propel the economies into full-fledged financial crisis.

4 What are the implications?

Countries affected from financial crises are suffering from banking failures, business closures, high unemployment, high interest rates, high inflation, significantly reduced growth rates (with recession for some), and political instability. Major industrial changes

could also occur. Countries that are not directly involved in the financial crisis are affected by lost regional markets, financial losses, and fierce competition for export markets.

Recovery by the directly affected countries faces severe challenges due to damaged banking systems, many insolvent firms, inadequate external demand to drive recovery, social and political instability, and the need for profoundly difficult changes. Recovery could take many years, and despite devaluation, strong exports may not be maintained in the meantime.

Increased openness to international capital flows has been associated with a high and increasing frequency of financial crises (Kaminski and Reinhart, 1999). Kaminski and Reinhart find, for 5 industrial and 15 major emerging market economies in the 1980-95 period, a 10-15 % annual probability of balance of payments crises. A third of these crises are “twin” currency and banking crises, which have the most severe effects of all. Pure currency crises have moved to more flexible exchange rate regimes in the post-Bretton Woods era. However, banking crises, which had been few in number thanks to extensive capital controls and regulations introduced during the Bretton Woods era, have asserted themselves, especially in the 1990s. The average cost of an emerging market currency crisis is estimated at 8% of cumulative forgone GDP, rising to 18% when a banking crises occurs simultaneously (World Bank 1998, p.127)

Crises cause large increases in poverty and have longer-term consequences for the country as a whole. They hurt both the poor and nonpoor, but the decline in income is more devastating for the poor because of their typically meager savings and lack of success to social or market insurance. Risk-averse workers benefit less from the gains of capital account openness in good times than they lose during a crisis. The fact that the poor have limited access to capital markets for smoothing their consumption during the bad times makes their situation even worse. (Rodrik 1999). Lustig (1999) estimates that each percentage-point decline in growth from an adverse economic shock raises the poverty rate by 2 percentage points. For the East Asian crisis countries, the increase in poverty was less than originally expected and varied significantly across countries, but it was far in excess of what one might have expected from the modest decrease in an average consumption per capita (World Bank 2000, table 2.1). Lustig notes, moreover, that the measured increase in poverty understates the human cost, since rising poverty is associated with deterioration in school attendance, and in health and nutrition indicators.

5 Financial Policies to Prevent Financial Crises

Now that we have developed a framework for understanding why financial crises occur, we can look at what financial policies can help prevent these crises from occurring. There are twelve basic areas of financial reform: 1) prudential supervision, 2) accounting and disclosure requirements, 3) legal and judicial systems, 4) market-based discipline, 5) entry of foreign banks, 6) capital controls, 7) reduction of the role of state-owned financial institutions, 8) restrictions on foreign-denominated debt, 9) elimination of too-big-to-fail in the corporate sector, 10) sequencing financial liberalization, 11) monetary policy and price stability, 12) exchange rate regimes and foreign and foreign exchange reforms.

The key to reducing the social costs of crises lies in preventing crises through better economic management, and a propoor response. The 1990s witnessed significant progress in incorporating social protection in adjustment programs, for example in Argentina and Mexico after 1995 and in the East Asian crisis. These experiences offer several lessons for the future crises. One is the need to protect government spending that benefits the poor, and especially spending on primary education, preventive health care, water, sanitation, rural infrastructure and housing. Another need is to maintain general food subsidies on basic staples in the short run-even if their benefits leak to the nonpoor- unless they can be replaced by targeted programs. Finally, social programs put in place before a crisis strikes are of more value than ad hoc emergency measures. To get effective result, safety nets should consider a wide range of programs: scholarships for poor children, public works programs, cash transfers, food-related transfers, food-subsidies, social funds and fee waivers for various essential services. The appropriate mix of safety-net programs will depend on the demographic and other characteristics of a country's poor, on the type of crisis, and on the government's institutional and administrative capacity. The international community can and is playing an important supportive and financing role.

References:

Feldstein, Martin. 1999. "Self-Protection for Emerging Markets Economies" NBER Research Working Paper #6907. National Bureau of Economic Research.

International Monetary Fund. 1999a. *Exchange rate Arrangements and Currency Convertibility: Development and Issues*. Washington, D.C.

Kaminsky, Graciela L., and Carmen Reinhart. 1999 "Twin Crises: The Causes of Banking and Balance-of-Payments Problems". *American Economic Review* 89:473-500

Lustig, Nora. 1999. "The crisis and the Poor". Presidential address to the Latin American and Caribbean Economic Association, Santiago, October 22.

Rodrik, Dani. 1998. "Who Needs Capital-Account Convertibility?" In Stanley Fisher and others, eds., *Should the IMF pursue Capital-Account? Essays in International Finance* 207. Department of Economics, Princeton University, Princeton, N.J.

World Bank. 1998. *Global Economic Prospects*. Washington D.C

<http://www.ceip.org/programs/polecon/CurrHistoryWhyInequalityMatters.htm>

<http://www.imf.org/external/pubs/ft/weo/weo0598/pdf/0598ch4.pdf>

<http://www.nber.org/papers/w8087>