

THE EXTERNAL DEBT SITUATION OF THE TURKISH PRIVATE SECTOR:
EVIDENCE FROM THE TURKISH TEXTILE SECTOR

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ABSTRACT

Ok, İsmail Erdem

THE EXTERNAL DEBT SITUATION OF THE TURKISH PRIVATE SECTOR:
EVIDENCE FROM THE TURKISH TEXTILE SECTOR

Master of Arts in Financial Economics, Graduate School of Social
Sciences

Supervisor: Assoc. Prof. Ayla Oğus Binatlı

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The goal of this thesis is to show whether or not the ratio of foreign currency in Turkish private sector loans increased from 2001 to end of 2007, if the debt was in foreign currency to show these years external debt ratios and its distribution by statistical tables for these years, to explain the exchange rate risk because of using excessive external debt could be. The highest losses occurred by volatility of exchange rates in Turkey was after the February 2001 crisis and increased the importance of foreign exchange rates and the necessity of following them. Nowadays companies are exposed to exchange rate risks in different ratios because of their special conditions or revenue sources. Thesis has also indicated that, the percentage change and distribution of external debt among the public sector, the private sector and the National Bank by charts; the reasons of the increasing use of foreign debt by the private sector has been explained by quantitative applications. The general trends of the dollar and the euro and their effects on the external debt of The Turkish Private Sector has been analyzed and in the interest rates in domestic market and foreign interest rates has been compared. In addition, the thesis has inspected financial tables of the Turkish Textile sector by using ratio analysis. In the final part of the study two different companies analyzed by using value at risk method and their the worst expected value that could be lost because of exchange rate risk has been measured.

Keywords: External Debt, The Turkish Private Sector, Exchange Rate Risk, Value At Risk, Ratio Analysis

ÖZET

Ok, İsmail Erdem

TÜRK ÖZEL SEKTÖRÜNÜN DIŞ BORÇ DURUMU: TÜRK TEKSTİL SEKTÖRÜNDE KANITLAR

Finans Ekonomisi Yüksek Lisansı, Sosyal Bilimler Enstitüsü

Tez Yöneticisi: Doç. Dr. Ayla Oğus Binatlı

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Bu tezin amacı 2001 den 2007 yılı sonuna kadar Türk Özel Sektöründe yabancı para ile kredi kullanımının artıp artmadığını göstermek, eğer yabancı para ile borçlanma var ise bu yıllarda borçların dağılımını istatistiksel tablolarda göstererek, aşırı dış borç kullanımı yüzünden oluşabilecek kur riskleri ifade etmektir. Kurlardaki oynaklıktan kaynaklı en yüksek zararlar 2001 Şubat krizinden sonra gerçekleşmiş ve kurları takip etmenin gerekliliği ve önemi artmıştır. Günümüzde firmalar kur riskine özel koşulları ve gelir kaynakları açısından farklı oranlarda maruz kalmaktadırlar. Tezde ayrıca dış borç kullanımının özel sektör, kamu ve Merkez Bankası arasında yüzdesel değişimi ve dağılımı grafiklerle gösterilmiş özel sektörün yabancı para ile borç kullanımının nedenleri sayısal uygulamalarla açıklanmıştır. Dolar ve Euro kurunun genel seyrinin Türk özel sektörün borçlanması üzerine etkisi analiz edilmiş, iç piyasa ve yabancı piyasalardaki faiz oranları karşılaştırılmıştır. Ayrıca, Türk Tekstil Sektörünün finansal tabloları rasyo analizleri yapılarak incelenmiştir. Çalışmanın son kısmında iki farklı firmanın riske maruz değer methodu kullanılarak döviz kuru riskinden dolayı kaybedecekleri en yüksek değer ölçülmüştür.

Anahtar Kelimeler: *Dış Borç, Türk Özel Sektörü, Kur Riski, Riske Maruz Değer, Oran Analizi*

To My Beloved Family and Dear Friends

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CHAPTER 1

INTRODUCTION

Globalization, the opening of all world markets to each other influences countries in terms of culture, politics and also the economy. Globalization has brought dynamism and profitability to countries. Foreign trade, known as heart of Globalization opens new horizons and provides opportunity to appear in foreign markets, not only the stability of domestic market.

These developments increased the importance of foreign exchange rates and the necessity of following them because foreign exchange rates impact companies from different sides. Companies are exposed to exchange rate risks in different ratios because of their special conditions or revenue sources. The highest impact occurred in Turkey after the February 2001 crisis, when the value of the dollar increased twofold, damaging all Turkish markets and leaving people and companies in a difficult situation.

The goal of this thesis is to show whether or not the ratio of foreign currency in Turkish private sector loans increased from 2001 to the end of 2007, if the debt was in foreign currency to show these years external debt ratios and its distribution by statistical tables for these years and also explain the exchange rate risk because of using excessive external debt could be.

Literature review will be made in the second chapter and then in the third chapter of thesis, economic developments the recent years in Turkey and in the world will be summarized. Then the important economic indicators for Turkey such as the growth rate, the current account deficit, the unemployment rate, and the public sector borrowing requirement are explained by historical data.

In the next chapter, the general situation of external borrowing in Turkey will be presented, the percentage change and distribution of external debt among the public sector, the private sector and the National Bank will be explained by charts; and the reasons of the increasing use foreign debt by the private sector will be explained through quantitative applications. The general trends of the dollar and the euro and their effects on the external debt of The Turkish Private Sector will be analyzed and in the interest rates in domestic market and foreign interest rates will be compared.

The textile sector, an important contributor to exports and employment in Turkey will be analyzed in next part. Generally, as borrowing in foreign currencies by the Turkish Private Sector is increases, comparison on use of foreign currency should be made through the analysis of the financial structure of the textile sector in order to achieve logical results in sectoral on a based. Also this part, a general historical overview of Turkish exports and the ratio of textile exports to total exports will be explained. The final part of the chapter contains a SWOT analysis for Turkish Textile Sector.

In the sixth part, the exchange risk of transactions in foreign currency, the type of exchange rate risks and how they can affect companies will be explained. These are transaction exposure, translation (accounting) exposure, and economic exposure.

In the final part of the thesis, using the published financial sheets of Akin Tekstil A.Ş. and Goldaş A.Ş., Value at Risk analysis will calculate the net currency positions for the firms. A two-sided scenario will be used, measuring by standard deviation the Euro and the Dollar return. Data obtained from the 2001 crisis period returns then for unfluctuated periods. The two different companies will be analyzed and their worst expected value that could be lost because of exchange rate risk will be measured within a determined confidence interval and time.

CHAPTER 2

LITERATURE REVIEW

Concepts of debt and excessive indebtedness became more prominent on the agenda after the 1980's and as a result led to a need to analyzing foreign debt in a standard manner throughout the world's economies. In this framework, international institutions such as The World Bank, BIS, IMF, OECD launched an associate working team to standardize data regarding foreign debt in 1984. The definition of foreign debt, suggested by this working team in 1988 and accepted by the Turkish Treasury, as follows "within a specific time period gross foreign debt for a country is the summation of its short-, mid- and long-term liabilities all of which were provided by non-resident individuals" (Bal, 2001, p.14).

In other words, it is the provision of external credit to residents and institutions of a country from foreign non-resident individuals and institutions.

In the mid-1970s, changes began to occur in the structure of the international credit markets. Loanable funds shifted from official development credits to private credits, at the same time, interest and maturity structures of these credits were changed adversely on behalf of developing countries interests. Official credits, provided by international institutions such the World Bank, were more advantageous compared with private credits, since they had lower interest ratios and longer maturities with constant interest ratio (Sarı, 2004, p.13).

Parallel to the increase in private credits, international credits cost also increased and their maturity shortened. These structural changes in the international credit markets started to create some troubles and difficulties in debt servicing for the credit-using countries at the end of the 1970s. Starting in the 1980's, seeing the potential risk of an international debt problem, creditors started to shift from stable to floating interest rates in order to guarantee themselves.

Moreover, they started to impose additional interest on their lending which was called a spread. Creditors could take into account the potential risks of indebted countries. All these developments created a higher cost of foreign borrowing to the developing countries. This process in turn led to a circle, where new burdens were created on the financial balances of debtor countries and this laid the groundwork for the emergence of international debt trouble.

The external accounts remain a source of macroeconomic vulnerability for the Turkish economy. The trade and current account deficits remained high in 2007, at 5.5%, marginally improved compared with the previous year. Many banks borrowed in foreign exchange and lent in domestic currency at high rates (including to the Treasury), leading to large open positions. When the lira was floated, the sector incurred significant foreign Exchange losses. (European Central Bank, 2008)

A rising external debt tends to weaken the economy. First, foreign borrowing increases vulnerability to external conditions. When debt is contracted at a floating rate, higher foreign interest rates lead to an increase in debt-servicing costs. This raises budgetary outlays, which may translate into a larger deficit or a reduction of nondebt outlays. Likewise, a depreciation of the currency leads to increased debt servicing (in domestic currency terms), and has the same effects. When the government borrows to cover a growing deficit, foreign borrowing leads to an unsustainable level of debt, an excessive share of debt service in overall government expenditure, and substantial use of foreign exchange to service the debt. In the long run, this may lead to a debt crisis. (Bcaugrand 2002)

Moreover, the recent literature on debt intolerance emphasizes that developing countries historically have run into problems at much lower debt-to-output ratios than advanced countries. (IMF 2004) However, although foreign investors can increase competition and market efficiency, they can also bring risks, in terms of market volatility, since they can withdraw their investment on expectations of financial crisis, contagion, or deterioration of the macroeconomic framework. (Arnone and Presbitero 2006)

An article was written upon excessive indebted matters: that a country's record at meeting its debt obligations and managing its macroeconomy in the past is relevant to forecasting its ability to sustain moderate to high levels of indebtedness, both domestic and external, for many years into the future. It introduced the concept of "debt intolerance" (drawing an analogy to, for example, "lactose intolerance"), which manifests itself in the extreme duress many emerging market economies experience at overall debt levels that would seem quite manageable by the standards of the advanced industrial economies. (Reinhart, Rogoff and Savastano, 2003)

Another article analyses the Brazilian experience in financing economic activity from the 1964-67 reform until the 1990s. Experts emphasize that, Turkish economy shows very similar structure to the Brazilian economy. In the article, two issues are addressed: first, what conditions explain the development of a model based on public and external credit in Brazil, quite different from the capital market based system conceived in the 1964-67 reform? Second, what are the perspectives for the development of an alternative model in the country, led by the national private sector? Based on international experience, two alternatives are considered. (Hermann, 2002)

In the other noteworthy article discuss some of the implications of Mexico's indebtedness, particularly those which derive from the connection between the foreign debt and the rapidly growing domestic debt. It would be so beneficial to consider developing countries indebtedness problems such as Mexico in order to evaluate Turkey's case and circumstances. The cost of this debt, in interest payments, means that government must squeeze the business sector and the workers in order to service this debt and to finance its budget deficit while, at the same time, experiencing no economic growth. Excessive indebtedness brings about mostly unpleasant macro economic indicators. (Ramirez de la, 1988)

In parallel to these articles and analysis, this thesis aims to show whether or not the ratio of foreign currency in Turkish private sector loans increased from 2001 to end of 2007, and if the debt was in foreign currency, to show external debt ratios for these years and its distribution by statistical tables and, also to explain the exchange rate risk caused by using excessive external debt.

The VaR measure of exchange rate risk is used by firms to estimate the riskiness of a foreign exchange position resulting from a firm's activities, including the foreign exchange position of its treasury, over a certain time period under normal conditions (Holton, 2003). The importance of VaR calculations have increased continuously since financial crisis in 2001. Measuring and managing exchange rate risk exposure is important for reducing a firm's vulnerabilities from major exchange rate movements, which could adversely affect profit margins and the value of assets.

VAR methodology was discussed in the article , not all VARs are equal, a study of VAR techniques used by dealers and end-users reveals that VAR calculations differ significantly for the same portfolio. VARs are extremely dependent on parameters, data, assumptions. (Beder 1995)

In the another article analyzes optimal, dynamic portfolio and wealth consumption policies of utility maximizing investors who must also manage market-risk exposure using Value at Risk (VaR). It is indicated that VaR risk managers often optimally choose a larger exposure to risky assets than non-risk managers and consequently incur larger losses when losses occur. The study suggested an alternative risk-management model, based on the expectation of a loss, to remedy the shortcomings of VaR. (Basak, Shapiro 2001)

It is a very similar study to in this thesis, it is focused on VaR use for corporates. It shows how VaR can be helpful to study market value risk proxied by share price risk. It has been developed a methodology to decompose the overall VaR into components that are attributable to underlying external risk factors and a residual idiosyncratic component. The study was made on the airline industry to show what practical results our 'Component VaR framework' can yield. Like any multinational company, an airline faces significant exposures to external risk factors, e.g. commodity prices, interest rates and exchange rates. (Hallerbach and Menkveld, 1999)

In parallel to this study the thesis will focus on Turkish Private sector and its risks which is an important issue nowadays, the published financial sheets of Akın Tekstil A.Ş. and Goldaş A.Ş, VAR analysis will calculate the net currency positions for the firms. A two-sided scenario will be used measuring, by standard deviation the Euro and the Dollar return.

Data has been obtained from in 2001 crisis period returns, then for unfluctuated periods. The two different companies will be analyzed and their the worst expected value that could be lost because of exchange rate risk will be measured within a determined confidence interval and time.

CHAPTER 3

OVERVIEW OF TURKISH ECONOMY

The economic recession that started in autumn of 2007 in the international markets is still effecting all economies. Although liquidity injections and interest rate discounts by Federal National Banks of countries decreased tension in the markets, it is clearly seen that the markets can not be completely relieved unless the financial markets of the USA become stable again. Deterioration in credit conditions, decreasing housing prices, increases in energy and food expenses and other negative developments have caused weak progress of economic growth in both developed countries and emerging economies alike in the last quarter of 2008.

In the report “World Economic Outlook” which is published before the annual Autumn Conventions of IMF and World Bank, expectations of the effects of financial tension to the real economy is noted by indications that the world economy is in a great comedown because of a financial crisis the likes of not seen since 1930. Financial losses, and lack of credit predicted as high as 1,4 trillion lead to expectations the world economy will barely become normal by the middle of 2009. In addition global growth will slowdown to approximately 3.9 % according to the report. Inflation has also increased because of increases in the prices of energy and food. In addition the financial crisis stopped the economic growth in Europe. Interest rate discounts and government regulations are therefore needed to prevent the economy from slowing down according to the report.

Actions in the international markets also directly effect the Turkish economy. It is thought that the impacts of the crisis will be reflected as a slowdown in credit liquidity because of high interest rates, loss of momentum in the economic growth, and decays in external debt conditions. Besides, production value-weighted capacity ratio of manufacturing industry decreased 4.5 % then became 78.1 % the end of 2008. According to the “World Competition Report 2008-2009” made by the World Economic Form, Turkey was 63rd in world competition in 2008, 10 positions lower than in 2007. The current financial crisis inevitably impacts real economies, and depending on size and scale of this impact, there will be increased competition in export sectors of Turkey, related to decreased demand especially in Europe due to recession.

3.1 Balance of Payments and the Current Account Deficit

The balance of payments is a record that shows revenue from external economic relations and payments from abroad over a significant period. Balance of payments has four main parts. These are : current account balance, balance of capital account ,net error omissions, and reserve movements.

If the sum of these quantities is positive, there is current account surplus,if negative, there is a current account deficit.The capital account includes direct investments, portfolio investments and other investments.The current account is subdivided into three broad categories: Goods and Services, Income, Current Transfers (Unrequited Transfers).

Goods item covers general merchandise, goods for processing, repairs on goods, goods procured in ports by carriers and nonmonetary gold. Foreign trade flows are measured in terms of “Special Trade” or “General Trade” systems and choice of the system may differ among countries. The special trade system is based on the physical movement of goods across customs, but does not include the movement of goods to or from the free trade zones located on a country’s border, whereas general trade system covers all goods crossing the national territory.

Services account covers Transportation (including freight), Travel, Communication services, Construction services, Insurance services, Financial services, Computer and Information services, Royalties and License Fees, Merchanting and Other Trade-Related services, Operational Leasing services, Miscellaneous Technical services, Personal, Cultural and Recreational services and Government services.

Income covers two types of transactions between residents and nonresidents: compensation of employees, which is paid to nonresident workers (e.g., border, seasonal and other short-term workers), investment income receipts and payments on external financial assets and liabilities, comprising direct investment, portfolio investment and other investment. Direct investment income includes income on equity, dividends, reinvested earnings and other intercompany investment income. Portfolio investment income refers to dividends earned on equity securities (dividend), income earned from bonds and other debt

Transfers are defined as offsetting entries for real resources or financial items provided, without a quid pro quo, by one economy to another. (CBRT, 2008)

Table 1. Balance of Payments in Turkey from 2003 to 2008

Million \$						
BALANCE OF PAYMENTS	2003	2004	2005	2006	2007	2008
CURRENT ACCOUNT	-7.515	-14.431	-22.088	-32.051	-38.219	-41.623
Exports f.o.b.	52.394	68.535	78.365	93.611	115.364	140.748
Imports f.o.b.	-65.883	-91.271	-111.366	-134.573	-162.041	-193.922
Balance on Goods	-13.489	-22.736	-33.001	-40.962	-46.677	-53.174
Services: Credit	17.952	22.941	26.757	25.407	28.615	34.778
Services: Debit	-7.441	-10.144	-11.423	-11.713	-15.292	-17.321
Balance on Goods and Services	-2.978	-9.939	-17.667	-27.268	-33.354	-35.717
Income: Credit	2.246	2.651	3.608	4.383	6.420	6.860
Income: Debit	-7.803	-8.260	-9.483	-11.074	-13.528	-14.784
Balance on Goods, Services and Income	-8.535	-15.548	-23.542	-33.959	-40.462	-43.641
Current Transfers	1.020	1.117	1.454	1.908	2.243	2.018
CAPITAL ACCOUNT						
FINANCIAL ACCOUNT	7.162	17.702	42.660	42.689	48.637	34.294
Direct Investment Abroad	-480	-780	-1.064	-924	-2.106	-2.585
Direct Investment in Turkey	1.702	2.785	10.031	20.185	22.046	17.985
Portfolio Investment- Assets	-1.386	-1.388	-1.233	-4.029	-2.063	-1.276
Portfolio Investment- Liabilities	3.851	9.411	14.670	11.402	2.780	-3.502
Equity Securities	905	1.427	5.669	1.939	5.138	716
Debt Securities	2.946	7.984	9.001	9.463	-2.358	-4.218
Other Investment- Assets	-986	-6.983	-578	-13.437	-4.858	-7.425
Monetary Authorities	-28	-24	-16	0	2	2
General Government	0	0	0	0	0	0
Banks	348	-5.324	-149	-11.018	-3.394	-9.117
Other sectors	-1.306	-1.635	-413	-2.419	-1.466	1.690
Other Investment- Liabilities	4.461	14.657	20.834	29.492	32.838	31.097
Monetary Authorities	497	-209	-787	-1.268	-1.450	-1.791
General Government	-2.194	-1.163	-2.165	-712	82	-959
Banks	2.846	6.564	10.524	11.704	3.735	8.086
Other sectors	3.312	9.465	13.262	19.768	30.471	25.761
Current, Capital and Financial Account	-353	3.271	20.572	10.638	10.418	-7.329
NET ERRORS AND OMISSIONS	4.450	1.071	2.628	-13	1.597	4.571
GLOBAL BALANCE	4.097	4.342	23.200	10.625	12.015	-2.758
RESERVE ASSETS	-4.097	-4.342	-23.200	-10.625	-12.015	2.758
Reserve Assets	-4.047	-824	-17.847	-6.114	-8.032	1.057
Use of Fund Credits and Loans	-50	-3.518	-5.353	-4.511	-3.983	1.701
Exceptional Financing	-	-	-	-	-	-

Source: Turkish United Treasury

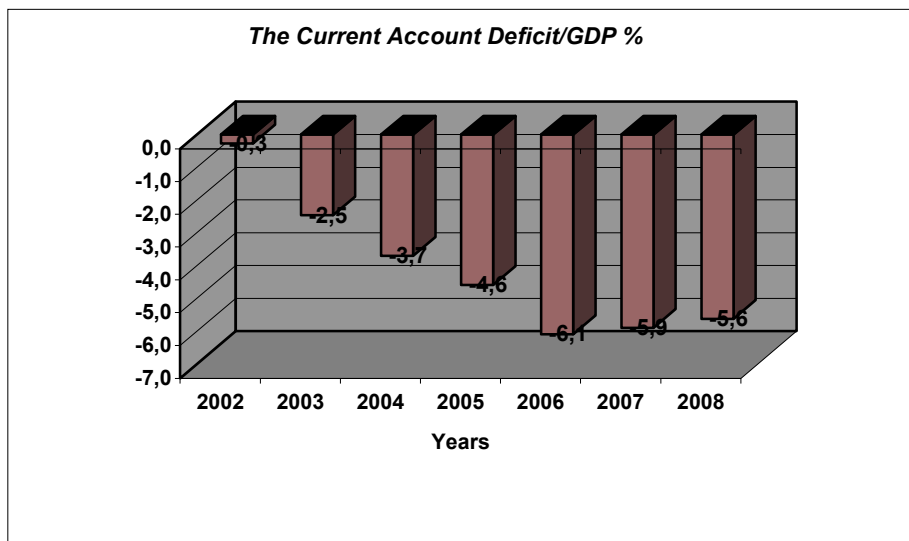
Current account balances have an important role in determination of the foreign currency gap of a country. If there is a deficit in Current Account Balances, a country is expected to cover this deficit by borrowing. Thus, if there is deficit in Current Account Balances, there must be surplus in capital accounts.

In the capital accounts except from foreign direct investments, all financial capital flows have debt increasing characteristics. In that mean, more important than its coverage policy, level of the current account deficit. Financing current account by direct investments or long term foreign currency inflow is less problematic. On the other hand, financing current account deficit by short-term and debt increasing hot money flow can be dangerous for the economy (Yeldan, 2006). If current account is not financed by direct investments but is financed by other investments, then it is financed by all external debt. These overseas resources must be repaid.

It can be seen that except from the 1994 and 2001 crisis conditions current account deficit is financed by debt creating finance. This high current account deficit is a sign of danger for the economy. (Yentürk, 2006). In accordance the policies applied after the 2001 crisis, Turkey became a country where short term capital moves began. A huge foreign currency inflow and an over-valuation of TL increased import demand. The ratio of GDP to current account deficit reached the highest level in the country's history. Table 1 shows that, the current account deficit reached the level of 41.623 billion dollars in 2008; its ratio of the current account deficit to GDP which can be also seen on figure 1 was 5.6 % in 2008.

Foreign trade balance (export-import), which is part of current account deficit is one of the factors that influence growth as well. Developing countries especially require intermediate inputs and raw materials for production. The ratio of current account deficit to GDP was 5.6 % in 2008 compared with only 0.3% in 2002. Because of overvaluated foreign currency policy was applied it became to desirable to import export inputs, and as a result the current account deficit continuously increased, this in turn negatively effected domestic production and employment because of the high level of import and currency circulation.

Figure 1: Current Account Deficit to GDP



Source : Undersecretariat of Turkish Treasury, Electronic Statistics Database.

Another important point shows by Table 1, the net error omission item was positive except for 2006. Uncertain sourced foreign currency input creates lower exchange rates, this cheaper exchange rates triggers growth, however, this condition also causes enlargement of the the foreign trade deficits. (Ay ve Alkoçlar, p.82)

Today developing countries use external financing for two reasons. First, there is insufficient capital accumulation for development because of insufficient savings in developing countries, the second is that in order to finance balance payment, gaps must be covered. Therefore increasing payment balance gaps also increase external debt. Another important point is whether that kind of capital includes whether debt or not. According to many economists, positive a value of net error omission means domestic hot money. (Yeldan,2006:p.2)

The current account deficit in the 2002-2008 period is basically due to an increase in investment expenditure of the private sector. In the most recent five years, as a result of reforms in the public treasury and applied policies, public saving deficit was significantly closed.

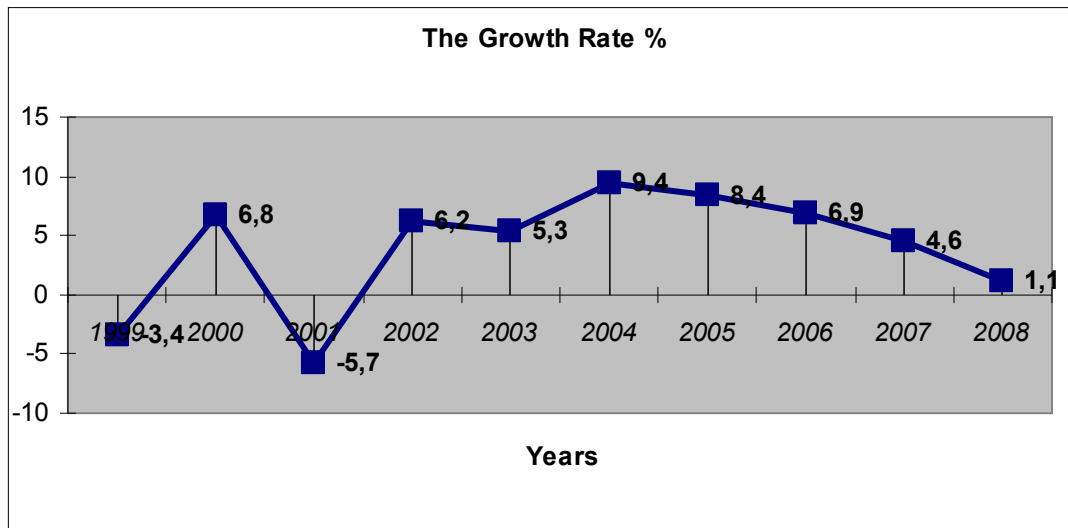
In 2008 ratio of account deficits to GDP was approximately 6 %. Economists indicate that if this ratio is over 5 % then it is dangerous. The fact that Turkey exceeds this ratios can be seen the Figure 1, which shows that current account deficit is a significant risk. Because the financing of this deficit by hot money is also problem. All of these these conditions point to the importance of decreasing the current account deficit to acceptable levels.

3.2 The Growth Rate and Unemployment

Figure 2, clearly shows the different and fluctuating periods of economy. After the 2001 economic crisis, the growth performance of Turkish Economy was at high levels between 2002-2006. Growth rates of economy from 2002 to 2006 were respectively; 6.2 %, 5.3 %, 9.4 %, 8.4 % and 6.9 %. After a growth rate of 9.4 % in 2004 growth rate was tending to decreased. This decreasing trend led to a 1.1 % in 2008 and this value was the lowest of last 6 years. The main reason of this global financial crisis.

Turkey overcame the 2001 crisis by use of external debt and speculative growth. In this process, the economy was built on a sensitive balance between the high-interest rate and low foreign exchange rate. The policy created some problems, especially a high unemployment rate and an import dependent industrilization. (Yeldan 2006:p.1)

Figure 2. The Growth Rate Trend of Turkey 1999-2008



Source : Undersecretariat of Turkish Treasury, Electronic Statistics Database.

Although the growth rate was high in the years between 2002-2006, the important point is that unemployment rate did not decrease. Table 2 shows, the unemployment rates were respectively: 10.3 %, 10.5 %, 10.3 %, 10.3 % for years 2002-2007 and in 2006 10.1 %. Interestingly, the high growth rate provided no employment growth in this period. Some economists describe this kind of growth as “unqualified growth”.

Table: 2. The Unemployment Rates for Turkey 2002-2007

Years	2002	2003	2004	2005	2006	2007
Unemployment Rate (%)	10,3	10,5	10,3	10,3	9,9	9,9

Source : UT, CBRT, TURKSTAT

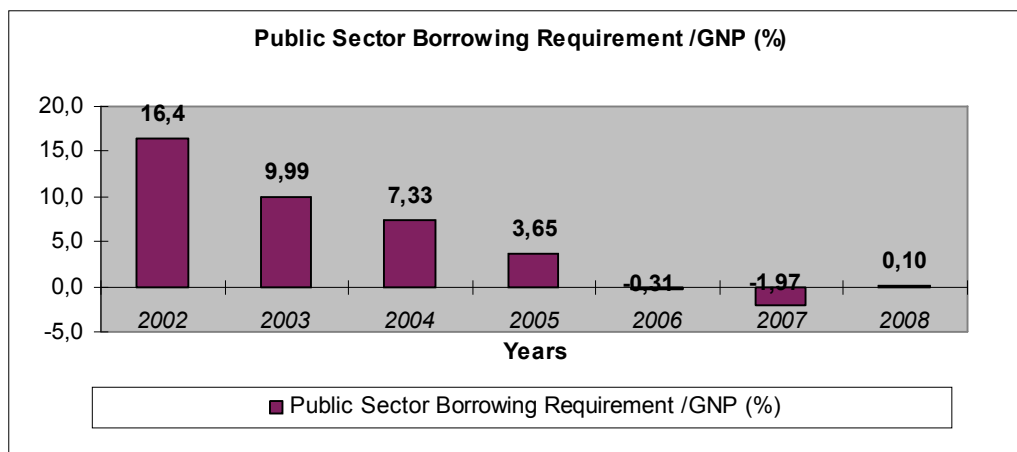
3.3 Public Sector Borrowing Requirement

Briefly, a budget deficit is the condition of public expenses exceeding public revenues. The public sector is represented by various units in an economy. A large description public sector is formed from the consolidated budget, local government budgets, state economic enterprises budget, social insurance budget and other funds. Gaps in this balance of public sector known as “Public Sector Borrowing Requirement” or the budget deficit.

Political instabilities could cause economic problem in developing countries. A good example is (would be) the six government changes, and often varying monetary and fiscal policy changes in the 1995-2000 period in Turkey.

Political instability and fiscal policy decisions are included as an increasing factor of public/budget deficits. The Public Sector Borrowing Requirement ratio to GNP in Turkish economy an indicator of this variable. Briefly, public sector incomes are less than public sector spending years and this causes a budget deficit.

Figure 3. Public Sector Barrowing Requirment.



Source : Undersecretariat of Turkish Treasury, Electronic Statistics Database.

In the 2002-2008 period, decreases in the ratio of PSBR/GNP can be seen on Figure 3. The ratio decreased to negative values in 2006 and 2007 and it was 0.1 % in 2008. In parallel was a programme that aimed to decrease the proportion of the budget deficit to national income and this program was first applied in the crisis. The decrease reflects fiscal discipline and it is good for the whole economy. Especially there appeared to be new sources of budget discipline in the economy toward investment expenditures instead of paying debt and its expense.

CHAPTER 4

THE EXTERNAL DEBT SITUATION of THE PRIVATE SECTOR

When economic indicators are analysed in Turkey, it is discussed that in recent years private sector foreign currency borrowing has increased compared with previous. In chapter 3, first a definition of external debt and the reasons for external debt will be explained, then GDP and external debt of Turkey will be proportioned and constructed. In later parts, a comparison will be made between the amount of exports to Gross Domestic Product rate, which is an important indicator in debt provisions. Preferences of USD and Euro as external debt will be shown and the variations rate changes of these currencies against Turkish Lira will be analyzed. Debt indicators of the National Bank, public and private sector will be analyzed, the amount of debt from foreign currency from 2001 to 2007 will be shown and explained. Then the possible reasons for this foreign currency debt will be explained. In a sample study, change and stability possibilities of exchange rate will be analyzed if borrowed in US dollars, the possible profit or loss of company will be shown and the exchange rate risk of company also will be calculated.

4.1 External Debt

The definition of foreign debt which by this working team in 1988 and accepted by the Turkish Treasury is such that: “within a specific time period gross foreign debt for a country is the summation of its short-, mid- and long-term liabilities all of which were provided by non-resident individuals”

In other words, it is the provision of external credit to residents and institutions of a country from foreign non-resident individuals and institutions.

4.1.1 Reasons for Foreign Borrowing

Borrowing foreign currency, in general, is known as providing external resources from developed countries to less developed countries. However, in reality foreign borrowing is not only a concern just for developing countries; but also for developed countries, since they too have some degree of foreign debt as well. Nonetheless developed countries foreign debt is not as serious as developing countries foreign debt and does not create significant problems.

Along with the present globalization process we observe accelerated industrialization and improving financial markets which necessitate more external financing sources than in the past. Developing countries resort to external borrowing to fill the gap between desired expenditure and domestically available resources and also to obtain necessary resources for development.

Lack of developing countries necessitate investment, in order to reach a certain level of economic growth and development. Savings are the source of these investment, because of lower levels of national income in developing countries, they lack these domestic savings, and therefore, they look for foreign resources. In this way, foreign borrowing plays an important part in the financing of development in the emerging markets.

The reasons for the less developed countries and developing countries to engage in foreign borrowing can be summarized as: lack of investment sources and savings, foreign trade or balance of payment deficit,

Furthermore, the level of economic development or under-development may lead to many different factors for a country falling into indebtedness. Countries may borrow for listed various reasons at below;

- To overcome budget deficit problems,
- Providing financial sources for military spending,
- To create and maintain economical stabilization,
- To finance big investments and reforms,
- To maintain efficiency in resource allocation and its usage,
- Aiming at channeling savings towards specific investments,
- Creating financial sources for matured liabilities,
- To meet a need for extraordinary expenditure like natural disasters, wars etc.
- Economic openness to short term capital flow.

In addition to these reasons, a country can borrow to increase national income, expand employment, maintain equilibrium in balance of payments, sustain price stability, rearrange income distribution and provide balanced regional development. (Önertürk, 1979, p.11)

4.2 Total External Debt to GDP

Total external debt to GDP ratio is used in measuring the general credibility of a country's economy, and has some defined degrees. For instance, if this ratio is between 30% -50%, then the country is known as a mid-level indebted country, if it is above the 50 %, the country is known as an excessive indebted country.

When total external debt of Turkey is shown at the Table 3, it is accepted that there was excessive borrowing in 2001 and 2002. After 2003, it can be seen that total external debt to GDP of Turkey progressively decreased and fell to less than 50 %. In other words, Turkey became mid-level indebted country from 2003 to 2007.

Table 3. Gross External Debt

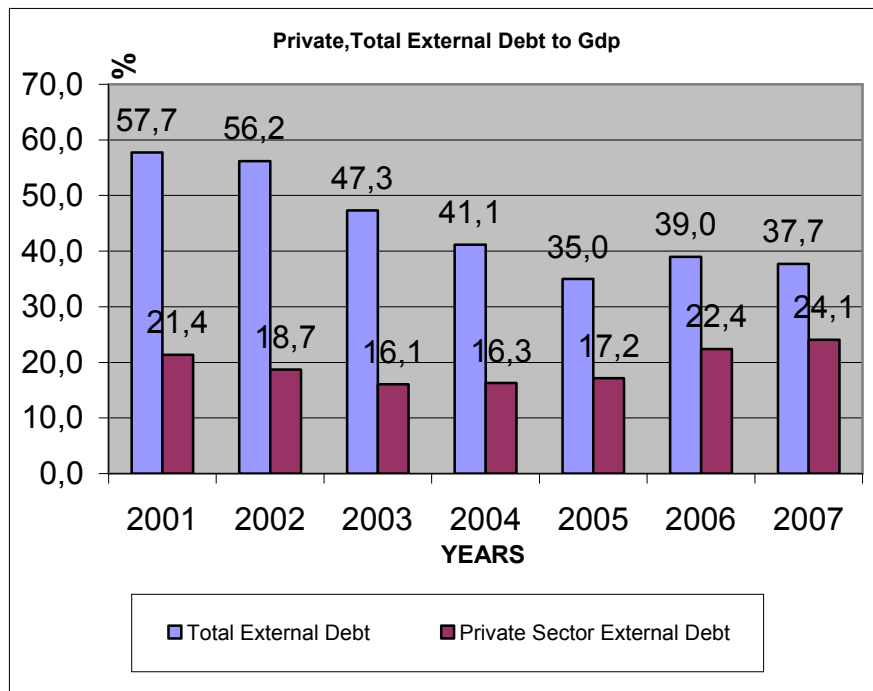
(Million \$)	2001	2002	2003	2004	2005	2006	2007
PUBLIC SECTOR	47.129	64.534	70.844	75.668	70.414	71.588	73.457
Short Term	1.019	915	1.341	1.840	2.133	1.750	2.163
Long Term	46.110	63.619	69.503	73.828	68.281	69.838	71.294
CENTRAL BANK	24.351	22.003	24.373	21.410	15.425	15.678	15.801
Short Term	752	1.655	2.860	3.287	2.763	2.563	2.282
Long Term	23.599	20.348	21.513	18.123	12.662	13.115	13.519
PRIVATE SECTOR	42.112	43.068	48.941	63.557	82.592	117.890	157.861
Short Term	14.632	13.854	18.812	26.753	32.207	36.041	37.337
Long Term (1)	27.480	29.214	30.129	36.804	50.385	81.849	120.524
GROSS EXTERNAL DEBT (Million \$)	113.592	129.604	144.158	160.635	168.431	205.156	247.120
GDP (Million \$)	196.736	230.494	304.901	390.387	481.497	526.429	655.886
Total External Debt /Gdp (%)	57,7	56,2	47,3	41,1	35	39	37,7
Private Sector Debt /Gdp(%)	21,4	18,7	16,1	16,3	17,2	22,4	24,1

Source : UT, CBRT, TURKSTAT

4.3 Private Sector External Debt to GDP

When Private Sector Debt to GDP is analyzed; we can see the ratios on Figure 4, in 2001 the ratio was high because of the economic crisis, but from 2002 to 2004 it had tendency to decrease but then from 2004 to 2007 it started to increase again. While the ratio of total external debt is progressively decreasing, in last 3 years private sector external debt is increasing. The private sector has a three basic reason to borrow on currency, which will be explained later in this chapter.

Figure 4.Private Sector and Total External Debt/Gross Domestic Production



Source : UT, CBRT, TURKSTAT

4.4 Total External Debt to Export

This ratio, which indicates the country's capacity to repay debt, gives some clues regarding the long-term effects of export revenues over the total debt stock. In the case when this ratio is between 165-275 %, the country is said to be mid-level indebted country, if it exceeds 275 %, then the country is classified as an excessively indebted country.

When we analyze the condition of Turkey, Total External Debt to Export in the years 2001, 2002 and 2003 was over than 275 %. In these years Turkey was an as excessive indebted nation. However, when we look at ratios from 2004 to 2007; we can see at the Table 4, Turkey became a mid-level indebted country moving away from, the excessively indebted country classification.

Table 4 Total External Debt/Export

Years	2001	2002	2003	2004	2005	2006	2007
TOTAL EXTERNAL DEBT/EXPORTS (FOB)	362,5	359,4	305,1	254,3	229,2	239,9	230,4

Source : UT, CBRT, TURKSTAT

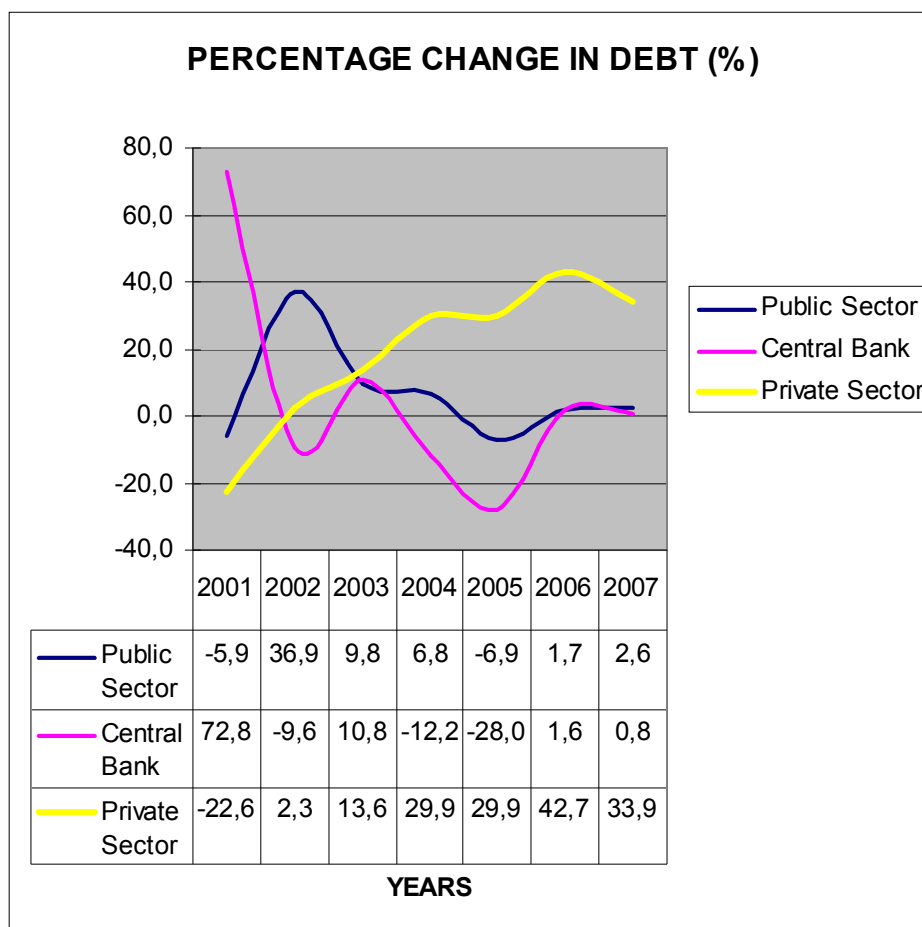
4.5 External Debt Use in Turkey

In this part of thesis, the percentage change and distribution of external debt among the public sector, the private sector and the National Bank will be explained by charts; and the reasons for the increasing use foreign debt by the private sector will be explained through quantitative applications.

4.5.1 Percentage Change according to Previous Years,

External debt users are divided into three groups by treasury the National Bank, the public and the private sector. In the figure 5, we can see Percentage Change of debt according to the previous year, in debts of National Bank no fluctuations and decreasing trend from 2001 to 2007 can be observed. In foreign debts of public sector, excluding a 36 % increase at 2002, continuously decreasing tendency of the debts of National Bank can be observed. In the observed years, the foreign debts of the private sector increased continuously. In particular, from 2004, the growth rate accelerated and Percentage Change did not dropped under 30 %.

Figure 5 Percentage Change External Debt According to The Year Before,



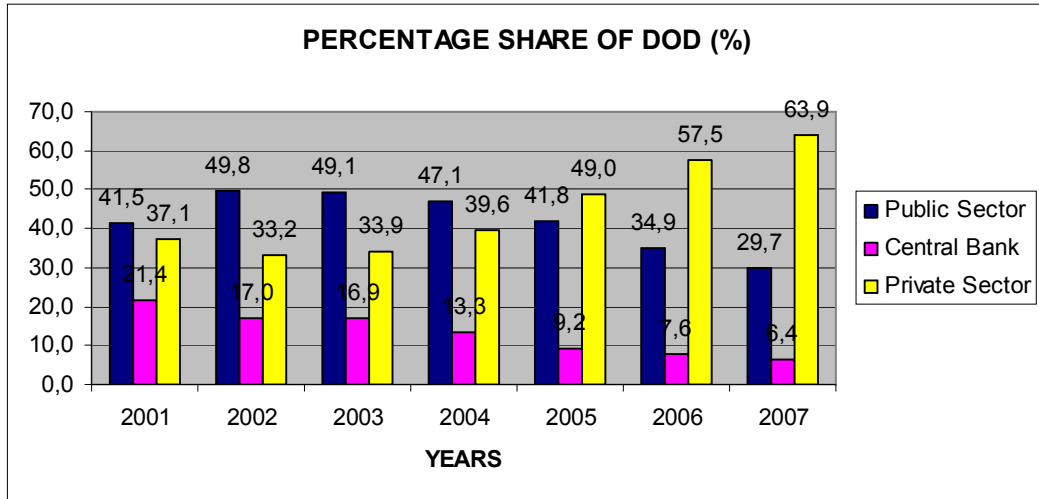
Source : UT, CBRT, TURKSTAT

4.5.2 Distribution of Foreign Debt Use

In the Figure 5, the Percentage Distribution of External Debt between the NB, the public and the private sector over the same time period are shown. With adjustment to previous chart and data, in this chart, the debt of the private sector is showing to be increasing tendency. The portion of the private sector debt in total external debt always increased except from 2001 to 2002, and starting in 2005 the private sector percentile became the highest percentile.

The portion of NB in external debt has been continuously decreasing, and the portion of the public sector debt also shows a decreasing tendency. As seen in similar in the Figure 6, even as the external debt ratio of the public sector and NB was decreasing, external debt ratio of private sector was increasing.

Figure 6 Percentage Distribution of Foreign Debt Use



Source : UT, CBRT, TURKSTAT

4.6 Dollar and Euro Borrowing

The general trends of the dollar and the euro and their effects on the external debt of The Turkish Private Sector will be analyzed. In this analysis, external debt of the lending country, the relative value of the currency being borrowed to the domestic currency, and the interest rates of the borrowed currency are all important.

4.6.1 Effects of Euro and Dollar to Borrowing

The Turkish private sector generally uses Euro or US Dollar denominated debt, as shown in the Table 5. When total external debt is compared with Euro and US dollar debt from 2001 to 2007, the US dollar was preferred more than the Euro, with 55 % of total external debt was denominated in US dollars and 34 % Euros in 2007.

Therefore, the relative values of the Euro and the Dollar to TL and the interest rates of these currencies must be analysed. A large part of the external debt of Turkey is denominated in Euro and USD and this has increased in the last 6 years as shown in the related graphics.

Table 5. Gross External Debt of Turkey –Currency Composition

<i>(Million \$)</i>	2001	2002	2003	2004	2005	2006	2007
TOTAL	113.592	129.604	144.158	160.635	168.431	205.156	247.120
CHF	686	718	866	1.045	872	937	988
DEM *	826	0	0	0	0	0	0
ECU/EUR	34.162	39.732	47.975	54.352	53.890	66.630	86.173
FRF	23	0	0	0	0	0	0
GBP	709	731	640	679	575	866	877
JPY	5.176	5.311	4.509	3.427	2.804	2.688	2.851
NLG	21	0	0	0	0	0	0
SDR	14.106	22.018	24.012	21.447	14.653	10.764	7.150
USD **	57.307	60.599	65.641	78.125	91.572	113.050	137.143
Diğer / Other (USD)	576	497	515	1.560	4.064	10.220	11.937
EUR/TOTAL	30,07%	30,66%	33,28%	33,84%	32,00%	32,48%	34,87%
USD/TOTAL	50,45%	46,76%	45,53%	48,63%	54,37%	55,10%	55,50%

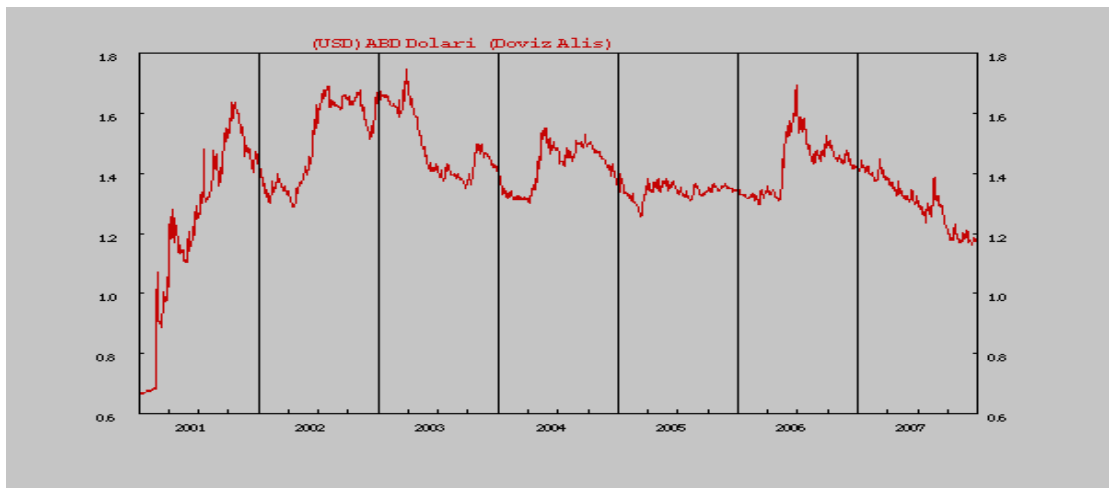
Source : UT, CBRT, TURKSTAT

In the next part the relations between the increase in external debt in recent years and tables that show daily Euro and US Dollar buying rates will be explained.

4.6.2 The Situation of Dollar Exchange Rate

When the situation the TL/USD dolar Exchange rate from 2001 to 2007 is analyzed in the Figure 7, it is important to observe that; it has never exceeded 1.80, which was the highest levels reached in March 2003 and June 2006, followed by decreases, and in these years such fluctuations were relatively limited and short lived. The TL/USD Exchange rate declined to 1.20 at the end of 2007. It is the lowest since 2002

Figure 7 Historical Trends of the TL/USD Exchange Rate

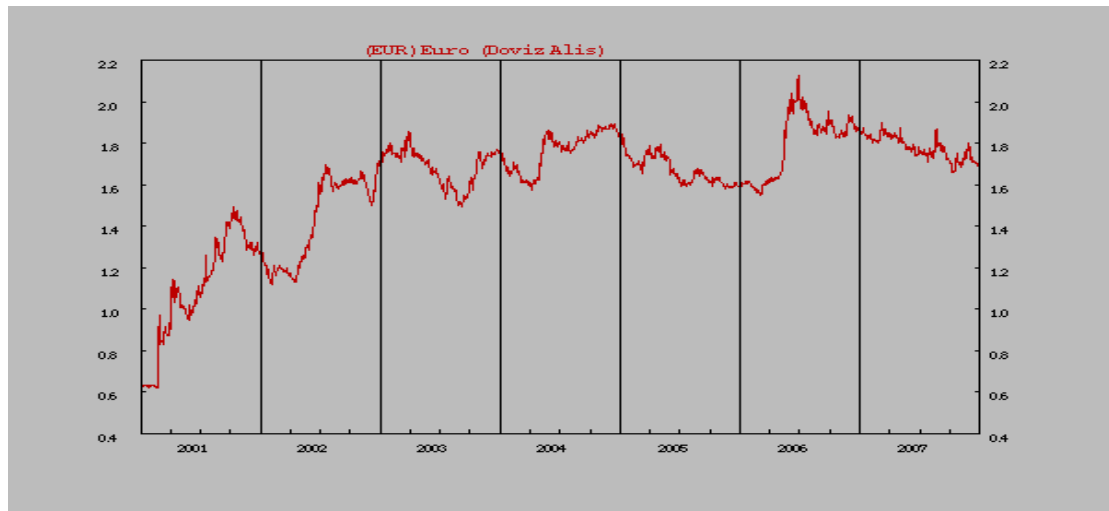


Source: CBRT

4.6.3 The Situation of Euro Exchange Rate

When the relative values of TL/Euro Exchange rate is analyzed from 2001 to 2007; the noteworthy observations from the Figure 8 : the Exchange rate has never exceeded 2.20, that the highest level was in June 2006 and it then started to decrease until the end of 2007, the Exchange rate decreased to 1.71.

Figure 8 Historical Trends of TL/USD Euro Exchange Rate



Source: CBRT

What can be inferred from related progression of these two figures is that, for future years expectation of TL/Euro and TL/USD exchanges rate will not increase sharply and any increases will not continue for a long time. Despite entering into a floating exchange rate regime after the 2001 economic crisis, the NB intervened in the economy so that undesirable fluctuations were overcome in short time periods. Eventually, TL/USD and YTL/Euro Exchange rate won't increase sharply and undesirable fluctuations due to the interventions of the NB can propose.

4.7 The Effects of Interest Rates on Borrowing

Other reasons that the Turkish private sector to using external debt. And the sheer size of the Euro and Dollar credit markets compared with domestic markets, and more suitable interest rates of these currencies compared to the Turkish Lira.

Table 6 National Interest Rates,in the Money Markets

COUNTRYNAME	DESCRIPTOR	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
United States	FEDERAL FUNDS RATE	5,35	4,97	6,24	3,89	1,67	1,13	1,35	3,21	4,96	5,02
Japan	CALL MONEY RATE	0,37	0,06	0,11	0,06	0,01	0,00	0,00	0,00	0,12	0,47
Euro Area	INTERBANK RATE (3-MONTH MATURITY)	3,96	2,96	4,39	4,26	3,32	2,33	2,11	2,18	3,08	4,28
United Kingdom	OVERNIGHT INTERBANK	7,21	5,20	5,77	5,08	3,89	3,59	4,29	4,70	4,77	5,67
Turkey	INTERBANK MONEY MARKET RATE	74,60	73,53	56,72	91,95	49,51	36,16	21,42	14,73	15,59	17,24

Source:Imf Financial Statics

According to Money market data from imf statistics related years, while annual interest rate in the US Money market was 5,02 % in 2007, the annual interest rate for TL was 17,24 %. The interest rate of the Euro was approximately 4,28 % in Euro Region. This interest rate is also lower than TL. The lowest interest rate was the Japanese Yen at 0,47 % however even at this the interest rate,it was not the preferred currency. Because exporter companies generally earn Euros or US dollars, for this reason they usually also borrow these currencies. As shown in Table 7 regional distribution of Turkish exports, most of total exports are to EU countries where the currency is the Euro.

Table 7 Export Figures of Turkey for Top Fifteen Countries

Million \$											
COUNTRIES		DECEMBER					JANUARY - DECEMBER				
		2007	SHARE (%)	2008	SHARE (%)	CHANGE (%)	2007	SHARE (%)	2008	SHARE (%)	CHANGE (%)
1	Germany	959	9,9	765	10,0	-20,2	11.993	11,2	12.959	9,8	8,1
2	Iraq	248	2,6	429	5,6	72,9	2.845	2,7	3.912	3,0	37,5
3	United Kingdom	778	8,0	390	5,1	-49,8	8.627	8,0	8.169	6,2	-5,3
4	Italy	675	6,9	366	4,8	-45,8	7.480	7,0	7.817	5,9	4,5
5	Switzerland	77	0,8	358	4,7	364,3	935	0,9	2.857	2,2	205,5
6	France	598	6,2	331	4,3	-44,7	5.974	5,6	6.622	5,0	10,8
7	Russia	416	4,3	323	4,2	-22,5	4.727	4,4	6.482	4,9	37,1
8	USA	292	3,0	283	3,7	-3,3	4.171	3,9	4.290	3,3	2,9
9	U.A.E	368	3,8	279	3,6	-24,0	3.241	3,0	7.981	6,0	146,3
10	Spain	386	4,0	212	2,8	-45,1	4.580	4,3	4.051	3,1	-11,5
11	Netherlands	261	2,7	175	2,3	-32,9	3.019	2,8	3.143	2,4	4,1
12	Iran	209	2,2	161	2,1	-22,9	1.441	1,3	2.028	1,5	40,7
13	Algeria	85	0,9	147	1,9	73,7	1.232	1,1	1.614	1,2	31,0
14	Egypt	75	0,8	142	1,8	89,8	903	0,8	1.426	1,1	58,0
15	Belgium	156	1,6	139	1,8	-10,9	1.736	1,6	2.123	1,6	22,3
	LIST TOTAL	5.585	57	4.502	59	279	62.903	59	75.474	57	592

Source: Undersecretariat of Foreign Trade

4.8 Reasons Why the Turkish Private Sector Borrows Euro and US Dollar

As tried to be explained previous part of the chapter, the Turkish private sector's external debt increased in the last six years continuously using the Euro and the Dollar as currencies. There are three basic reasons for this form of borrowing: First, the interest rate of the Euro and the US dollar is lower and more attractive than interest rate of Turkish Liras.

Second the forecast indicated there would be no significant increased in exchange rate as there had been no long fluctuations in analyzed years. Finally, as most of Turkey's exports are to EU countries, Turkish firms are paid in Euros besides, the Dollar is the most common currency in the world. Although they used appropriate process, Turkish private sector companies incurred exchange rate risk because of this external debt. They might make a loss because of their transactions and currency positions.

Application:

The next part will attempt to explain difference in profit or loss for companies who borrows either Turkish Lira or Dollars , using the application below.

In the study the advantages and disadvantages of borrowing in Turkish Liras or US dollars the sum of 100.000 USD (its Turkish Liras equivalent of 127.500 TL) will be compared using data of the 13 September 2008 TL/USD exchange rate and the real interest rate of Ing Bank in Turkey. If a company uses a Turkish Liras loan, for 4 years at a 1,95 % monthly fixed interest rates the company must pay 201.456 TL at the end of the 4 years. If a company uses a dollar loan and the exchange rate does not change, the company will pay less interest, because the monthly fixed interest rate of USD is 0,75 %. If the exchange rate on average continues at level of 1.40 during credit payment time, company will pay 32.784 TL less.

However, if exchange rate level rises to 1.70 or more, the company will make a loss because of having borrowed in USD. In other words, the company will have exchange rate risk during the payment period. As seen in the table, company will be negatively effected by positive changes in the TL/USD exchange rate.

Table 8 Why the Private Sector has been borrowing foreign currency.

Dolar Exchange rate	Loan	Monthly Payment	Month	Interest Rate	Total Payment		
Ytl	127.500,00	4.197,00	48	1,95	201.456,00		Profit or Loss
1,28	100.000,00	2.510,00	48	0,75	120.480,00	153.612,00	47.844,00
1,40	100.000,00	2.510,00	48	0,75	120.480,00	168.672,00	32.784,00
1,50	100.000,00	2.510,00	48	0,75	120.480,00	180.720,00	20.736,00
1,70	100.000,00	2.510,00	48	0,75	120.480,00	204.816,00	-3.360,00
2,00	100.000,00	2.510,00	48	0,75	120.480,00	240.960,00	39.504,00

Source:Ing Bank and Author's Calculation

In developing countries such as Turkey, where the central bank attempts to provide economical stability, borrowing by foreign currency and Exchange rate risks might cause great losses, in a four year long period, TL/USD Exchange may be affected by several economic indicators, and as a result it might increase. This risk will be lower for companies that export and whose earnings are in foreign currency, because these companies can pay back their loan in denominated foreign currency independent of the current exchange rate changes. In Turkey, where generally capital is generally insufficient, as seen in the above statistics, borrowing in a foreign currency has recently increased as companies to avoid paying a high amount of interest have preferred to take the risk of exchange.

CHAPTER 5

THE TURKISH TEXTILE SECTOR: AN OVERVIEW AND FINANCIAL ANALYSIS

In this chapter of the thesis, information about the general structure of the Turkish textile sector will be presented, the importance of this sector for Turkey will be explained and the place of the textile sector in comparison with total exports as well as the development of the sector in the last 10 years will be illustrated. Information about the general financial structure of textile companies will also be given in this chapter. Then using sector data from the NB, bunched income tables, balance sheets of various firms in the textile sector, selected data will be analyzed using the ratio analysis method.

Data about the Turkish textile sector is published quarterly. Including the income tables and balance sheets from 1997 to 2006. After 2000, the amount of loans by various companies in the textile sector and the ratio of foreign currency loans borrowing at total borrowing was also published by NB is included in this chapter.

Furthermore, ratio of assets of companies to their equities, the proportion of these companies financed by capital stock, the ratio of foreign currency borrowing versus total borrowing of companies, the proportion short term versus long-term borrowing in regards to the financial expenses of the companies and the financial situation of textile sector in last nine years will be discussed.

Whether companies in the textile sector borrow large amounts of foreign currency with variable and potentially increasing interest rates, as the Turkish private sector in general does (as seen in fourth chapter). As a result of this analysis, the exchange rate risk of the textile sector will be explained, especially in regards to amount of borrowing and potential exchange rates.

5.1 General View to Textile Sector in Turkey

At the beginnings of the 1980s, cheap raw materials, a low wage labor force, proximity to important markets, reduced costs in the textile and confection sector and transforming it into an import part of the Turkish economy. At the same time, Common Custom Union agreement between Turkey and the EU raised the importance of these sectors. Related to these improvements, in the past 20 years, there have been noteworthy improvements in the production of Turkish textiles and confections.

In Turkey after the 24 January 1980 Declaration by export based industrialization strategy this highly improved sector became the main vehicle for raising total exports. The product quality and production technology of the textile sector is the world class, approximately %75 of output produced is done by new machines and equipment.

Table 9 Contribution of Textile Sector to Economy

Share in GNP	11%
Share in Production Industry	16%
Share in Employment	11%
Employment Share in Industry	28%

Source: Undersecretariat of Foreign Trade

The textile and confection sectors are combined, the largest sector in Turkey from the point view of GDP, share in production industry and total industry, exports, net foreign currency inflow, employment, investment, index of openness and macro-economic indicators. With 20 billion USD production value, the sector reach an 11 % the ratio of total GNP. The share of the sector compared to total industry production is approximately 16 %. In addition, 11 % of the total employment of the country is in textile and confection.

In addition to being an important textile and confection producer of world, Turkey is also world's 6th largest cotton producer, with production of 875 million tons in in 2006/07 and 725 million tons in 2007/8.

Table 10 Cotton Production and Consumption by Countries

	2006/2007		2007/2008	
	Production	Consumption	Production	Consumption
CHINA	7.740	10.800	7.600	11.200
INDIA	4.760	3.995	5.270	4.250
UNITED STATES	4.696	1.073	4.107	1.002
PAKISTAN	2.075	2.650	2.004	2.720
BRAZIL	1.524	900	1.500	900
UZBEKISTAN	1.167	240	1.100	260
TURKEY	875	1.550	725	1.600
GREECE	300	65	320	55
SYRIA	225	200	275	200
OTHERS	3.108	4.931	2.923	4.887
WORLD TOTAL	26.470	26.404	25.824	27.074

Source: Cotton Outlook 2007

There are approximately 2 million people who work in the informal sector. Approximately 450,000 of these work in the textile sector and around 1.5 million of the work in confection industry. According to the July 2006 working statistics of the Ministry of Labor and Social Security, 588,903 workers work in 36,811 recorded establishments and 493,443 workers (83.79%) are registered to syndicates. 70 % of production of the sector is exported. 80 % of exported, products are cotton clothes. At the same time, as Custom Union with the EU went in effect, the expectations were that all custom taxes and other taxes would be removed and that trade would improve, because of the important investments to the sector in 1995. These investments decreased after 1995.

On the other hand, the textile industry is dependent on other sectors in the areas of technology equipment and inputs. Cotton is an important input of sector a product of the agriculture sector. Other inputs are synthetic raw materials, and colorants which are the products of chemical industry. It is estimated that there are 40,000 companies in the textile and confection sectors in Turkey. 90 % of these were established as SME and these companies make manufacture on a contract basis. While most of companies in the confection sector are SME, most of the companies of textile sector are large sized enterprises.

The textile sector of Turkey was effected by the global crisis which started in the Far East space in 1997 and then spread to Russia in 1998. In a progressively globalising world economy, competition increased, some factors like low cost, high quality and efficiency increased in importance.

The textile industry is not a primary industry in countries with information-based economies. However, these countries can catch up by establishing suitable structures for their textile industry; improving and creating new textile technologies, by implementing special protection policies, by making available credit opportunities with reasonable interest rates, by increasing access to higher level education and by funding R&D facilities.

As Turkey's goal in EU entry process is to complete industrialization for the enter an information-based economy, the textile sector will continue to grow in the future but in time will lose its status as the leading industry. EU members, today's information-based economies and newly industrialized countries. When the textile industry shifted focus to production of textile machines and textile chemicals, with these developments in machinery production industry, electronic industry and chemistry industry they appear to be as industrialized developed countries.

5.2 Turkish Textile Export

The textile and confection sector of Turkey began experiencing export-oriented growth in the beginnings of the 1980s. Despite the changes in the economic policies in the 1990s, the textile sector continued to be successful in export performance, as the rate of export to EU countries from non-member countries increased. To provide an analogy between Turkish foreign trade and the common trade policy of the EU, many reciprocal agreements were signed with many countries as a part of the conclusion 95/6815, many regulations concerning about one sided-quota supervision of textile products were ratified. When we analyze general exports of Turkey from 1998 to 2007, dollar based exports quadrupled in this 10 year period.

The annual average increasing rate of general export was 16,5 %. The textile exports of Turkey increased two and a half times in that 10 year period. The annual average rate of textile export increase was 11 %.

Table 11 .Total Turkish Exports and Total Exports from the Textile Sector for the years

Years	Total Export (1000 \$)	Change %	Textile Export (1000 \$)	Change %	Share of Textile Sector %
1998	28.054.932		2.631.227		9,4
1999	26.992.209	-3,8	2.565.465	-2,5	9,5
2000	27.201.538	0,8	2.590.818	1,0	9,5
2001	31.063.595	14,2	2.867.083	10,7	9,2
2002	36.205.090	16,6	2.979.471	3,9	8,2
2003	47.880.277	32,2	3.661.104	22,9	7,6
2004	64.010.231	33,7	4.565.602	24,7	7,1
2005	73.444.821	14,7	4.860.887	6,5	6,6
2006	85.774.644	16,8	5.576.708	14,7	6,5
2007	105.925.486	23,5	6.551.786	17,5	6,2
98-07		16,5		11,0	

Source:ITKIB

In the 10 year period between 1998 – 2007, the rate of textile export growth fell behind the rate of general export growth. When the general exports Turkey from 1998 to 2007 are analyzed, dolar-based exports quadrupled in this 10 year period. In the same period, textile exports increased two and a half times. As a result of this difference, in growth rate share of textile exports as a percentage of total export decreased from 9.4 % in 1998 to 6.2 % .In 2007, Turkey exported 6.6 billion dollars worth of textile 17.5 % increase compared to 2006. The rate of growth in textile exports was slightly less than the rate of a growth in general exports (23.5 %)

5.3 Importers of Turkish Textiles

When we analyse Turkish textile export in respect of customer countries, Italy, Russia, Germany, Romania and Poland are the five main importers of Turkish textiles. The top ten countries account for 53.7 % of total textile exports. Mostly cotton fiber, cotton yarn and cotton textiles were exported to Italy in 2007. In total 229.6 million dollars worth of textile products purchased by Italy. The second largest receiver of textiles was the Russian Federation. Exports to the Russian Federation totaled 182.8 million dollars in 2007, which primarily consisted of woven fabrics of synthetic and artificial filaments and yarn. Cotton products continued to be the most exported products to Germany. 110.8 million worth of cotton products were purchased by Germany from Turkey.

Table 12 Turkey's Largest Textile Markets: Italy, Russian Federation and Germany

TEXTILE EXPORT-TOP TEN COUNTRIES								
	2006 December 1000\$	2007 December 1000\$	Change %	2006 January- December 1000 \$	Total Share of Textile %	2007 January- December 1000 \$	Total Share of Textile %	Change %
ITALY	50.490	43.044	-14,7	588.829	10,6	657.952	10,04	11,7
RUSSIA	45.632	48.747	6,8	485.042	8,7	653.727	9,98	34,8
GERMANY	36.735	29.963	-18,4	356.162	6,4	390.980	6	9,8
ROMANIA	27.768	27.352	-1,5	324.190	5,8	381.283	5,8	17,6
POLAND	21.880	19.426	-11,2	231.918	4,2	296.699	4,5	27,9
ENGLAND	21.451	18.250	-14,9	230.532	4,1	254.607	3,9	10,4
BULGARIA	23.177	18.949	-18,24	247.680	4,4	244.839	3,7	-1,1
SPAIN	19.564	16.152	-17,4	200.530	3,6	225.131	3,4	12,3
UNITED STATES	18.911	15.089	-20,2	194.141	3,5	218.855	3,3	12,7
GREECE	14.497	13.093	-9,7	159.744	2,9	195.553	3	22,4
TOTAL of TEN COUNTRIES	280.105	250.065	-10,7	3.018.768	54,1	3.519.626	53,7	16,6
TOTAL TEXTILE EXPORT	526.686	515.655	-2,1	5.576.708	100	6.551.786	100	17,5

Source:ITKIB

Increases in exports to Poland, Russia and Greece led to increase in total exports. On the other hand, the increase in textile exports was less than the rate increase of general exports, the share of textile exports in total exports decreased to 6.2 % in 2007 even though it was 6.5 % in 2006. Nonetheless, the textile sector along with the confection sector is currently the biggest exporting sector in the Turkish economy.

Textile Exports Increased to Every Country Groups in 2007

In 2007 textile exports increased to every country group without exception in the range of 9.8 % - 33.5 % can be seen in the Table 13. The highest increase of textile exporting was to former USSR countries at a rate of 33.5 %. The component of the Turkish textile sector which exports most to EU countries is the confection sector. In 2007 textile exports from Turkey to this country group totaled 3.5 billion dollars an increase of 14.5 % compared with 2006.

Textile exports to other European countries such as Macedonia, Serbia and Albania recorded a relatively 28.1 % increase recorded in 2007. The share of exports to this country group rose from 2.3 % to 2.6 %. In 2007 the third highest ranking country group after EU countries and former USSR countries that Turkey exported textile products to was African countries. In 2007, Turkey began textile exports of Turkey to countries such as Egypt, Morocco and Tunisia. These Reciprocal Free Trade agreements, valued at 432.9 million dollars increased at a rate of 23.8 %.

Table 13 .Importing Turkish Textile Major Country Groups

Country Groups	2006 Jan-Dec 1000\$	Share of Textile %	2007 Jan-Dec 1000\$	Share of Textile %	Change
Total EU Countries	3.053.916	54,8	3.498.220	53,4	14,5
Total of Other OECD Countries (U.S., Canada, Switzerland, etc.)	272.767	4,9	307.335	4,7	12,7
Other European Countries Total (Macedonia, Serbia, Albania, Cyprus, Bosnia and Herzegovina)	130.976	2,3	167.804	2,6	28,1
Total of Former USSR Countries (Russian Fed., Azerbaijan, Uzbekistan, etc.)	654.634	11,7	873.774	13,3	33,5
Total of Middle East Countries (S. Arabia, Israel, Kuwait, etc.)	365.417	6,6	401.231	6,1	9,8
African Countries Total (Egypt, Tunisia, Algeria, RSA, etc.)	349.743	6,3	432.905	6,6	23,8
Other Asian Countries (China, India, Malaysia, Taiwan, etc.)	202.385	3,6	242.560	3,7	19,9
Total of Other Countries and Territories	546.870	9,8	627.957	9,6	14,8
TOTAL TEXTILE EXPORT	5.576.708	100	6.551.786	100	17,5

Source:ITKIB

According to annual data from 2007, the fourth ranking receiver of Turkish textile products was Middle Eastern countries. The proportional export increase which was 9.8 % to these countries, was less than the general increase rate of 17.5 % for textile exports in 2007 in Turkey. The share of Middle Eastern countries receiving textile exports from Turkey decreased to 6.1 % from 6.6 % in 2006.

Textile exports to OECD countries such as the USA, Canada and Japan increased to 307.3 million dollars an increase rate of 12.7 % in 2007. Although confection exports to USA decreased by 20 %, to increase textile exports is nonetheless remarkable. Exports to other Asian countries, most of them rivals of Turkey, increased to 242.6 million dollars a rate of 19.9 %.

5.4 The Financial Structure of The Turkish Textile Sector

At the beginning of 2000s, the raw material prices for the textile and ready-to-wear sector became expensive, there was intense competition in foreign markets for textile products which can be inexpensively imported. In addition, differences between the foreign exchange rates and sale terms made the financing needs of Turkish firms more significant.

Also, late in 2001 as a result of the floating exchange system, it became difficult to keep prices stable in the international markets because of the pressure foreign customers exerted as they tried to benefit from the devaluation of TL. In this period companies, who used their own resources and managed to reduce financial cost to survive. However, many companies who borrowed dollar-based foreign currency had difficulty paying it back were forced to cease operations. Devaluation in 2001 positively influenced the companies who had experience working in exports.

The costs of export companies (even those which were in a relatively advantageous position compared with domestic outfitters in 2001 and 2002) became higher due to an increase in exchange rates at 2003. The crisis and economic recession did the most damage to those companies dependent on foreign loans. This reduced the credibility of entire confection and ready-wear sectors which were sectors the most dependent on credit in Turkey, led to significant loss in bank support for this sector.

In addition, VAT problems and the slow speed of refund procedures in the sector negatively affected the liquidity and the business cycle of those companies. Companies in the sector which benefitted from exim and prefinancing loans also depend on the volume of exports carried out.

Raw materials are imported predominantly by letter-term credit. Confection companies need a letter of guarantee to buy fabric and other materials. These firms can receive a letter of guarantee at different commission ranging from 2 and 5 percent per thousand according to their credit worthiness.

Additionally, when they purchase capital goods from abroad, textile and garment companies need to apply for external guarantee instruments. In a sector that is dependent on importing from abroad capital goods, liquidity and debt issues appeared regarding exchange rates and in terms of financing credits.

5.4.1 Financing Opportunities of Textile Sector

It is estimated that there are 40,000 companies that facilitate the confection and textile industries in Turkey. Almost all of these in the confection sector are SMEs whereas most of the companies in the textile sector are a large-scale enterprises. Moreover, 25 % of the companies in the textile sector operate as active exporters which account for a large portion of Turkey's total exports. Despite the rapid growth in the sector in the 1980s, not all companies benefitted from the financial markets and technology improvements in the same way.

Insufficient capital of such companies and difficulty in obtaining credit are two reasons why companies were not able to advantage of the benefits. Also, the high-off-the-record and low turnover balance sheet structures of these companies, increased the difficulty of meeting short-term financing needs and lowered credibility of these companies. The refund period method is the most common method which companies use during long-term investment decisions. The financial resources that they used to finance investments are their own personal savings, resources provided by their partners, and sales of stocks and foreign resources.

After the 2001 crisis, companies preferred external resources methods in investment financing and wanted to use the leverage effect that these external resources. Some example of this include firms take advantage of the low exchange rate by borrowing foreign currency and finding credit at low interest rates from countries that the company exports. Despite this, it can be clearly seen that the loans given to the sector were not in appropriate terms for intended investment and the companies tried to finance their investments with short-term (6-24 month) resources. Maturity mismatch causes companies to pay off the interest of credit in 6-24 months while paying only a small part of the principal. In addition, companies which finance investments with short-term credits have trouble obtaining required letters of credit and documentation for imported products.

It is not surprising therefore the textile sector has the most problem loans with in the banking sector. As a result of these mismatched short-term loans, there were 8-10 billion dollars worth of non-performing loans in this sector. Insufficient capital not spreading out the funds provided between the medium and long repayment terms, insufficient capital of leading operations only partial capacity, lack of experience, excessive capital investment without market share failing to capture desired share of market. All led to problems for textile sector.

Additionally, the foreign expansion policies of the 1980s, made it easy to open accounts at many banks and receive credit from as many as eight to ten banks without banks being aware of this. Therefore, the real potential risk of the company was not seen by the banks or the company partners and for this reason credit worthiness was not accurately measured overtime. The situation became clear, when the capital structure of small and middle scaled enterprises of textile sector was analyzed. Many of companies think of credit as a short-term financial instrument and for this reason they reject longer-term credits, and some companies even avoid using credit as way to meet their short-term financial needs and look for different ways.

5.5 Ratio Analysis

The financial structure of textile sector companies between 1997-2006 will be analyzed using cumulative income statements and balance sheets of the textile sector from sector data published by the NB.

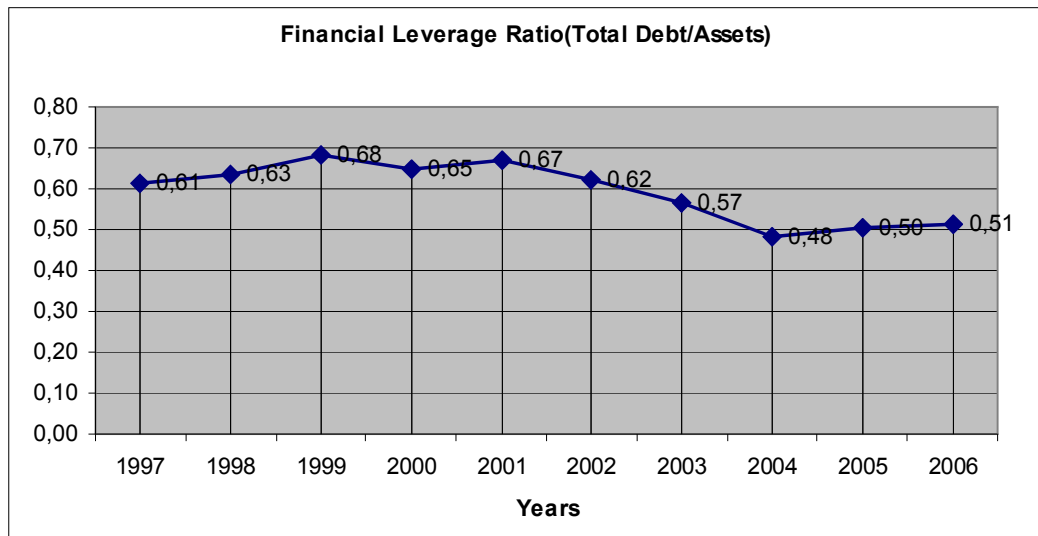
5.5.1 Financial Leverage Ratio(Total Debt/Total Assets)

The financial leverage ratio is an important indicator because it shows the percentage of a firm's assets financed by external sources. Some experts prefer to use this ratio only to make decision about a company. A lower level of financial leverage ratio is preferred to higher one. In other words, high levels of external sources in the financing of a company's assets is seen as negative.

A high level of financial leverage ratio can be very dangerous for companies in times of crisis. A higher financial leverage ratio means that the company is financed speculatively, the security margin of the company is too exposed to risk for creditors, and the fiscal situation of the company can easily deteriorate if payments of interest and principal are missed. Companies often try to raise their value by means of leverage effect. The debt level where the firm's value is the greatest is called the optimal debt level. To continue borrowing after the optimal debt level has a negative effect on the profitability of the company and this can cause the company to become bankruptcy.

An acceptable level of financial leverage is 0.50 but in countries such as Turkey where capital is insufficient, 0.60 is acceptable. Beyond this level, an increase in the debt load can cause financial hardship to companies and significantly increase the risk of the company.

Figure 9 Financial Leverage Ratio



Source: CBRT and Author's Calculation

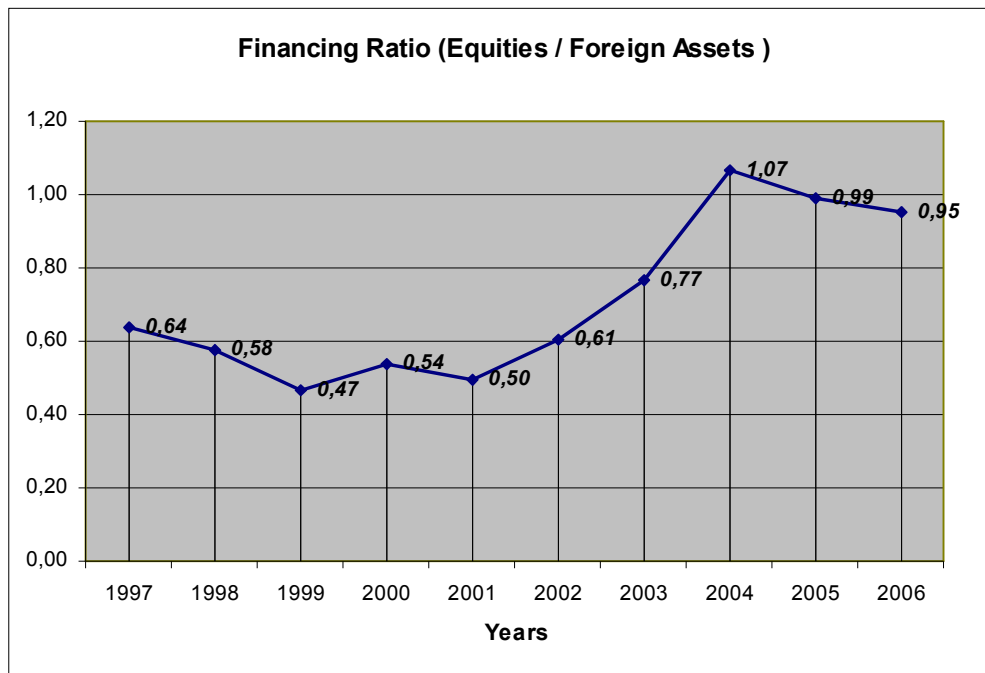
When we look at the Figure 9 illustrating the financial leverage ratio, it can be seen that the ratio didn't fall below 60% before 2003. This shows the capital deficiency of Turkey's textile companies and also means high use of external resources. In 1999, when the ratio reached its highest level of 68%, companies used the insufficient level of 32% of their own resources to finance their assets.

Another noteworthy observation in the chart is that from 2003 on, companies started to increasingly use more of their own resources. This meant that the expenses associated with servicing interest decreased. Which has been perceived positively over the last three years.

5.5.2 Financing Ratio (Equities / Short Term Liabilities+Long Term Liabilities)

The Financing ratio shows the proportion of a company's equities to its foreign liabilities. The level should be one or more. If the ratio is greater, the company will recover from debt pressure, and this causes the company to use costless funds. High levels of this ratio mean, many of the company's assets are financed by the company itself. However, finance managers must be aware of the value the ratio that maximizes the company's value. A ratio of 1 or more indicates that the equities of the company can cover the debts of the company and the creditors are secure. A ratio of 1 or less indicates that creditors have more rights on the assets of the company than the owners, in this case the creditor doesn't have much assurance. This lack of assurance will cause an increase in borrowing costs.

Figure 10 Financing Ratio



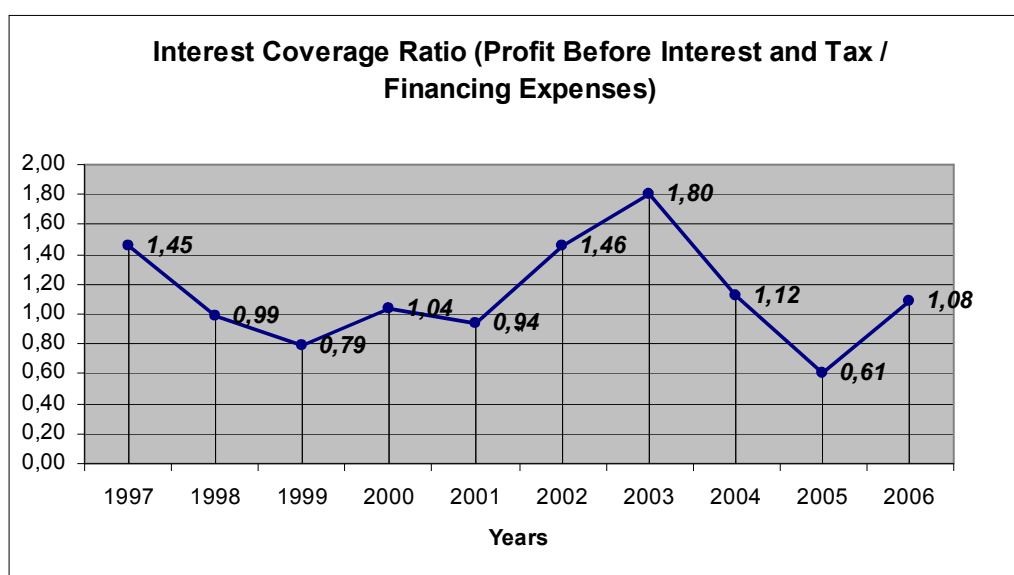
Source: CBRT and Author's Calculation

When the financing ratio between 1997 and 2006 are analyzed, it can be seen that only in 2004 the ratio an acceptable level and it was very low from 1997 to 2004 and this means companies possessed insufficient amounts of their own resources. This naturally led to increased costs explained previously. A covering process is seen in both financial leverage ratio in 2003 and the financing ratio in 2004, as both started to come closer to acceptable levels.

5.5.3 Interest Coverage Ratio (Profit Before Interest and Tax / Financing Expenses)

Interest coverage ratios show the required profit rate of firms in order to cover interest, taxes and financing expenses. When this ratio increases, the risk of a firm failing to cover its financing expenses decreases. If the ratio is less than 1, a company may have difficulty making its interest payments. When the ratio increases, it means the company can easily pay its interest expenses, there is a minimal risk of bankruptcy. Such a company has the opportunity to borrow easily.

Figure 11 Interest Coverage Ratio



Source: CBRT and Author's Calculation

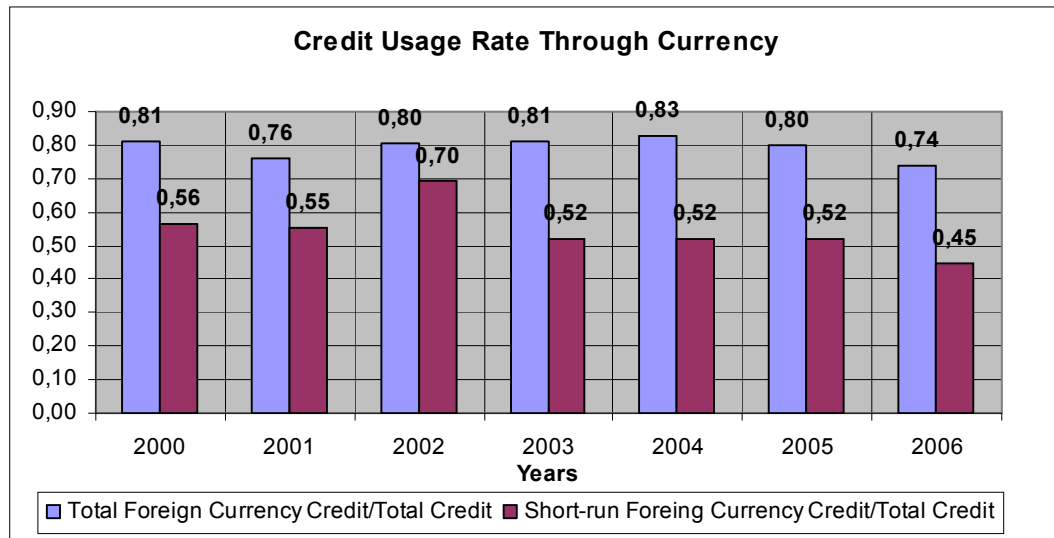
In the previous two charts, a positive change was seen between the years 2003-2004. This change is not present, however, in the chart of the interest coverage ratio. An acceptable level of this ratio for Turkey would be 3 or 4, because of capital insufficiency and macro-economic instabilities are considered. Unfortunately, the interest coverage ratio has not been at this sufficient level at any time from 1997 to 2006. In this 10 year period, the average level was less than 1 which means that companies did not have sufficient profits to cover the costs of external funds that they borrowed to continue their activities.

5.5.4 Credit Usage Rate Through Currency

Textile sector companies borrowed an average 79 % of the credit used from 2000-2006 in foreign currency. When taking into account the use of cash, non-cash and financial papers. In addition, an average of 55 % of these credits were short-run loans during this time.

As can be seen in the following chart, the usage of foreign currency did not vary in these 6 years. Although the textile sector makes up an important share of the exports of Turkey and a large part of the income is denominated in foreign currency in the textile sector, there should be low costs because of the high degree of competition from both domestic and foreign firms. Companies took on a greater economic exposure, translation exposure and transaction exposure by borrowing high levels of foreign currency over a number of years.

Figure 12 Credit Usage Rate Through Currency



Source:CBRT and Author's Calculation

Also it is difficult to convert short-run loans into longer term loans. The difficulty of companies in covering their financing expenses can be clearly seen in interest coverage ratio. Additionally, companies have not yet reached sufficient capital levels. All of these factors increase the possible negative effects of economic crisis and fluctuations on the textile sector, which is the leading exporting sector of Turkey.

5.6 Swot Analysis Turkish Textile and Confection Sector

A swot analysis consist of four parts, these are strengths, weaknesses, opportunities, threats. In this part of thesis, Turkish Textile and Confection Sector will be evaluated by using Swot analysis method.

5.6.1 Strengths

The textile and confection sectors are important in terms of employment and exports. The textile sector is the locomotive sector of Turkish economy making up 11 % of GDP, 16 % of industrial production, and 28 % of the industry labour force with 2 million employees and more than 11 % of the total labour force of Turkey.

One of Turkey's strengths is its position as sixth largest cotton producer in the world. The cotton is an important raw material in the textile sector, with 35 million sheep, behind only China, Australia, Russia, India, Iran and New Zealand, Turkey has the seventh largest sheep population in the world. This also gives Turkish textile sector an important advantage in the wool sector.

The great number of SMEs ensure, a dynamic and flexible sector. There are many advantages of the Turkish textile sector compared with the Chinese. Unlike China, Turkey has no communication problems with other countries. The Turkish textile sector can also produce small orders of goods with speed and flexibility compared with China, which can produce only bigger orders.

With the advantage of Turkey's geographical position, proximity to the EU market and the resulting short times of delivery of goods the Turkish textile sector has many advantages in exports. The export to the EU market with duty-free access is also an important advantage.

High levels of quality by national international standards in the production of Turkish textiles which leads high price /quality are an important advantage of the sector.

5.6.2 Weaknesses

Macroeconomic problems of the Turkish economy directly influence Turkish textile and confection sectors. Macroeconomic weaknesses such as inflation, exchange rates, tax policies, interest rates, instabilities and negativities in credit volume are main problems in the sector.

After 1995, the slowing of investment incentives resulting from entering into Custom Union caused a surplus of capacity in sector. The bureaucratic and complex structure of taxes on equipment investments also negatively influenced the fiscal situations of textile companies. Rigid labor law which do not allow for flexible production, the weight of bureaucracy, the lack of legal infrastructure, and the legal gaps in the protection of intellectual property rights holds the sector back. Labor and raw material costs as a share of total cost is above the world average in Turkey, at 84 %. Rising labor costs since 1980 and informal employment in the sector led to unfair competition.

The lack of R&D deficiency is an important problem of sector. Another problem is the lack of trademark laws in Turkey which has not yet been overcome. In addition, major investments are needed.

It may be better to concentrate on brand establishment rather than profitability for a period of time. Finally, not taking advantage of the future markets that were established to increase the competitive power of Turkish textile exporters in foreign markets and to minimize exchange rate risks is yet another weakness of the sector.

5.6.3 Opportunities

Currently the Turkish textile industry ranks 13th worldwide is also 6th major supplier of the garment sector. Also Turkey is the most important exporter after China in the EU market.

As Turkey is the sixth largest cotton producer in the world, the best technology is used in yarn production. The improving relations between textile and garment sectors as with complement sectors each other rather than competitors creates unity. The presence of educated institutions in the textile and garment sector creates opportunity for a better educated workforce in the future. There is also the possibility of developing supply chain management models that would ensure the highest competitive advantage in products and services such as fashion, brand and retail.

By using geographical and logistical advantages, experience and know how; Turkish textile sector positioned to be leader of Pan-European nations, Mediterranean countries, the Turkish Republics and Middle Eastern countries.

Increasing trade with neighboring countries could lead to higher levels of supply chain event management (industry consolidation, fast delivery, cargo trade) ability to adjust changes and trends in the global retail industry, and economic/political stability in the short run.

5.6.4 Threats

Although there may be dynamic and flexible SMEs, the majority of SMEs have a capital deficiency also creates a disadvantage. Exporting only to the EU markets have risks if there is ever a political conflict possibility with these countries. One important threat for Turkey is the Asian markets which have decreased costs after the crisis and could use this price advantage to compete effectively against for Turkey. The 2005 lifting of quotas by the WTO also removed an advantage of Turkey, which already has unlimited Access to EU markets because of the custom union.

Competition with China, Hong Kong and India will increase. The improving economy and production quality of China is a significant threat for Turkey. Not being able to sign a Free Trade Agreement with the USA, Iran, Russia according to Custom Union terms also represents a negative situation. The lifting of quotas in the sector in 2005 all around the world negatively effected especially small-scale companies that produce low quality products.

In 2001, as a result of the crises caused by the release of foreign exchange, and the appreciation of the Turkish Lira against the dollar a negative effect in real terms was experienced by exports. Present environmental standards set by European countries have created new challenges for the sector. As a result of investment in the confection sector, increase in supply and decrease in unit prices along with increased competition around the world is also a significant risk.

CHAPTER 6

FOREIGN EXCHANGE EXPOSURES FOR COMPANIES

The general concept of exposure refers to the degree to which a company is affected by exchange rate changes (Shapiro, 1994; 187). This means that a firm has assets, liabilities, and profits or expected future cash flow streams and the home currency values of these assets, liabilities, and profits or expected future cash flow streams changes as exchange rates change. Risk arises because currency movements may change home currency values. When the volatility seen in foreign exchange rates causes foreign exchange exposure. This volatility creates three types of exposures for the firms.

6.1 Transaction Exposure

Transaction exposure, or contractual exposure, is the degree to which cash and known transactions denominated in a foreign currency and already entered into for settlement in a future date are affected by exchange rate changes (Click and Coval, 2002; 223). It is concerned with how changes in exchange rates affect the value, in home currency terms, of anticipated cash flows denominated in foreign currency relating to transactions already entered into. Transaction exposure is a cash flow exposure. It may be associated with trading flows, dividend flows or capital flows (dividends or loan repayments) (Buckley, 2000; 137).

Transaction exposure arises from;

- Purchasing or selling on credit goods or services when prices are stated in foreign currencies.
- Borrowing or lending funds when repayment is to be made in a foreign currency
- Being a party to an unperformed foreign exchange forward contract.
- Acquiring assets or incurring liabilities denominated in foreign currencies (Eitemann et al., 2004; 201).

Transaction exposure is composed of three parts: quotation, backlog and billing exposures. As the seller quotes a price in foreign currency terms, a transaction exposure called as "quotation exposure" is created. The potential exposure created at the time of quotation (t1) is converted to actual exposure called as "backlog exposure" by the placement of an order. Backlog exposure lasts until the goods are shipped or billed (t3), at which time it becomes "billing exposure". Billing exposure remains until actual payment is received by the seller (t4).

The most prevalent transaction exposure is seen as a result of purchasing or selling goods with credit in foreign currency. For example, a Turkish exporter sells textile to a French firm (importer). The value of goods is TRY 160,000. The Turkish firm will receive the payment after 90 days as EURO 100,000. The spot rate is €1= TRY 1.60. After 90 days, the Turkish firm will receive EURO 100,000.

If there is a change in foreign exchange rates until the payment date, transaction exposure will arise. For instance, if foreign exchange rate decreases and becomes €1=TRY 1.55, the amount of TRY that the exporter can get will decrease to TRY 155,000 ($1.55 \times 100,000 = 155,000$).

If the foreign exchange rate increases to 1€=1.65TRY, the exporter will receive more in TRY terms ($1.65 \times 100,000 = 165,000$). The exporter may want to invoice sales in TRY to remove transaction exposure. If the French importer accepts this, the transaction exposure will not be removed. It will only be transferred to the French importer.

In the case of borrowing and lending debt in foreign currency, transaction exposure arises, too. If a Turkish firm receives debt from the bank in EURO and will pay the debt after 1 year, the payment will increase or decrease as TRY according to the foreign exchange rate. If TRY depreciates, the amount of debt payment in TRY will increase and if TRY appreciates, the amount of debt payment in TRY will decrease. As a result of high volatility in exchange rates, transaction exposure has gained importance for firms. By failing to cover transaction exposure, a firm may incur a loss on a very large receivable or payable denominated in a foreign currency. This may result in an overall loss for the firm. In order to measure the effect of exposure on enterprises, two steps are followed (Madura, 1992; 266):

- The amount of net cash inflow and net cash outflow for each currency should be determined
- The overall impact of these currencies on the enterprises should be determined

Projections of the consolidated net amount of currency inflows or outflows for all subsidiaries are required for the measurement of transaction exposure. After analyzing the amount of net cash inflow and net cash outflow for each currency, the effect of each currency should be determined. This is accomplished by assessing the standard deviations and correlations of the currencies. Even if a particular currency is evaluated as risky, its effect on the firm's overall variability will not be very important if the firm has taken a minor position in that currency. In order to determine the potential degree of movement for each particular currency, historical data can be evaluated.

The standard deviation statistic serves as one possible way to measure the degree of movement for each particular currency. A currency with lower standard deviation shows less variability and therefore an open account is not important as an open position in other currencies (Madura, 1992; 269). A firm cannot predict a currency's future variability with perfect accuracy, but it can identify currencies whose values are most likely to be stable or highly variable in the future.

Two highly correlated currencies act as if they are the same currency. In this case, transaction exposure to inflows of one currency and outflows of the other currency are then offset. Even if the currencies move in the same direction to a degree, a partial offsetting effect will take place when one currency represents an inflow while the other an outflow (Madura, 1992; 270).

When the firm has more than one inflow currencies, it can still benefit from assessing correlations. These inflows can be evaluated as a portfolio. In this case, the lower the correlations, the lower will be the variability of the portfolio of inflows. Firms would normally prefer to have a cash inflow portfolio that exhibits low variability, since there is less chance that the value of such a portfolio will substantially deviate from what was expected. The same rule is valid for a portfolio of consolidated net outflows. While analyzing currency correlations, the firm needs to assess whether there are consolidated net inflows or outflows in these currencies. High positive correlation between two currencies could decrease exposure when one of the currencies is an inflow and the other is an outflow. On the other hand, if both currencies represent future cash inflow or outflow, then the exposure is high (Madura, 1992; 273).

Transaction exposure can be assumed as an improvement over translation exposure. The first reason is that translation exposure deals with cash flows that are not actual. This means that fixed assets such as land, plant and equipment and physical inventory are excluded from the exposure measurement.

The second reason is that all contractual agreements that do not show up on the balance sheet (off-balance sheet items) are included in the measurement. On the other hand, this report has also some deficiencies: The first one is that it ignores all the firm's ongoing operations assuming that non-contractual cash flows are not exposed. The second deficiency of transaction exposure report is that it ignores the economic valuation of fixed assets and inventory (Click and Coval, 2002; 225).

The transaction exposure report is a managerial report. Treasurers use the report to get an indication of what elements of exposure will lead to realized foreign exchange gains and losses in the near future. The gains and losses associated with the transactions are not posted to the firm's financial reports.

6.2 Translation(Accounting) Exposure

Translation exposure, also called accounting exposure, arises because financial statements of foreign subsidiaries which are stated in foreign currency must be restated in the parent's reporting currency for the firm to prepare consolidated financial statements (Eitemann et al., 2004; 269). During this consolidation, due to the changes in foreign exchange rates, some changes in home currency term may be seen in financial statements of the companies. Both balance sheet and income statements must be consolidated and they both give rise to translation exposure. It can be said that translation exposure is the potential for an increase or decrease in the net worth and net income of the parent company caused by a change in exchange rates (Buckley, 2000; 137).

A firm's cash flows are not affected by translation of financial statements for consolidation purposes. For this reason some analysts suggest that it is not relevant. On the other hand other analysts argue that consolidated financial statements are the indicators of firm performance and therefore translation exposure is relevant (Madura, 1992; 285). According to Choi, in the floating exchange rate system or in regimes in which rates are not permanently fixed, the firms accounting exposure is obvious. The reason is that changes in exchange rates affect the accounting value of the firm's exposed assets and liabilities after translation (Choi, 1989; 154).

Different translation methods exist for countries. Two dimensions are important in the determination of translation methods. The first one is the foreign subsidiary's independence on the parent firm and the second one is the definition of which currency is most important for the subsidiary's operations.

Subsidiary's characterization: The translation method used by the subsidiary is determined according to foreign subsidiary's business operations. For example a foreign subsidiary's business can be categorized as either an "integrated foreign entity" or a "self-sustaining foreign entity". An integrated foreign entity is one that operates as an extension of the parent company with highly interrelated business operations and cash flows with those of the parents. A self sustaining foreign entity is one that operates in the local economic environment independent of the parent company (Eitemann et al., 2004; 270).

The greater the percentage of a firm's business conducted by its foreign subsidiaries, the larger will be the percentage of a given financial statement item that is susceptible to translation exposure. For the logic of translation, this differentiation is important. The currency that is the basis of economic operations should be used for valuation.

Functional Currency: A foreign subsidiary's functional currency is the currency of the primary economic environment in which the subsidiary operates and in which it generates cash flows. In the case of a hyper-inflationary country- defined as one that has cumulative inflation of approximately 100 percent or over for a three year period - the functional currency must be a hard currency (Shapiro, 1994; 192).

6.2.1 Translation Methods

There is an important issue while consolidating the financial statements. This issue is related with the date used in consolidating financial statements. It is important to decide whether to use the B\S (Balance Sheet) date or the date at which assets or liabilities are recorded. This choice depends on the translation method employed. Four methods for the translation of foreign subsidiary financial statements are employed: The current\non current method, monetary\non-monetary method, temporal method and current rate method.

Regardless of which translation method is used, a translation method not only indicates at what exchange rate individual balance sheet and income statements are remeasured but also indicates where any imbalance is to be recorded. The importance of this decision is that imbalances passed through the income statement affect the firm's reported current income whereas imbalances transferred directly to the balance sheet do not. (Eitemann et al, 2004; 271).

6.2.1.1 Current\Non-current Method

This approach uses the traditional accounting distinction between current and long-term items and translates the former at the closing rate, the rate of the balance sheet date and the latter at the historical rate. According to the current-non-current method, the sum exposed is net current assets (Click and Coval, 2002; 138). A foreign subsidiary with positive local currency working capital will give rise to a translation loss (gain) from devaluation (revaluation) with this method and vice versa if working capital is negative.

The average foreign exchange rate of the period is used for translating the income statement. There is an exception for this rule: those revenues and expense items associated with non-current assets or liabilities, such as depreciation expense, are translated at the same rate as the corresponding balance sheet items

(Shapiro, 1994; 188).

According to this method, inventory is exposed to foreign exchange risk whereas long-term debt is not. This assumption is not valid since long-term debt is also exposed to foreign exchange risk. This lack of logic supports the move away from this method.

6.2.1.2 Current Rate Method

All balance sheet items are translated at the current rate. Accounting exposure is given by net assets. "It is the most popular method all around the world (Buckley, 2000; 138). Under this method, if a firm's foreign currency denominated assets exceed its foreign currency denominated liabilities, a devaluation results in a loss and a revaluation in a gain.

All income statement items, including depreciation and COGS are translated at either the actual exchange rate on the dates the various revenues, expenses, gains and losses were incurred or at an appropriately weighted average exchange rate for the period. Dividends paid are translated at the exchange rate of the payment date. Common stock and paid-in capital accounts are translated at historical rates (Eitemann et al., 2004; 271).

Gains and losses caused by translation adjustments are not included in the calculation of consolidated net income. Rather, these translation gains and losses are reported separately and accumulated in a separate equity reserve account on the consolidated balance sheet.

This account is titled as "Cumulative Translation Adjustment (CTA)" (Eitemann et al., 2004; 271). It is a necessary entity that will force the statement into balance. At any point in time, the CTA account represents the cumulative exchange rate changes since the foreign subsidiary was established.

The gain or loss on translation is not shown in the income statement but is directly shown in a reserve account. That is the greatest advantage of current rate method. By this way, variability of the reported earnings due to foreign exchange gains and losses is decreased. The other advantage of this method is that the relative proportions of individual balance sheet items remain the same. Thus, balance sheet ratios such as current ratio or the debt-to equity ratio are not distorted. On the other hand, this method has a disadvantage of violating the accounting principle of carrying balance sheet accounts at historical cost.

6.3 Economic Exposure

Economic exposure is the extent to which the market value of a firm or a subsidiary changes when exchange rates change. Economic exposure is an improvement over the other two concepts of translation and transaction exposures (Click and Coval, 2002; 234).

The concepts of translation and transaction exposure are useful for accountants faced with consolidating financial statements or finance managers who must make short-term decisions about how to deal with known contractual obligations denominated in foreign currencies. Both of them have some deficiencies when a long-term analysis is required.

Translation exposure ignores all off-balance sheet commitments and includes exposure for fixed assets that are not associated with cash flows. Transaction exposure ignores the ongoing operations of the firm. Economic exposure is an improvement over transaction and translation exposures

(Click and Coval, 2002; 234).

Economic exposure and transaction exposure is separated from each other by the timing of cash flows. Transaction exposure is a subset of economic exposure because gains and losses due to foreign exchange changes from transactions already entered into may affect future cash flows of the company. The effects of foreign exchange rates on firm value and competitive power are more important for economic exposure analysis. In transaction exposure, short-term transactions that are known and already entered are evaluated whereas in economic exposure unknown and long-term transactions are evaluated.

Economic exposure may be visualized as the overall impact of foreign exchange rate fluctuations on stockholder wealth. Since the aim of the enterprise in the long-run is maximizing stockholders' wealth, managing economic exposure is vital for firms. As a result of appreciation of a local currency, the firm's local sales may decrease. This is seen due to the increased foreign competition because local customers can purchase foreign products cheaply. The local sales will decrease according to the foreign competition in that market. Cash inflows from export sales may also decrease as a result of appreciation of the local currency.

The reason is that foreign importers will need more of their own currency to pay for these products. Exports denominated in the foreign currency would also decrease due to an appreciation. In this case demand for the product by foreign importers would not change but when the firm received the foreign currency inflows; it would convert them to local currency. If the local currency had appreciated, these inflows would be converted to a reduced amount. Lastly, interest received from foreign investments will be less when the local currency appreciates. (Eitemann et al., 2004; 243).

When cash outflows are analyzed, it is seen that firm's imported supplies in local currency terms will not change however the cost of imported supplies will decrease due to appreciation of the local currency. In addition, interest paid on foreign currencies will be reduced in local currency. Appreciation in the local currency causes a reduction both inflows and outflows. The net effect will be dependent on whether the inflow variables are more or less than the outflow variables. (Eitemann et al., 2004; 243).

If there is devaluation in the local currency, variables will be affected oppositely. Local sales should increase as a result of reduced foreign competition. The exports denominated in local currency will appear cheaper to the foreign customers and demand will increase to the products. In addition, the export denominated in the foreign currency increases cash flows since the conversion of it will be resulted with more local currency. Interest received will be converted to more local currency, too. In the cash outflow side, there will not be a change in imports denominated in local currency.

On the other hand, the cost of import denominated in foreign currency will increase since the local firm needs to pay more in local currency terms for imported goods. Generally, depreciation of a local currency causes an increase in both cash inflows and outflow.

Economic exposure depends on whether an unexpected change in exchange rates causes unanticipated changes in sales volume, sales price or operating costs. The strategy undertaken depends on some factors that influence the strategic decisions of the firm. These factors are: type of firm, nature of products, monopoly power, firm size, pricing flexibility and ability to change location.

CHAPTER 7

VALUE AT RISK ANALYSIS

7.1 Concept of The VaR Method

Value at Risk, or VaR is a special measure to quantify risk for financial institutions. It attempts to measure the market risk of a financial firm's "book", which means the list of positions in various instruments that expose the firm to financial risk. Generally speaking, VaR measures the worst expected loss over a given horizon under typical market conditions at a given confidence level.

VaR calculation models basically say the following: "We are c percent certain that we will not lose more than V dollars in the next N days". Here the variable V is the VaR of the portfolio. It depends on two parameters: a time period (horizon) N and a confidence level c . Therefore when we calculate VaR for a portfolio of a financial institution, we calculate the expected loss in the portfolio's market value over a given horizon such as one day or two weeks (N) that is exceeded only with a small probability, say, 1 percent ($1-c$).

Additionally, the quality of the model directly depends on the model assumptions. Assumptions about distribution indicate what the VaR model assumes about the distribution of trading revenues, profits and losses. Other measures to quantify risk are quantile measures which includes Standard deviation, interquartile range, and lower partial moments or shortfall measures of the financial firm's portfolio.

The VaR model also says what the model assumes about the distribution of the underlying market risk sources which the portfolio's market value depends on. The valuation model states how VaR relates the portfolio's value to different shocks in the market risk sources, or the association between the return of the portfolio and returns of the instruments included in the portfolio.

One important type of VaR methodology is so-called normal approach to VaR. This approach assumes that all risk factors in the market are normally distributed and that the portfolio is a linear function of those normally distributed risks, which means the P&L distribution for the portfolio is also normally distributed. Under these assumptions, VaR calculations become easy to solve, if normal distribution is assumed. In this method, the prospective approach of risk factors can be measured by volatility and correlations of exchanges obtained from past data (price and ratios). Volatility and correlations are used to measure expected changes in the value of one portfolio. Under these assumptions, VALUE AT RISK of a portfolio is measured from volatility (standard deviation) and correlation of financial assets (risk factors).

PV : Portfolio value

Z_{α} : Critical value that corresponds to normal distribution table at $1-\alpha$ confidence interval

σ : Return volatility (standard deviation)

T : Retention time

by this method with these data VaR can be measured in the following way,

$$VaR = PV \times Z_{\alpha} \times \sigma \times t$$

This formula shows the VaR value under the condition of investing in only one financial asset. In case of portfolios which include two financial assets or are exposed to two different risk factors, correlation between the return of the financial assets and risk factors must be considered. Standard deviation of two financial asseted portfolio can be measured by using correlation.

σ_p : Standard deviation or risk of the Portfolio

w_1 : weight of first financial asset in the portfolio

w_2 : weight of second financial asset in the portfolio

σ_1 : standard deviation of the first financial asset

σ_2 : standard deviation of the second financial asset

$\rho_{1,2}$: correlation coefficient among two financial assets

Risk of portfolio standard deviation of portfolio (volatility) is measured by the following formulas;

$$\sigma_p = w_1\sigma_1 + w_2\sigma_2 + 2w_1w_2\rho_{1,2}\sigma_1\sigma_2$$

In the case that a portfolio includes two financial assets or is exposed to two different risk factors, applied VaR Formula contains standard deviation of the portfolio.

$$VaR = PV \times Z_\alpha \times \sigma_p \times t$$

7.2 The Application

Using source given in the footnote of the 3rd Quarter financial sheets of Goldaş A.Ş. and Akın Tekstil A.Ş., The VAR of these companies will be measured. The foreign currency risk, due to potential fluctuation of dollar and euro exchange rates under two different scenarios will be calculated.

Table: 14 Akın Tekstil A.Ş. Currency Composition 30.09.2008

Currency	Euro	Dollar	Sterling	Franc.	Total
Akın Tekstil A.Ş	-16.869.597	-4.897.552	653.566	-3.388.206	-24.501.789

Source: <http://kap.gov.tr/Yay/Download/Bildirim/Ek/21989.pdf>

Table: 15 Goldaş A.Ş. Currency Composition 30.09.2008

Currency	Euro	Dollar	Sterling	Franc	Other Curr.	Total
Goldaş A.Ş	-154.688	-428.943.519	-12.476	68.730	50	-429.041.953

Source: http://www.goldas.com/documents/mali_tablolar/goldas/tr/2008/dipnotlar_2008_ceyrek3.pdf

Two different VaRs will be measured under the assumptions that from the last quarter of 2008 throughout 2009, the economy will either be in static positions or experiencing fluctuations as in the 2001 economic crisis.

The third quarter foreign currency positions of companies is shown in Table 14 and Table 15. As seen in the table, the companies not only held dollar, they also held euros in their portfolios. This is the method that the companies use to diversify their currency usage to hedge exchange rate risk. It is seen that the income and expenditures of the companies are not only in dollars, the companies used also euros, sterling, francs and other foreign currencies in their effort to be less affected by fluctuations in the exchange rate.

Using the daily conversion rates of the U.S. dollar and euro published by the Turkish Central Bank from 2001 to the 9th month of 2008, the standard deviation of the return of

Dollars and Euro and the correlations of these return are measured and can be seen in Table 16. Excessive fluctuations occurred in foreign currency exchange rates because of the 2001 economic crisis in Turkey. For this reason the standard deviation of euro and dollar returns was calculated to be 0,033 in 2001 and then the standard deviation of Euro and Dollar return was approximately 0,01 for the other years, as can be seen at Table 16. Both rates could be indicators for the end of 2008 and 2009, because the global financial crisis can create fragility and cause foreign currency fluctuations. 0,01 is the standard deviation of periods during which foreign currency does not fluctuate. This ratio will be used in the model to represent a stable economy.

Table 16 .Corr.Coefficient,Standart Dev. of Dollar and Euro Return

Years	Std Dev.Dollar Return	Cor.Coefficient Euro And Dollar Return	Std.Dev.Euro Return
2001	0,033	0,977	0,033
2002	0,009	0,862	0,011
2003	0,007	0,738	0,010
2004	0,008	0,635	0,007
2005	0,007	0,694	0,007
2006	0,010	0,892	0,010
2007	0,009	0,923	0,008
2008(Jan-Sept)	0,012	0,834	0,010

Source:CBRT

The time period generally accepted in VaR is one day. According to the third quarter 2008 currency composition of the companies, this analysis will show the worst expected loss of value in a currency position of the companis in a day. The confidence level is selected by decision makers. A 99 % confidence level measured VaR is greater than a 95 % confidence level measured VaR. In this analysis 1,96 is used which is the 95 % confidence level.

When VaR for the Euro and Dollar positions of Akin Tekstil A.Ş. and Goldaş A.Ş is measured, the portfolio Standard deviation is measured by using standard deviation, portfolio weights, and the correlation coefficient of the returns of the two foreign currencies

$$\sigma_p = w_1\sigma_1 + w_2\sigma_2 + 2w_1w_2\rho_{1,2}\sigma_1\sigma_2$$

The portfolio standard deviation is 0,033, which was measured by using the standard deviation of euro and dollar returns of 2001 when these currencies were floated. VaR was measured as: -1.407.899 TL for one day at 95 % confidence level. The highest level of euro-dollar portfolio of company that company could reach in a day because of Exchange risk was calculated as -23.175.048 TL. This result was calculated by adding the measured VaR value to the Dollar-Euro position of the company - 21.767.149,00 TL.

The value of the other possibility is measured by holding all values fixed and using another standard deviation of the portfolio. By using a 0,01 standard deviation of the portfolio at 95 % confidence interval, the VaR of the foreign currency obligations seems the same -21.767.149 TL and for a day because of the exchange risk measured as - 426.636 and the worst expected value of the euro-dollar portfolio was calculated as - 22.193.785TL.

Table 17 Value at Risk Measurement of Akın Tekstil A.Ş.

Scenerio 1 for the Stable Economy		Scenerio 2 for the Volatile Economy	
Total Euro and Dollar Position	-21.767.149	Total Euro and Dollar Position	-21.767.149
Dollar Weight	0,22	Dollar Weight	0,22
Euro Weight	0,78	Euro Weight	0,78
Confidence Interval 95 %	1,96	Confidence Interval 95 %	1,96
Time (Day)	1	Time (Day)	1
Standard Deviation of Dollar and Euro Portfoy	0,01	Standard Deviation of Dollar and Euro Portfoy	0,033
Cor.Coefficient Euro And Dollar Return	0,977	Cor.Coefficient Euro And Dollar Return	0,977
Value At Risk	-426.636	Value At Risk	-1.407.899
Dollar and Euro debt of the company may reach at the top level within one day.	-22.193.785	Dollar and Euro debt of the company may reach at the top level within one day.	-23.175.048

Source: Author's Calculation

The foreign currency debt of Goldaş A.Ş is greater than that of Akın Tekstil A.Ş. , and it is mostly in dollars. VaR at Goldaş A.Ş. will be higher than that of Akın Tekstil.

By the same assumption at the related currency being floated, the portfolio standard deviation is 0,033 and the standard deviation that was measured by using other years currency return is 0,01.

Table 18 . Value at Risk Measurement of Goldaş A.Ş.

Scenerio 1 for the Stable Economy		Scenerio 2 for the Volatile Economy	
Total Euro and Dollar Position	-429.098.207	Total Euro and Dollar Position	-429.098.207
Dollar Weight	0,99964	Dollar Weight	0,99964
Euro Weight	0,00036	Euro Weight	0,00036
Confidence Interval 95 %	1,96	Confidence Interval 95 %	1,96
Time (Day)	1	Time (Day)	1
Standard Deviation of Dollar and Euro Portfoy	0,01	Standard Deviation of Dollar and Euro Portfoy	0,033
Cor.Coefficient Euro And Dollar Return	0,977	Cor.Coefficient Euro And Dollar Return	0,977
Value At Risk	-8.410.325	Value At Risk	-27.754.072
Dollar and Euro debt of the company may reach at the top level within one day.	-437.508.532	Dollar and Euro debt of the company may reach at the top level within one day.	-456.852.279

Source:Author's Calculation

By using a 0,033 standard deviation of the portfolio at 95 % confidence interval for one day, because of foreign currency Exchange risk the VaR of Goldaş A.S. is -27.754.072 TL and the highest level of the Euro-Dollar portfolio is -456.852.279 TL. If VaR that is measured by using standard deviation 0,01, VAR is -8.410.325 TL because of Exchange rate risk and the highest level of the Euro-Dollar portfolio could reach is measured as -437.508.532 TL.

CHAPTER 8

CONCLUSION

The economic recession in the international markets that started in autumn of 2007 is still effecting all economies. Although liquidity injections and interest rate discounts by Federal National Banks of countries decreased tension in the markets, it is clearly seen that the markets cannot be completely relieved unless the financial markets of the USA become stable again. Deterioration in credit conditions, decreasing housing prices, increases in energy and food expenses, and other negative developments have caused weak progress of economic growth in both developed countries and emerging economies alike in the last quarter of 2008. The developments in the international markets directly affect the Turkish economy. It is thought that the impact of the crisis on the sector will be reflected in a slowdown in credit liquidity, which will decrease cash circulation in the markets because of high interest rates, and decays in external and domestic market debt conditions.

When looking at the economic indicators of the Turkish economy, it can be seen that although economic growth performance was high after 2001, from 2002 to 2006 for years unemployment did not decrease by the same rates. In that period, the unemployment rates were respectively; 10.3 % , 10.5 % , 10.3 % , 10.3 % and 10.1 % . Accordingly, the high growth rate did not provide more employment. Some economists describe this kind of growth as “unqualified growth”.

Turkey overcame 2001 crisis by use of external debt and speculative growth. In this process, the economy was built on a sensitive balance between the high-interest rate and low foreign exchange rate. The policy created some problems, especially a high unemployment rate and an import dependent industrialization. Another major problem was that the Turkish Economy had a high level of current account deficit. In 2008, the ratio of account deficits to GNP was approximately 6 %. Economists indicate that if this ratio is over 5 %, it is a sign of danger. This ratio has exceeded 5 % in Turkey in the relevant years as can be seen in the statistical data.

It can be seen from this analysis that the Turkish Private Sector continuously made use of external debt from 2001 to the end of 2007. As shown in the related charts, the share of the NB and the public sector in external debt steadily decreased, but in contrast the private sector share increased. The most used currency is the US dollar and followed by the euro. When debt by dollar and euro are proportioned to the total external debt in 2007, total of approximately 90 % can be seen. Almost all of the external debt was in US dollars and euros.

There are three major reasons for the increased borrowing of the private sector of US dollars and euros. The first reason was the stable trend of the TL/dollar and TL/euro exchange rates from 2001 to 2007. The forecast indicated there would be no significant increase in exchange rate as there had been longterm fluctuations in the analyzed years. Although Turkey started to apply free floating exchange policy after the 2001 crisis, the National Bank intervened in the markets in periods of extreme exchange rate fluctuations. This past experience allowed firms to predict that, if there would be extreme fluctuations in exchange rates, the NB would intervene.

The second reason was the competitiveness of external interest rates over domestic interest rates. The interest rate of the euro and the US dollar was lower and more attractive than the interest rate of Turkish Liras. Companies could borrow from abroad at a lower rate.

Finally, companies generally borrowed in euros or dollars because their revenues from exports were generally in Euros or Dollars. As seen in the table, the fifteen countries to which Turkey exported most, were mainly EU countries. In other words, most of the revenues of companies were in euros, and the dollar is the most common currency in the world. The Turkish private sector companies that borrow in foreign currency benefited from the deepness of the external credit markets, the lower external interest rates compared with domestic interest rates, and the historical stable trend of dollar and euro Exchange rates.

Companies in the Turkish Private Sector have chosen increasingly to borrow foreign currency in recent years. Although they used the appropriate process, Turkish private sector companies incur exchange rate risk because of this external debt. Economic crises and political instabilities occur in developing countries very often. Having a high level of currency composition creates more vulnerability for companies which have no revenue in foreign currency. This risk will be lower at companies that export and whose earnings are in foreign currency, because companies whose earnings are in foreign currency can pay back their loan denominated foreign currency independent of the current exchange rate changes.

As an example, after the banking crisis in 2001, the dollar exchange rate doubled in one day, and this affected many companies negatively. Companies will be affected negatively by a positive trend in the euro and dollar. As the refund of received credits is dependent on internal demand, and export performance of the sector, it is also dependent on stability continuity of the macro economy and trust in the business environment of country.

When the Turkish Textile Sector's financial ratios between years 2000-2006 are analyzed, it is clearly seen that capital and equity of textile companies is insufficient; the companies were unable to cover financial expenses by net profits. The Turkish textile sector borrowed in foreign currency and more than half of these loans short term. These analysis charts, and tables show that the Turkish Textile sector like the Turkish Private Sector choose to pay less interest as using credit by foreign currency.

The major advantages of the Textile sector are ; as Turkey's set status as the world 6th cotton producer and the world 7th producer of sheep. Additionally, the sector has export advantages because of the geopolitical location of Turkey. Besides, small and medium size enterprises provide dynamic structure in the sector by small party productions. However, an important problem of textile sector is insufficient budget for branding and insufficient marketing strategies. Companies do not pay sufficient attention to modern financing techniques. Also, textiles are labour-intensive and labor costs are higher in Turkey than in Egypt and Bulgaria.

Goldaş A.Ş. and Akın Teksti A.Ş. are the companies considered specifically and how they were influenced by Exchange rate risk was measured in the “VALUE AT RISK” test. The result of this analysis were based on the currency position of the companies under fluctuations of exchange rate seen by companies in the past period. These companies dependence on the exchange rate in valuing their foreign currency portfolio exposes them to risk.

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APPENDIX B Balance of Sheets of The Turkish Textile Sector 1997-2006	1997		1998		1999		2000		2001		2002		2003		2004		2005		2006	
	BILLION TL	(%)	BILLION TL	(%)	BILLION TL	(%)	BILLION TL	(%)	BILLION TL	(%)	BILLION TL	(%)	BILLION TL	(%)	THOUSAND YTL	(%)	THOUSAND YTL	(%)	THOUSAND YTL	(%)
CURRENT ASSETS	1.418.923,5	100,0	2.535.449,9	100,0	3.726.484,7	100,0	5.536.689,9	100,0	9.451.040,0	100,0	13.170.337,3	100,0	16.577.804,2	100,0	21.749.321,9	100,0	22.718.188,8	100,0	25.207.424,3	100,0
CURRENT ASSETS	746.822,3	52,6	1.291.472,7	50,9	1.952.317,1	52,4	3.008.905,9	54,3	4.970.977,1	52,6	6.644.139,9	50,4	8.222.011,0	49,6	10.636.649,9	48,9	11.331.231,7	49,9	13.090.362,4	51,9
FIXED ASSETS	672.101,2	47,4	1.243.977,2	49,1	1.774.167,5	47,6	2.527.784,0	45,7	4.480.062,9	47,4	6.526.197,4	49,6	8.355.793,2	50,4	11.112.671,9	51,1	11.386.957,0	50,1	12.117.061,8	48,1
LIABILITIES	1.418.923,5	100,0	2.535.449,9	100,0	3.726.484,7	100,0	5.536.689,9	100,0	9.451.040,0	100,0	13.170.337,3	100,0	16.577.804,2	100,0	21.749.321,9	100,0	22.718.188,8	100,0	25.207.424,3	100,0
SHORT TERM EXTERNAL RESOURCES	624.923,2	44,0	1.139.870,7	45,0	1.824.021,0	48,9	2.603.947,5	47,0	4.265.166,6	45,1	5.078.670,1	38,6	6.223.051,6	37,5	7.190.879,4	33,1	7.800.938,6	34,3	8.708.666,5	34,5
LONG TERM EXTERNAL RESOURCES	242.528,7	17,1	466.568,1	18,4	716.813,7	19,2	991.447,2	17,9	2.053.073,9	21,7	3.119.848,5	23,7	3.167.994,8	19,1	3.338.257,3	15,3	3.607.888,9	15,9	4.204.167,0	16,7
EQUITY	551.471,6	38,9	929.011,1	36,6	1.185.649,9	31,8	1.941.295,2	35,1	3.132.799,5	33,1	4.971.818,8	37,8	7.186.757,8	43,4	11.220.185,2	51,6	11.309.361,3	49,8	12.294.590,8	48,8

**APPENDIX C
The Credit
Compositon
of The
Turkish
Textile Sector
2000-2006**

	2000 BILLION TL			2001 BILLION TL			2002 BILLION TL			2003 BILLION TL			2004 THOUSAND YTL			2005 THOUSAND YTL			2006 THOUSAND YTL		
	Short Term	Long Term	Total	Short Term	Long Term	Total	Short Term	Long Term	Total	Short Term	Long Term	Total	Short Term	Long Term	Total	Short Term	Long Term	Total	Short Term	Long Term	Total
Cash Credit	1.016.885,9	441.729,3	1.458.615,2	1.630.609,1	511.916,2	2.142.525,3	2.586.244,8	400.461,8	2.986.706,6	2.086.796,5	1.030.590,3	3.117.386,8	2.228.320,9	1.187.031,0	3.415.351,9	2.567.726,8	1.308.269,4	3.875.996,2	2.703.991,3	1.777.234,6	4.481.225,9
-TL	174.126,2	78.569,3	252.695,5	335.822,7	21.320,2	357.143,0	365.730,1	32.321,6	398.051,7	438.718,7	42.781,5	481.500,2	511.415,3	72.160,8	583.576,1	591.282,7	101.072,1	692.354,8	778.169,8	254.986,7	1.033.156,5
Currency	842.759,7	363.160,0	1.205.919,7	1.294.786,3	490.596,0	1.785.382,3	2.220.514,8	368.140,2	2.588.655,0	1.648.077,8	987.808,9	2.635.886,6	1.716.905,6	1.114.870,3	2.831.775,9	1.976.444,1	1.207.197,3	3.183.641,4	1.925.821,5	1.522.247,9	3.448.069,4
Non-Cash Credits	467.995,6	209.635,4	677.631,0	799.769,3	234.800,2	1.034.569,5	1.375.810,0	184.257,7	1.560.067,7	914.887,5	375.646,3	1.290.533,8	953.459,0	379.241,2	1.332.700,3	883.678,5	298.198,4	1.181.876,9	1.102.766,8	334.610,7	1.437.377,5
-TL	71.957,0	29.857,5	101.814,5	144.196,6	31.849,1	176.045,7	163.429,3	20.216,0	183.645,3	130.598,6	36.132,9	166.731,4	137.930,0	39.663,8	177.593,8	138.998,9	46.161,6	185.160,4	193.386,8	61.134,5	254.521,3
Currency	396.038,6	179.777,9	575.816,5	655.572,6	202.951,1	858.523,7	1.212.380,7	164.041,7	1.376.422,4	784.288,9	339.513,5	1.123.802,4	815.529,0	339.577,5	1.155.106,4	744.679,6	252.036,8	996.716,4	909.380,1	273.476,2	1.182.856,3
Liquidation Credit	59.950,4	3.091,9	63.042,3	302.234,2	90.746,8	392.980,9	566.966,4	0,0	566.966,4	272.276,4	0,0	272.276,4	79.096,7	0,0	79.096,7	208.937,9	0,0	208.937,9	350.093,0	0,0	350.093,0
-TL	55.401,9	2.735,8	58.137,7	266.866,4	69.305,3	336.171,7	433.931,0	0,0	433.931,0	256.177,0	0,0	256.177,0	76.381,6	0,0	76.381,6	171.858,8	0,0	171.858,8	344.510,2	0,0	344.510,2
Currency	4.548,5	356,1	4.904,6	35.367,8	21.441,5	56.809,3	133.035,4	0,0	133.035,4	16.099,4	0,0	16.099,4	2.715,1	0,0	2.715,1	37.079,0	0,0	37.079,0	5.582,7	0,0	5.582,7
Bonds	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Fund usage leasing purpose	230,7	6.107,5	6.338,2	7.078,8	23.693,7	30.772,5	78.130,9	35.007,5	113.138,4	31.582,5	57.337,3	88.919,8	29.113,5	70.690,2	99.803,7	13.943,6	57.604,6	71.548,3	10.562,3	46.097,6	56.659,9
-TL	0,0	169,0	169,0	418,4	141,7	560,0	7.121,0	225,9	7.346,9	622,5	1.405,3	2.027,8	2,3	1.154,1	1.156,4	10.513,6	10.363,9	20.877,5	8.403,4	9.814,0	18.217,4
Currency	230,7	5.938,5	6.169,2	6.660,4	23.552,1	30.212,5	71.009,9	34.781,6	105.791,5	30.960,0	55.932,0	86.892,0	29.111,2	69.536,1	98.647,3	3.430,1	47.240,7	50.670,8	2.158,9	36.283,6	38.442,5
Total	1.545.062,6	660.564,1	2.205.626,7	2.739.691,3	861.156,9	3.600.848,2	4.607.152,1	619.727,0	5.226.879,1	3.305.542,9	1.463.574,0	4.769.116,8	3.289.990,1	1.636.962,5	4.926.952,6	3.674.286,8	1.664.072,4	5.338.359,2	4.167.413,3	2.157.942,9	6.325.356,3