‘BANK VALUATION- TURKISH EVIDENCE’

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'BANKA DEĞERLEMESİ – TÜRKİYE MODELİ'

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Abstract

This study investigates alternative approaches to the valuation of banks. Many valuation approaches has been developed in finance literature. The study describes the similarities and variances of those approaches. On the one hand, the bank valuation followed the same approaches and techniques with non-bank firms on the other hand; it presents some difficulties comparing non-bank firms. Unique specific services of the commercial banking necessitate different approaches and techniques through the value. The main aim of banks is to get profit from margin between borrowed funds and placed funds. Then all else, credibility of the placed funds comes into mind in order to assess the worth of a bank. The market risk of a bank can easily be measured and hedged, whereas credit risk cannot. Thus, the following study involves a comprehensive literature survey on; Credit risk exposures and Bank analysis. Finally, a bank valuation methodology is presented in order to forecast future cash flows depending on the existing balance-sheet structure and profitability ratios. The methodology involves a technique of measuring credit risk by using the risk weighted assets footnote. The methodology is used to valuate commercial banks in Istanbul Stock Exchange. Findings of the study provide strong evidence that recent bank deals in Turkey have not been overpaid. The average Sales Value / Book Value ratio of last two year's bank deals used in the paper is 3,09. Supporting this, the average DCF Value / Book Value ratio of the DCF methodology presented in the paper is 3,57. This finding may not be interpreted that banks have been sold cheaply but Turkish banks getting closer to their intrinsic values after 2001 economic crises.

Özet

Bu çalışma banka değerlemesi konusunda alternatif yaklaşımları incelemektedir.Finans literatüründe birçok değerleme yaklaşımları geliştirilmiştir. Çalışma, bu yaklaşımlar arasındaki benzerlik ve farklılıkları ortaya koymaktadır. Banka değerlemesi bir taraftan banka dışı firma değerlemesi ile aynı yaklaşım ve teknikleri izlemekle beraber diğer taraftan banka dışı firmalarla karşılaştırıldığında bazı zorluklara sahiptir. Bankaların kendine has yapısı, değerleme için farklı yaklaşım ve teknikleri zorunlu kılar. Bankaların ana amacı borçlanılan fonlarla borç verilen fonlar arasındaki marjdan kar elde etmektir. Bu nedenle, bir bankanın varlıklarını değerlendirebilmek için herşeyden önce verilen borçların kredibilite konusu akla gelir. Bir bankanın piyasa riski kolaylıkla ölçülebilir ve korunulabilir. Ancak kredi riski kolaylıkla ölçülemez ve korunulamaz. Takip eden çalışma kredi riski tutarı ve banka analizi konusunda kapsamlı bir literatür incelemesi sunmaktadır. Son olarak bankaların gelecek nakit akımlarını tahmin etmek için mevcut bilanço yapısı ve karlılık rasyolarına dayanan bir değerleme metodolojisi sunulmuştur. Bu metodoloji; risk ağırlıklı aktifler dipnotunu kullanarak kredi risk ölçümü hesaplama tekniğini de içermektedir. Metodoloji, İstanbul Menkul Kıymetler Borsası'nda işlem gören ticari bankaların değerlemesi için kullanılmıştır. Çalışmanın sonucu, son zamanlarda yapılmış olan banka satışlarında yeralan fiyatların olması gerekenden fazla olmadığına kuvvetli bir kanıt sağlamıştır.Çalışmada kullanılan bankaların son iki yıldaki satış işlemlerinin ortalama Satış Değeri / Defter Değeri rasyosu 3.09'dur. Buna destekleyici olarak çalışmada sunulan DCF metodolojisine gore bulunan DCF Değeri / Defter Değeri rasyosu 3,57'dir. Bu bulgu, Türk bankalarının ucuza satıldığı şeklinde yorumlanmayabilir; ancak bankaların 2001 ekonomik krizi sonrasında gerçek değerlerine yaklaştığı şeklinde değerlendirilebilir.

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ABBREVIATIONS

DCF	Discounted Cash Flow
CAPM	Capital Asset Pricing Model
NOPAT	Net Operating Profits Less Adjusted Taxes
DDM	Dividend Discount Model
EVA	Economic Value Added
EP	Economic Profit
EBIT	Earning Before Interest, Tax
EBITDA	Earning Before Interest, Tax, Depreciation, Amortization
ALM	Asset and Liability Management
MTM	Mark to Market
GAAP	Generally Accepted Accounting Principles
IFRS	International Financial Reporting Standards
PV	Present value
CD	Certificate of Deposits
OTC	Over the Counter
ROE	Return on Equity
ROA	Return on Assets
HHI	Herfindahl-Hirschman Index
M&A	Merger and Acquisitions
BDDK	Turkish Banking Supervisory Authority
IMKB	Istanbul Stock Exchange
TCMB	Central Bank of Turkey
FX	Foreign Currency
IRR	Internal Rate of Return
MPT	Modern Portfolio Theory

1 INTRODUCTION

The firm valuation techniques come together with the valuation techniques of single stocks that have a long history together with stock markets. But modern valuation era starts with Graham and Dodd. They introduced the concept of "Intrinsic Value", which is not necessarily the same price of the stock. Until that time, stocks had been valuated with dividend capitalisation, which are Price/Earnings per share multiplier in today's financial literature and book value. Companies paying more dividends were valued more compared to lesser dividend paying companies. But people were not searching what the earnings were of; or the real worth of a firm. After 1929 crises, stock prices crashed beyond reason. But difficulty started with choosing better among cheaper stocks. In their "Security Analysis"; Benjamin Graham and David Dodd defined intrinsic value as "that value which is justified by facts as distinct from market quotations established by artificial manipulation or distorted by psychological excesses". In order to find intrinsic value, Graham and Dodd advised to look at a given firm's earnings instead of dividends. Graham and Dodd presented figure of 10 times of earnings as prices. If market prices of stocks are ten times of firms earnings, intrinsic value is equal to market value. If ratio is lower than 10, than market price is cheaper than intrinsic value, if not, then it is to be considered expensive.

Although discounted cash flow is presented as the best way to calculate intrinsic value, the DCF could not be popular for a long time. The advantage of DCF derives from its ability to assess stable or unstable future earnings. Preinreich (1932) presented present value of growing future earnings. He argued that multiples valuation is only possible in a stable world. Gordon Myron used his growth models to value a firm with a constant and infinite rate of growth. Just before CAPM, Bauman (1963) wrote "Estimating the Present Value of Common Stocks by the Variable Rate method" and formulated The Capital Assets Pricing Model (CAPM) helped DCF model in getting more scientific and true discount rate and off course intrinsic value with Sharpe (1964). But popularity of DCF model started with 1990 technological firms' booms. Internet and other high growth technological companies made impossible to use P/E ratios that was the popular valuation technique among financial analysts. They were compelled to find intrinsic value of the companies and discount irregular expected future cash flows.

2 VALUE

Before starting Valuation, the term of value should be understood well. The term of value is not a clear understandable word. The meaning of the concept changes according to the context it is utilised. In our context, the value means economic [monetary] value. In other words it means how much a product or service is worth vis-à-vis other goods and services. As it is a common belief that price and value are not one and the same.

According to S. Keen the term ‘value’ refers to the innate worth of a commodity, which determines the normal ('equilibrium') ratio at which two commodities are in exchange.

Economist L. V. Mises argued that ‘value’ had always been qualitatively subjective; that there was no value intrinsic to objects or elements and that; value derived entirely from the psychology of the participants of the market. It was false to say that the economic value of a good was equal to what it cost to produce or to its current replacement cost.

The value should basically be understood as ‘real value’ or ‘actual value’. It is the measure of worth that is based purely on the utility derived from the consumption of a product or service. There are many concepts of value in the professional literature, of which we will attempt to explain below.

2.1 Intrinsic Value

The intrinsic value is the most defining word of value in the context of valuation. It is used amongst financial analysts in reference to the fundamental value of a stock based on all of the facts and circumstances of a firm and its investment environment. In other words, it is value of the given company based on its earning power and earning quality. The earning power is the firm’s capacity to make profit. The earning quality is the capacity of the firm to continue to stabilize the said profit.

The intrinsic value generally defined as the present value of the future cash flows discounted with market yield.

2.2 Fair Market Value

The implication of this concept is the oft-used concept of value in everyday life. It is a quantity that is expressed in cash or equivalent, at which a property or an asset would be exchanged between a willing buyer and willing seller, each having reasonable knowledge of all related facts, neither being under compulsion to buy or sell and with equity to both. In this definition the fact should be borne in mind that ‘willing buyer and seller’ are hypothetical more

than particular. Hypothetical willing buyer and seller are most likely buyer and seller. As a result, it is most likely that ‘fair market value’ is in fact ‘the transaction price’.

2.3 Investment Value

This term of value is generally used in mergers and acquisitions. It reflects the intentions of a potential buyer;

- Perceived synergy and value aggregation opportunities
- Desire to enter into a new market
- Perception of exposure and/or volatility of the asset’s earning power
- Tax status and planning
- Optimism

Those intentions and factors influence the investment value. Since investment value depends on personal circumstances of buyers, it may change from one willing buyer to the other.

2.4 Fair Value

Fair value is based on quoted market prices, where available. If listed prices or quotes are not available, fair value is based on internally developed models that primarily use market based or independent information as inputs to the valuation model [Due diligence exercises]. In recent years ‘Fair value’ has become a key term. International Accounting Standards (IAS) or International Financial Reporting Standards (IFRS) after 2002, embrace fair value assessment as comprehensively as possible. For that reason it is much easier to value a firm by looking at its financial factors.

2.5 Goodwill Value

This is a specific type of an intangible asset that arises from a merger or acquisition process. Goodwill is the difference of the price paid for an acquired business and the fair market value of the assets acquired net of liabilities. This is to suggest that; goodwill value is the difference between fair market value and the investment value of the buyer.

2.6 Going Concern Value

This concept is brought in to play when a business is being valued as a viable operating unit, without an immediate threat of discontinuance of operations.

2.7 Book Value

The book value of an asset is the historical cost minus accumulated depreciation of that asset. It does not bear an economic meaning. It reflects accounting results of the entity. For a business, book value is total book value of individual assets minus total book value of individual liabilities. In accounting this is also called ‘net worth’ or ‘book equity’.

The book value and the fair market value have no direct relation. In some cases book value and fair market value may coincide but most of the time, they differ from each other. But it should be borne in mind that the level of difference between book value and fair market value indicate to investment value or market trend. One of the other benefits of the book value is that it also is an indicator as to whether the sale had been exceedingly costly or not. In cases where Sale value/ Book value is a higher ratio than average weighted ration (P/B) is an indication that the process had been costly. However, in countries where lengthy periods of hyperinflation had been persistent, book values should be adjusted according to the figures of inflation. Otherwise, book value cannot function as reference on the value of the firm.

2.8 Liquidation Value

It is the net collectible sum in case the business is terminated. According to causes of liquidation, there are two types of liquidation processes;

- Forced Liquidation; The net amount that an asset will bring if exposed for immediate sale on the open market. But here seller is compelled to sell, buyer is free to buy and each party know this.
- Orderly Liquidation; The net amount that an asset will bring if exposed to sale on the open market and with reasonable time allowed to find a buyer.

The term of net amount includes all costs relevant to liquidation. The liquidation value is the lowest amount vis-à-vis other concepts of value.

2.9 Replacement Value

The replacement value of an asset simply is the cost of acquiring a new asset of corresponding utility. The estimation of cost of replacement takes into account as to how an asset would be replaced with newer materials and current technology.

3 VALUATION

Valuation is the process of assessing the market value of a firm and/or components of it. This is to say that a firm can either be valued as a combined system or its assets, properties, derivatives, liabilities; intangible assets can be valued independently.

A valuation of a firm can be done for varying intentions. Those being; merger and acquisition, pricing common stocks on the exchange market, tax cases, disposal of firm's components, inheritance or legal causes. However, the subject matter of our study is assessing the value of firms for mergers and acquisitions purposes.

Valuation of a firm is primarily based on financial tables of the firm. For that reason, reliability of financial data is fundamentally crucial to the valuation process. Recently General Accepted Accounting Principles have started to locate on Fair Value principles. In addition to that, firms are compelled to be audited by independent auditors. This made the valuation process much easier compared to the previous times, when prevailing accounting principle was the Book Value and auditing by independent auditors was not mandatory. But financial information is not enough to assess the value of a firm. This requires a 'due diligence' process.

The due diligence is the process of research and analysis to determine the value of the firm. The main purpose of due diligence is allowing the investigating party to find out everything that it needs to be known about the firm. The report on the target of an acquisition will, so far as possible, contain an analysis of the company's financial situation and prospects (including assets), contractual relationships with its customers and suppliers, legal risk, tax situation, employees, IT system and other matters relevant to the industry that the firm is participating in.

There are many models of valuation in the relevant literature. Some of them require many sophisticated minds whereas others are placed on the fundamental definitions of the finance. Although many valuation models have been developed during years, three main approaches and their main models have found great base both amongst academics and financial analysts. They are as follows;

- Discounted cash flow models / Income Approach
- Relative Valuation / Market Approach
- Net Asset Valuation / Balance Sheet Approach

3.1 Discounted Cash Flow Model / Income Approach

Discounted cash flow is the basis of the valuation. Almost all other models built on discounted cash flow model or utilise its outputs. To understand valuation process, we have to

know the discounted cash flow model well. Discounted cash flow models come from the rule of present value. Value of any asset is the function of cash flow of that asset; phases of those flows; and risk of the investment. This can be formulated as follows;

$$\text{Value} = \frac{(CF_t)}{(1+r)^t} + \text{Terminal Value}$$

Where;

CF = future cash flows

r = discount rate

t = time

Discount rate (r) includes both; the risk-free interest rate and the risk. The model tries to find intrinsic value of the asset. (Damadoran, 2002) Value of the firm is calculated by discounted expected cash flows to the firm. Discount rate is weighted cost of capital. The vital question here is to estimate future discount rates and cash flows.

Since discounted cash flow is the basis of valuation, it is imperative to understand inputs of DCF to apply them to the other valuation models. Those inputs are cash flows, discount rate, beta concept related to risk and terminal value.

3.1.1 Types of DCF models

The DCF models change according to what will be valued. This valuation can be applied to value firm's equity alone or value of the firm itself. Although these two models use different definitions of cash flows and discount rate, they both use same mathematical models. The main problem here is to be careful in matching cash flows and discount rates. On the one hand, DCF model to the equity at the cost of capital may value upward the value of the equity. On the other hand, DCF model to the firm at weighted average cost of capital may value downward the value of the firm.

3.1.1.1 Free Cash Flow to Equity

Free cash flow to equity refers to shareholders' shares from cash flow after all financial liabilities and fixed investment needs, which is calculated as follows;

- Profit Before Tax
- + Depreciation
- (-) Net Operating Capital Needs (Current Assets-Current Liabilities)
- (-) Debt Payments
- + New Borrowings
- + Fixed Capital Payments

- (-) Tax

The DCF model to the equity can be expressed mathematically as follows;

$$V = \sum_{t=1}^{t=n} \frac{CFtoequity_t}{(1+k_e)^t}$$

Where;

n = life expectancy of the asset

CF to equity = Expected future cash flows to the equity in time t

k_e = Cost of Equity

3.1.1.2 Free Cash Flow to Firm

Free cash flow to a firm means cash flow to both shareholders and creditors. It is calculated as follows;

- Operating Income
- (-) Tax
- (+) Depreciation
- (-) Fixed Capital Payments
- (-) Net Operating Capital Requirements

The DCF model to the firm can be expressed mathematically as follows;

$$V = \sum_{t=1}^{t=n} \frac{CFtofirm_t}{(1+WACC)^t}$$

Where;

n = life expectancy of the asset

CF to firm = Expected future cash flows to the firm in time t

WACC = Weighted average cost of capital

3.1.2 Discount Rate

Discount rate is the crucial factor of the valuation process. The value of the firms is directly affected by discount rate. High discount rate decreases firm's value. On the other side, lower discount rate increases the value of the firm. Discount rate should both include; risk free rate and risk premium of investing on equities.

3.1.2.1 Risk Free Interest Rate

The risk-free interest rate is the interest rate that it is assumed can be obtained by investing in financial instruments with no risk. Since default risks of governments are too low, government bond's yields are used as risk free rate.

3.1.2.2 Risk Premium

If there is an opportunity of investing at government bonds with risk less interest rate, then to invest in equities should have higher return. Because of uncertain return, equity investor will not accept to get same return with government bond investors at the beginning of investment. The difference between 'risk-free rate' and accepted rate of equity return is said risk premium. In his paper, entitled "Portfolio Selection," which appeared in the 1952 Journal of Finance, Harry Markowitz primarily introduces this approach. He detailed mathematics of his approach and proposed that investors' focus on selecting portfolios based on their overall risk-reward characteristics instead of merely compiling portfolios from securities that each individually has attractive risk-reward characteristics. Briefly, inventors should select portfolios, not individual securities. He created an "efficient frontier" of portfolios. An investor should select a portfolio that lies on the efficient frontier.

Other researchers, such as; Tobin, (1958) further developed Markowitz's work by adding a risk-free asset to the analysis, thus enabling leverage or de-leverage portfolios on the efficient frontier, hence leading to the notions of a super efficient portfolio and the capital market line. By advantage, portfolios on the capital market line are able to outperform portfolio on the efficient frontier.

3.1.2.3 Capital Asset Pricing Model (CAPM)

Although William Sharpe (1964) introduced Capital Asset Pricing Model, the model took roots from Harry Markowitz and James Tobin's works. CAPM divides a portfolio's risk into systematic and specific risk. Systematic risk is the risk of holding the market portfolio. As the market move, each individual asset is more or less affected. To the extent that any asset participates in such general market moves, that asset entails systematic risk. Specific risk is the risk of an individual asset. It represents the component of an asset's return, which is uncorrelated with general market moves. CAPM says that the market compensates investors for taking systematic risk but not for taking specific risk. This is because specific risk can be diversified away. When an investor holds the market portfolio, each individual asset in that portfolio entails specific risk, but through diversification, the investor's net exposure is just the systematic risk of the market portfolio. Systematic risk can be measured using beta risk metric. According to CAPM, the expected return of a stock equals the risk-free rate and the portfolio's beta multiplied by the expected excess return of the market portfolio. It is formulated as follows;

Cost of Equity = Risk Free Rate + (Equity Premium x Beta)

The Beta is financial elasticity of the share prices to the market prices as general. It is key factor in CAPM. It is formulated as follows;

$$\text{Beta } (\beta) = \frac{Cov(r_{a,} r_m)}{Var(r_m)}$$

Where;

$\text{Cov}(r_a, r_m)$ = Covariance r firm to r market

$\text{Var}(r_m)$ = Variance r market

3.1.2.4 Weighted Average Cost of Capital (WACC)

WACC is the weighted average of the after-tax cost of debt and the cost of equity. The weighting for debt is the portion of debt to total capital, whereas the weighting for equity is the portion of equity to total capital. These weighting are based on market value instead of book value of debt and equity.

WACC is mathematically formulated as;

$$\text{WACC} = (\frac{E}{L} \text{x}\, r_e) + (\frac{D}{L} \text{x}\, r_d)\,(1\text{-}t_c)$$

Where;

E= Equity

D= Debt

L = Total Liabilities (E+D)

r_e = Cost of equity

r_d = Cost of debt

t_c = Corporate tax rate

WACC is belonging to firm capital structure and borrowing capabilities. If the firm has the opportunity of borrowing from risk-free rate and portion of equity in total capital is low, then this most probably will lead to lower WACC. However, if the firm does not have low cost borrowing and has higher portion of equity in the total capital, this will lead to higher WACC.

3.1.3 Terminal Value

In DCF valuation, we try to find discounted cash flows of a firm at the future. But firms have unspecified lives unlike specific prefects. In this case we have difficulties of estimating

whole future cash flows. Using terminal value at the end of period estimated comes from these difficulties in the DCF valuation. There are three methods to find terminal value (Damodoran, 2002); Liquidation value, Multiple Approach, Stable growth model

3.1.3.1 Liquidation Value

Liquidation value is the estimation of sale price of firm's assets at the end of period estimated. But it is not so easy to estimate sales value of assets after long term. (Generally ten years is used to estimated future cash flows) For that reason some simplifications are done for estimation. One method is to add inflation effect in to book value of assets. The following formula is used for this way;

Expected Liquidation Value = Book Value x (1 + Inflation Rate) $^{averagelif \quad eofassets}$

After finding terminal value, the estimated debt value should be subtracted from this value to find net assets.

3.1.3.2 Multiple Approach

Multiple approaches is an estimation of terminal value based on the firm's earnings or revenues. Price to earnings or price to sales multiples can be used for this approach. But necessary steps should be taken using multiples method when estimating terminal value (Those steps will be explained in Relative Valuation Method)

3.1.3.3 Stable Growth Model

In this approach, it is assumed that the firm will continue to grow after terminal year. This is possible if the firm keeps some of the earning in the firm and those retained earnings will provide a constant rate of growth. This rate of growth cannot exceed the rate of growth of the whole economy in the long run but it can have a constant rate of growth lower than the economy's rate of growth. Similar to multiple approaches, this approach necessitates high attention in the valuation process. Because higher or lower stable rate of growth can affect value of the firm too much. Stable growth formula is presented below;

Terminal Value = $\frac{CashFlow_{t+1}}{(r-g)}$

Where;

g = Rate of growth

3.2 Residual Income Model

There are some other models built on discounted cash flow model. They are known as Residual income models (Excess Return Models). Many discussions and studies have been done to compare Residual Income Models and DCF models in the literature.

The residual Income Models find its roots on the studies of Feltham and Ohlson (1995). However, concept is much older than their ages (Discussion is done in the section of economic profit section below). In the DCF models, real cash flows are taken in to consideration. Nevertheless, this creates difficulties when valuing firms having high investment in the beginning years. Because DCF becomes negative and this make valuation difficult to analyse. On the other hand, RIM models use accrual basis accounting principles to find cash flows. They say that accrual accounting especially fair value accounting principles finds better results in valuation. General Residual Income is formulated as follows;

Residual Income = Net Profit – (Equity book value x (Cost of equity))

The models dos not say that directly take accounting results. They suggest accounting adjustments to reach clean surplus accounting. The fair value accounting principles made easier RIM valuation. In this valuation equity market value is found by that formula;

Equity Market Value = Equity Book Value + Present Value of expected future residual incomes

There are some other models built on residual income. They are Economic Profit, Market Value Added, Economic Value Added, and Cash Value Added.

3.2.1 Economic Profit (EP)

Alfred Marshall firstly used the Economic Profit concept in his book, Principles of Economics, 1890. Marshall defined economic profit as the excess of Entity's marginal revenue over its marginal cost. A firm generates returns greater than those required by investors is said to be earning economic profit.

Copeland in his Valuation (1995) book defines Economic Profit model as;

Economic Profit = Invested Capital x (WACC – ROIC)

WACC=Weighted average cost of capital)

ROIC= Return on the invested capital

In the model entity value is defined as Invested capital at the beginning of period of forecast. The model says the value of the company equals the amount of capital invested plus a Premium equal to the present value of the amount of value created.

The formula by Copeland to calculate the continuing value of Economic profit;

$$\text{CV} = \frac{EP_{t+1}}{WACC} + \frac{\left[NOPLAT_{T+1}\right]\left(\frac{g}{ROIC}\right)X\,(ROIC - WACC)}{\left[WACC \times (WACC - g)\right]}$$

Where;

CV= Continuing Value

NOPLAT= Net Operating Profits Less Adjusted Taxes *[NOP(-)AT]*

g= Rate of growth

If we come back again to "*Marshalian*" Economic Profit concept; in a perfectly competitive industry, equilibrium occurs when marginal revenue equals marginal cost. NOPLAT (net operating profit after tax) can be used to define his marginal revenue and WACC x Total Capital. Then in a perfectly competitive environment, Economic Profit (Stern Stewart calls it EVA) should be zero. Nevertheless, as he noted firms/industries might be in temporary disequilibrium because a new product or technological innovation can convey economic or abnormal profits on a firm that, ultimately, attracts competitors that, in turn, eventually erode these profits and force Economic Profit to be zero.

3.2.2 Market Value Added (MVA)

The MVA (market value added) seeks to measure a firm's value creation, and is the difference between the market value of the firm's equity (or market value of the new investment) and the equity's book value (or initial investment). Formulation to find MVA;

MVA (market value added) = Equity market value (price) - Equity book value

3.2.3 Economic Value Added (EVA®)

Among all models of residual income, EVA® became centre of the discussion since Stern Stewart & Co presented and registered EVA®. The EVA® is simply the difference between the ROA and the WACC multiplied by the enterprise book value (debt plus equity). The formulation for EVA® is;

EVA = EBV x (ROA – WACC)

Alternatively;

$EVA_T = NOPAT_T - (D_{T-1} + EBV_{T-1}) \times WACC$

Where;

EBV= Enterprise book value

ROA = Return of Assets

D = Debt

Stern Stewart proposes accounting adjustments to reach economic book value. Although they are hundreds, some main adjustments are as follows;

- + Deferred taxes
- + LIFO reserve
- + Cumulative depreciation of goodwill
- + Un-capitalised goodwill
- + Allowance for un-collectibles

- + Allowance for stock obsolescence
- + Accrued R&D expenses
- +Cumulative depreciation of R&D
- + Capitalization of non-cancellable contracts
- + Accrued losses from sale of assets

Adjustments to find Economic NOPAT is found as measuring periodical changes in the adjustments of economic book value

3.2.4 Cash Value Added (CVA)

The Boston Consulting Group proposes cash value added (CVA) as an alternative to the EVA®. CVA is NOPAT plus book depreciation (DEP) less economic depreciation (ED) less cost of capital employed (initial investment multiplied by the weighted average cost of capital). The formulation of CVA is:

$CVAt = NOPAT_t + DEP_t - ED - (D0 + Ebv0)\ WACC$

3.2.5 Cross-Comparison of Residual Income Models

Erdogan, Berk, and Katircioglu (2000) wrote that Free Cash Flow and Corporate Valuation of Modigliani and Miller (1958; 1961) constitute main references to economic profit concept. However, the title 'Economic Profit concept' was converted by Stern Stewart to EVA® (Economic Value Added) in 1990.

Accordingly, Erdogan, Berk, and Katircioglu (2000) have made a comparison between Economic Profit and Stewart's Economic Value Added (EVA®) in Turkish Stock Exchange. In their economic Profit Model, they used Gordon's Dividend Discount Model from the view of cost of capital.

In their analysis, they defined Economic Profit as follows;

EP= NOPAT – (C x COC)

= (ROI-WACC) x C

Where;

NOPAT= Net Operating Profit + Financial Expenses

(Copeland NOPLAT does not include interest but he adds interest expenses when he calculates WACC)

C= Total Capital Employed)

COC= Cost of Capital

ROI= Return on Investment

WACC= Weighted Average Cost of Capital

(Here WACC does not include borrowings)

They defined EVA as follows;

EVA= NOPAT= C (wd Rd + we [Rf + {E(Rm)-Rf } b im]

=ROI – [wd Rd + we{Rf + (E[Rm] – R f) b im}]) C

Where;

wd = weight of debt to the total capital employed

we = weight of equity to the total capital employed

Rd = Cost of debt

Re = Cost of equity

In the formula, they used exactly same formula with Discounted Cash Flow Model using CAPM of Sharpe to calculate cost of equity and net income instead of cash flows.

In the comparison EVA®, model with the CAPM cost of capital and EP model with DDM were used. Since Turkish economy suffers from high inflation, high rate of short-term risk-free interest rate was insufficient to discount future cash flows. Instead, they used Gordon's dividend discount model to discount future cash flows. 123 non - financial firms' data were used in the analysis.

According to evaluation of the results in the research, they found that due to the volatility of the risk free rate of returns and market risk, a reliable capital cost based on CAPM and short-term data cannot be used in emerging markets. Models that are more significant are made available by considering the dividend payout as the equity capital cost for companies. Nevertheless, and maybe more significantly, they showed that economic profit approach, which came from the previous century, is mathematically equivalent to discounted cash flow model. To use net income and WACC as performance measure is just up to the investment decisions.

In addition; market inefficiencies and uncertainty of future cash flows renders Economic Value Added model less reliable in comparing cash flows. As it is seen from above-quoted formulas, although the model finds its roots on classical discounted cash flow formula, the main difference is taking into consideration the net income instead of net operating cash flows.

Fernandez (2002) compared residual income models. According to his conclusion;

The information required to value a firm using the EP, EVA® and CVA is exactly the same as that required for valuing by means of cash flow discount. The present values of the EP, EVA® and CVA are equal to the MVA. Assessing the valuing of the firm by means of EP, EVA® and CVA gives the same result as valuing by cash flow discounting. Maximizing the present value of the EP, EVA® or CVA is equivalent to maximizing the value of the firm's shares. Maximizing a particular year's EP, EVA® or CVA is irrelevant: it may be the opposite to

maximizing the value of the firm's shares. The claim that the EP, EVA® or CVA measures the firm's "value creation" in each period is a tremendous error: it makes no sense to give the EP, EVA or CVA the meaning of value creation in each period. The EVA®, EP and CVA do not measure value creation during each period. Quantifying accrued value on the basis of Data accounting over a period is unattainable. Value almost depends on expectations.

It is quite possible that the EVA® and the economic profit in a given year may have been positive, and even higher than expected, but that the value of the firm or business unit has fallen because the business's expectations have deteriorated due to poor management.

The problems with EVA®, EP or CVA start when the desire is to give these parameters a context that they do not have: value and shareholder value creation always depends on expectations.

The comparative results of his studies can be seen in the annex 1.1:1.5.

Final emphasis on this sub=topic is that, Paulo (2003) argued that EVA® epistemologically non-sequitur, fails to satisfy the requirements of sound research methodology in terms of being a reliable and valid metric, and is unlikely to satisfy the requirement of Rule 702 of the Federal Rules of Evidence. He says that the use of EVA® is ethically questionable, and moreover in time is likely to result in class actions.

Paulo accuses EVA® the use of CAPM as basis of model in order to measure cost of capital, but CAPM defects to measure cost of capital in a non-efficient market world. CAPM is also questionable in efficient market world. He uses citations of "Fama and French" and other academics, who wrote on the apparent deficiency of CAPM, saying that CAPM is an undesirable way of calculating the cost of capital and should not be used for valuation purposes, not even as an approximation because of the serious average-return anomalies. Fama and French (2001) proposes dividend growth model in order to measure cost of capital.

Paulo does not only accuse of EVA® about theoretically defective, but also accuses about research methodology. He says that the main drivers of total shareholder return are not the type of fundamental accounting, economic, and financial information that is incorporated within the EVA® criterion.

3.2.6 Comparing Residual Income Models with DCF

The differences of RIM and DCF are not limited with using accounting earnings instead of free cash flows. The theoretical discussions focus on terminal value and adjustments to cost of capital. In DCF valuation, terminal value estimations are very important because of high portion in the valuation result. Under or over estimation of discount rate or market multiples results in big differences with valuation result and intrinsic value. Penman and Haas (1995) showed that the

DCF technique which forecasts free cash flows to the horizon and capitalizes expected terminal free cash flows is equivalent to specifying expected net debt plus capitalized financing flows as the terminal value in the dividend discount formula. The residual income technique that capitalizes terminal residual income is equivalent to capitalizing terminal income and adding the present value of dividends forecasted to the horizon.

Additionally, the quoted study suggests that; DCF techniques that specify capitalized operating income as the terminal value are equivalent to techniques that forecast accrual earnings, and are both equivalents to the dividend discount formula with the terminal values capitalized expected operating income less expected net debt. Correspondingly, differences in techniques are also identified. The accounting for investment and operating accruals on the horizon, and forecasting free cash flow distinguish DCF and residual earnings methods or residual income to the horizon not being an issue.

In contrast, Courteaua, Kaob, and Richardson (2000) argue that RIM is slightly outperformed by DDM and DCF with the ideal terminal values, an insight not previously documented in the literature. Nevertheless, the differences in pricing errors across the three valuation models are negligible.

Some of the studies argue that there are no significant differences between the two methods, hence even if there is an opportunity, DCF should be chosen. Tham (2001) says that; “From a purely algebraic point of view, it is true that two models are equivalent. At a minimum, the current analysis and discussion has shown that from a conceptual point of view, in valuation, the residual income model is not superior to the cash flow model. Furthermore, in valuation, the cash flow model may be preferred to the residual income model because it is based on market values rather than book values. Ultimately, the appeal of residual income lays in the mistaken notion that residual income measures "value creation", whereas the discounted cash flow (DCF) method does not. But the process of discounting takes into account “value creation". In short, what is the residual income approach? It is simply NPV re-expressed and repackaged in book values and accounting terms. The champion NPV is unfazed by the new arrival in the arena of valuation.” As a tool in the ring of management, EVA® may have some importance, but in the crucial arena of valuation, EVA® does not stand a chance against the current champion. In spite of all the hype in the media, the new kid is simply an alter - ego

3.3 Relative Valuation / Market Approach

In relative valuation, the value of a firm is found by similarities among market assets. This is done by some ratios in the market. This method is widely used by professional equity analysts. There are some reasons that made this method widely used. Primarily, there is no need for

assumptions. Secondly, it is simpler than other models and easier to explain. Thirdly it reflects market reaction and price movements all the time. It includes ownership premiums. The important thing is to use appropriate ratios and industry figures in the calculation. There are some standard multiples groups that are explained below.

3.3.1 Earnings Multiples

The most used earning multiples is Price to Earning Ratio. Price to earning ratio is defined as, (PE) = Market price per share/earnings per share. Although ratio seems easy, definition of earnings causes a big problem here. They may well be; current earnings, future earnings or primary earning. Additionally changes in earnings affect the price of the share. In the worst-case scenario, it cannot be used for negative earnings.

Some of the earning multiples are as follows;

Price/Earnings Ratio (PE)

Market Value/EBIT

Market Value/EBITDA

Value/Cash Flow

3.3.2 Book Value Multiples

Similar to PE ratio, Price to Book Value (PBV) is a common ratio in Book value multiples. PBV = Price per share / Book value of equity per share. Analysts find this ratio very useful because of those reasons; the book value is relatively stable which can be compared with unstable market prices. This gives idea about overvaluation of market prices. Further, this multiple can be used for the firm's negative earnings since negative book value is not as common as negative earnings. However, differences in methods of accountancy may influence the book value to a significant degree. Also, firms like technology or service firms, know how is much more important that firm assets. In such cases book value can prove to be irrelevant.

Some of the book values multiples as follows;

Price / Book Value

Market Value / Book Value of Assets

Market Value / Replacement Cost (Tobinis Q)

3.3.3 Revenues Multiples

Two main revenue multiples are in existence. The oft-used one is Price to Sales ratio Price=Market value of equity/revenues. As in the PBV case, these ratios are affected by accounting practices, which should be taken in to account when valuating firms. Additionally these ratios cannot be applied as financial service firms like bank in which sales are not the case.

Some of the revenues multiples are as follows;

Price / Sales per Share

Market Value / Sales

3.3.4 Sector Specific Multiples

These multiples are used to measure efficiency and productivity in a specific sector. Some of them are as follows;

Value per commodity unit = (market value of equity + market value of debt-cash)/ number of units of the commodity in reserves,

Value per unit product= (market value of equity + market value of debt-cash)/ number of units produced etc.

3.4 Net Asset Value Model / Balance Sheet Approach

Net asset value is the difference between market value of the firm's assets and the liabilities of the firm. Net asset value measures values after selling whole assets and paying entire liabilities instead of going concern value of the firm. This is the most conservative approach in valuating a firm since it does not take firm's expected future revenues into consideration. The goodwill added to net asset value gives the value of the firm in this model. It is formulated as follows;

Net Asset Value= Market Value of Assets – Market Value of Liabilities.

If the firm recorded its total assets and liabilities with market value in its financial table, the shareholder value would indicate the net asset value. For this reason, the trend in fair value accounting made financial tables to give more accurate figure of net assets value. Of course financial tables are not enough to give market value. In order to reach the figure, some adjustments should be carried out such as Held-to-maturity portfolio securities are accrued with its IRR value. So as to reach fair value of the firm, the difference between IRR value and market value should be added into firm financial table.

Provisioning should be employed/exercised properly; receivables, employee liabilities, legal liabilities, legal court-cases with potential financial implication. Receivables may not have secondary markets. In this case future cash flows should be taken into consideration. Inventories should be measured physically. They should be priced according to their quality or completion phase. (Raw materials or completed goods). Tangible assets (Real estates, machinery and equipment, office machines, valuation) should be made according to expertise value of the said assets. Mortgages or other limitations on tangibles should be checked with official registries. Intangible assets should be treated with care. Some intangibles (such as software) may not have any value in case of acquisition, but some others (goodwill, trademark, know-how) may have greater value more the registered cost/worth. Other assets should be treated case by case. For

example pre-paid expenses should be treated as cash. Additionally tax assets should be valued for any case. For example, in case of acquisition, tax assets may not have any value if acquiring firm has tax assets more than decreased from future profit. Liabilities should be checked according to their contacts. Contingencies should be treated according to their risks.

Generally, net asset valuation is made in following cases:

- If the firm is in a bad state
- If the firm is not generating cash
- If the firm assets are individually very valuable compared to the firm as a whole

In case of acquisitions, net assets valuation should be made together with other valuation models to compare results and to see value of goodwill.

4 BANK VALUATION

The valuation of commercial banks differs in many ways from other sector firms. These differences derive from some unique specialties of the commercial banks. Before studying bank valuation, commercial bank models and its roles in the economy should be studied. A commercial bank is a firm whose assets primarily include financial claims issued by borrowers, such as households, corporate firms, governments, and other financial intermediaries, and whose liabilities are sold as secondary claims to capital surplus units in various forms, such as demand deposits, saving deposits, term deposits, subordinated debt (loan capital), or equity shares. (Dermine, 2003) In addition to this, banks use their credibility's on behalf of customers and they offer non-cash loans such as letters of credit, note-issuance facilities, and letters of guarantees. Increasingly with financial techniques, bank use off balance hedging and speculating instruments in order to minimize their risks taken and to earn money. Those are said off-balance sheet activities of the banks.

Banks offer some specific unique services. These unique services can be (Dermine, 2003) distinguished in to five categories:

- **Underwriting and placement**

A first service provided by financial intermediaries is to bring together savers and borrowers. Underwriting and placement of securities is a function, which help borrowers to meet surplus units, and structure or customize the type of securities that meet the risk and return requirements of borrowers and lenders. In a pure underwriting and placement service, it is assumed that the return and risk of the securities can be properly defined, so that there is no major problem of asymmetric information (agency problem) between lenders and borrowers.

- **Portfolio Management**

Investors may wish to have diversified portfolio of securities. However, to keep these portfolios individually can be expensive and difficult to follow up. Instead of customers themselves, banks issue mutual funds and unit trust. By having shares of these mutual funds and trust, investors can diversify their investment.

- **Payment Mechanism**

Another unique service of financial intermediaries is to manage payment mechanism throughout country and worldwide. Banks use inter-country central transfers systems and international corresponding services of other banks abroad. By this service, individuals, firms, and banks themselves make payment of third parties without sending physical money. These services

have been developed a lot with check, debit cards and credit cards adding these payment process credit card companies for international purchases and credit cards clearing services inside country purchases.

- **Monitoring and Information Related Services**

Monitoring borrowers by individual investors can be very costly for them. Moreover, they may not have enough knowledge to assess that information. Banks collect information from borrowers and evaluate these instead of individual borrowers. This increase efficiency in the economy as well as reducing borrowing costs with scale economy.

- **Risk-Sharing Services**

Another function of the commercial banks as a financial intermediary is to manage risk sharing between borrowers and lenders. Banks assess economic and ethical situation of borrowers either as firm or individual. According to their risk level, banks offer interest level to borrowers. By this service, lenders and investors do not need to hesitate about future of their investments. Accordingly they offer to their customers the instruments such as inflation indexed, floating or fixed interest rates, liquidity insurance, option for depositors or holders of a line of credit to withdraw quickly as face value (Diamond and Dybvig, 1983; Rajan, 1998) Allen and Santomero have emphasized the growing importance of risk management services provided by commercial banks.

Those functions of the commercial banks change from country to country. Especially USA had made banks to specialize as a investment bank or commercial bank deposit taking. With the Glass-Steagell Act after Great Depression, banks are forced to specialize in order to prevent commercial banks to underwrite and to investment bank to accept deposit.

According to the II'nd Banking Directive of the European Commission's activities specific to banks are written as below:

- Deposit-taking and other forms of borrowing
- Lending
- Financial Leasing
- Money Transmission services
- Issuing and administering means of payments
- Guarantees and commitments
- Dealing for own and brokerage for customers in
- Money Market
- Foreign Exchange

- Financial Futures and options
- Exchange and interest rate instruments
- Securities
- Participation in share issues and the provision of services related to such issues
- Money broking
- Portfolio Management and advice
- Safekeeping of securities
- Credit reference services
- Safe custody service

As it is seen above, the banking instruments create specialties comparing other sector firms. Being as financial firm, fixed assets constitute little share in bank assets. Bank assets largely placed on loans either on individual customer and corporate firms or on bonds issued by governments and corporate firms.

Because of risk level, tax issues, valuation of loans present difficulties (Dermine 1985, 1987; Dermine and Hillion 1992). If there were no tax and risk, the market value of the bank would be discounted value of the dividends and liquidation value at the end of cash flows.

The bank valuation model of Dermine, explains three steps in valuation. They are model 1 without tax and risk issues, model 2 with tax and without risk issues and lastly model 3 including tax and risk effects. (Dermine, 2003)

He assumes a simplified bank framework, with loans and bonds in asset side and deposits and equity in liabilities side having two years average maturities, fixed interest rates and without risk, balance sheet of the bank would be as follows;

Assets	Liabilities
Loans L (p)	Deposits D (d)
Bonds B (b)	Equity E (b*)

‘p= historical rates p*= current rates

The growth period of assets and liabilities assumed as two years for simplicity. Additionally net profit is assumed be paid out as dividends.

The market value of the equity of the bank would be discounted value of dividends and liquidation value at the end of second year, discounted at the shareholders opportunity cost of funds, b* (cost of funds)

The formula is:

MV = {(pL+bB-dD)/(1+b*)}+{(1+p)L+(1+b)B-(1+d)D)/(1+b*)^2)}

Where Li*, Bi* and Di* are the current economic values in year i of the loans, bond and deposits evaluated at the current loan, bond and deposit rates.

In this context, the liquidation value is sum of economic values of loans, bonds, and deposits. In another way, market value of the bank is the difference between the economic value of assets and liabilities evaluated at their respective current rates and the franchise value. The franchise value represents the ability to pay below market rates on deposits and the ability to charge above market rates on loans.

In the model 2 added tax issue to the valuation model, the market value is the sum of four terms:

- The current value of assets net of liabilities,
- The after tax value of franchise on deposits and loans,
- The present value of non-tax deductibility of equity cost (Corporate tax penalty, Modigliani and Miller, 1958)
- The present value of tax savings due to non-taxation of capital gains/losses on assets and liabilities.

Lastly, model 3 added tax and risk issues to the valuation model, the market value will get more complex. In the literature, CAPM model is used to calculate market value of the common shares. However, this model is not appropriate for bank lending. Since every corporate firm, do not issue common shares in the stock exchange. Secondly, banks lend not only corporate firms, but also individuals. Then Dermine proposes the general formula to calculate market value of the bank:

MV= {((1-t)pL)/((1-t)p*)} + {((1-t)(p*-b**)L*)/b**}-{(tb**L*)/b**}

The third model's difference than previous one is adding the expected return rate on corporate bond with similar risk as the loan b**

Dermine used Miller and Modigliani valuation models in his bank valuation models. The model put question to value loans including risk factor. This problem arises either value non-problematic loans default probability or value problematic loans estimated collection amount or estimated collection time.

4.1 Analysis of Commercial Banks Financials

Analysis of bank financial structure is very important to make healthy valuation. As it is discussed before, the main sources of information in the process of valuation is financial tables. Although MTM is widely used in bank financial, there are limitations to this. For example, financial securities can be placed in three portfolios in the balance sheet. Trading securities and available for sale securities booked according to their market value of balance sheet day. On the

other hand, held to maturities portfolio is booked according to historical internal rate of return. Additionally intangible assets of the bank is mostly not booked or booked with linear depreciation method. However, some of the intangible assets can get value higher instead of lower value. Core deposit is one of the main intangible assets of the commercial banks. However, to reflect core deposits in to the balance sheet are not possible according to today's GAAP. Nevertheless, being most important item, quality of the risky assets is hardest issue to be valued from balance sheet. Loans are booked according to their historical internal rate of return. Moreover, balance sheet does not carry their risk structure.

4.1.1 Analysis of Assets

The analysis of commercial bank assets is crucial part of the analysis since some of the asset items are risky. There are mainly four types of assets in bank's assets (Cash and Bank Accounts, Financial Securities, Loans and Other Assets). For long time, banks have been using fair value principles to value their assets and liabilities. Sometimes it is not so easy to find fair value either not having secondary market to sell or risking of the assets immeasurably. For example, we give loans to earn interest and commissions income. However, some of them will not be paid back either because of failure of the borrower or ethical level. Then we cannot say that loan amount is 100% trustable asset. Alternatively, we may have fixed income securities but without having secondary market. In this situation, we need calculation methods to find fair value.

4.1.1.1 Cash and Banks

Cash and banks item consist of cash, bank or travellers cheques, deposit in central bank, deposit in local banks, and deposits in foreign banks. This item is valued with nominal value. However, there are some critical things should be taken in to consideration. Although, bank placements are short-term maturity, some placements may have longer term, especially participation to syndication loans. This type of loans should be valued as if customer loans. Customer quality analysis should be done. Additionally, this type of placements should be valued according to cash flow valuation with market interest rates. If they are placed with long term with fixed rate and current interest rates are higher than the loan given, then fair value of the placement will be lower than the nominal value.

Secondly, due from banks is liquidity resources of the bank against deposit withdrawals. However, although in some cases this liquidity is not as liquid as it is seen. If due from banks are placed as collaterals of the other borrowing, correspondent bank may reject bank demand to place money to back until the other borrowing is paid. Then lack of restriction on the account is should be questioned in the analysis.

4.1.1.2 Reverse Repo

Reverse Repo is placements at other banks or stock exchange. Generally, they are short-term placements such as 1 or 3 days. However, there are term placements as well. The difference of reverse Repo from other placements is including fixed income securities as collateral. Since reverse Repo is short-term placement, their value is very close to nominal value. In case of long-term placements, cash flow analysis should be done. They are liquid assets of the bank, which protect banks against unusual deposit withdrawals.

4.1.1.3 Fixed Income Securities

Fixed income securities are the financial securities that provides fixed rate of interest or interest spread. They both provide higher return to the bank and liquidity because of secondary market of these securities. Normally commercial banks keep government borrowing securities in their portfolios. Nevertheless, to keep also private bonds is possible, which offers higher yield than government securities. In this case, the securities should be treated as commercial loan, which subject to credit risk as well as interest risk. There are two types of fixed income securities; zero coupon bonds and coupon bonds.

4.1.1.3.1 Zero Coupon Bonds

Zero coupon bonds is A debt security that doesn't pay interest (a coupon) but is traded at a deep discount, rendering profit at maturity when the bond is redeemed for its full face value (Investopedia.com). The valuation of zero coupon bond changes according to its sales ability in the secondary market. If there is a market price, then price multiplied with face value will give value of the bond. If there is no market price or market price is not trustable, then the formula below will give us present value of the bond.

$$PV = \frac{FaceValue}{(1+r)^n}$$

Face Value= Amount will be given at the maturity

n= Time to maturity

r= Current market yield of similar type of securities

Another point of bond valuation is issuer of bonds. In case of local state or municipality bonds, bonds are accepted risk less. However, it the issuer is the company or foreign government, the bonds should be discounted according to rating note. Moreover, zero coupon bonds carry higher interest risk (or market risk) since its average duration is higher than same maturity date coupon bonds. This should be taken in to consideration in the analysis.

4.1.1.3.2 Coupon Bond

Coupon bond is debt obligation with coupons attached that represents semi-annual or quarterly interest payments. Unlike zero coupon bonds, coupon bonds may have fixed interest rate or indexed interest rate. Fixed interest rate and long maturities increase interest risk and valuation differs. Coupon bonds can be valued with market price if there is. However, if there is no price cash flows are used to find present fair value similar to zero coupon bonds. The formula below finds present value of coupon bonds.

$$\text{PV} = \frac{CouponValue}{(1+r)^n} + \ldots + \frac{CouponValue}{(1+r)^n} + \frac{FaceValue}{(1+r)^n}$$

Similar to zero coupon bonds, issuer of the bonds is important factor in the valuation and same principles are applied in the valuation with zero coupon bonds.

4.1.1.4 Loans and Leasing Receivables

Loans and leasing receivables are receivables that have customer basis. Those receivables may be given for retail purpose like buying a car, house or holiday payments or commercial purpose like provide operating capital, buying equipment, or long term investments. Loans are the most difficult part of the bank analysis. They are both the most profitable and most risky assets of the bank. They produce not only interest gain like financial securities but also fees and commission incomes. Loans include highly interest rate risk and credit default risk. In addition to these risks, concentration risk is also possible for loan portfolios. Concentration risk denotes the overall spread of a bank's outstanding accounts over the number or variety of debtors to whom the bank has lent money. This concentration may be based on specific customers, specific type, or specific sector.

Liquidity of the loans is lower than due from banks and securities. To collect loans back is not so easy when there is a need of liquidity. For that reason, in the liquidity planning, loan portfolios should be taken in to account in the lower level.

Valuation of loans is done by discounting future cash flows with current market interest rate (non interest rate written on the credit contract) plus risk premium. There are various approaches and models in the literature to measure credit risk structure of loans that is written below in detail in the credit risk measurement section. Customer loans should be measured and checked customer by customer. On the other hand, receivables including small in size and having similar character can be measured on portfolio basis. Again in the credit portfolio there may be correlation of defaults. In this case portfolio approach can be used to measure variance – covariance default effects of customers instead of measuring each customer risk and sum up these figures.

Collaterals of loans have a dominant factor in the valuation of loans. They have effects directly on estimating loss on default. Additionally liquidity of these collaterals is also important, which estimates time period in order to convert these collaterals to the cash. Loans can be classified as follows:

Consumer Loans, Commercial Loans, Financial Leasing, Mortgage Loans

4.1.1.4.1 Consumer Loans

Consumer loans are used to finance individual needs of consumer to purchase goods and services. By consumer loans, car, TV, furniture of holiday can be financed. Generally consumer loans are given on equal monthly instalments. But some there can be some special provisions to pay later on unequal instalment.

Equal monthly instalment payment loans can be valued with a formula below;

$$PV= \frac{(\frac{1}{DR})\times(1-\frac{1}{(1+DR)^{n}})}{(\frac{1}{DR})\times(1-\frac{1}{(1+IR)^{n}})} \text{ x Loan amount}$$

Where;

IR = Contractual interest rate

DR = Discount rate (including risk premium)

Consumer loans are generally collateralised with guarantors or purchased goods (i.e. car loans). Their concentration risk is much lower than commercial loans. Additionally loan customers do not bargain about interest rate, fees and commission as big commercial loan customers do. But for the long-term loans with fixed interest rate, consumer loans are highly faced with prepayment risk when market interest rate is down.

4.1.1.4.2 Commercial Loans

Commercial loans are receivables that are given to firms for business purposes. Their concentration is higher comparing consumer loans. Commercial loan customers are very sensitive to the interest rates, fees and commissions that bank charges. In addition to this, their default risk and expected loss in default is higher. For that reason, commercial loan portfolios should be valued customer by customer in the valuation process.

Commercial loans may have many forms according to specific purposes or payment plan. We will discuss commercial loans according to their payment plan more than purposes. Those are; Bullet loans, Working Capital Loans, Term Loans.

Bullet Loans

Bullet loans are paid back at the end of the maturity with principal and interest together. Bullet loans are fixed interest rate and there is no principal or interest payment until maturity. Their valuation is similar to zero coupon bonds;

$$\text{PV} = \frac{\text{Pr}\,incipal + Interest}{(1+r)^n}$$

Principal = Loan amount given to the customer

Interest = Interest amount calculated on contractual interest rate

n = Time to maturity

r = Discount rate (including risk premium)

Working Capital Loans

These loans are given to satisfy short term payment needs of the firms such as, paying wages, buying raw materials, etc. Generally these loans have long term maturity but their interest payment should be done in a specified periods during year for example quarterly or at the end of March, June, September and December. Interest rate of the credit changes according to bank decisions. Firms use these loans in time of cash needs within limits granted. They also can be paid any time with receivables of the firms or access money in the cash. Firms deliver their checks or payment promise to the bank as guarantee of the loans. At the payment time, banks accept payments instead of customer and it decreases firms' credit risk at the amount of payment.

Working Capital Loans are valued with the formula below:

$$\text{PV} = \frac{\left[A(1+CIR)^n + (LL-A)((1+CFR)^{n-1})\right]}{(1+i)^n}$$

Where:

A = actual borrowings to date

LL=Loan limit granted

CIR = Contract interest rate

i = discount rate (including risk premium)

CFR = Contract commitment fee rate

n = average maturity of lines of credit

Long-Term Loans

Long-Term loans have maturities more than 1 year. Generally they are used to finance fixed assets needs of the firms or other investments. Long-term loans may have two types: Instalments or Interest only loans

The valuations of the instalment loans are same with the valuation of consumer loans. Interest rate is fixed until maturity.

The valuation of interest only loan is the value of the interest payments and principal at the maturity. Interest payments can be made biannually or annually. And interest can be changed at the interest payment time. Generally they are indexed to Libor, Eurobor etc. They can be valued with the formula below;

$$\text{PV} = \left[L(\frac{iL}{m})(\frac{PVIFA}{m^n}) \right] + \left[\frac{L}{(1+i/m)^n} \right]$$

$L(\frac{iL}{m})$ = Periodic interest payment

iL = Contractual loan rate

i = Discount rate (including risk premium)

m = Number of times per year that payments are made

n = Number of payments until maturity

4.1.1.4.3 Financial Leasing

Financial leasing is the type of the loan in which bank is the owner ır the leased machinery of equipment and at the end of the maturity, customer has the option to but equipment with the residual amount. These loans are used to finance fixed assets needs of firms. They are in the form of consumer loans or consumer leasing. But their payment risk and collaterals can be different. Since they are generally specific equipment of business machines, their market value is less than ordinary used things. And some time additional collateral may be needed to cover financial leasing.

Financial leasing valuation formula is same with consumer loans in case of instalments. It is present value of monthly payments and residual at the maturity.

4.1.1.4.4 Mortgages

Mortgage loans are long-term loans used to finance real estate purchase. This can be residential or commercial real estate. Their valuations do not differ from consumer loan from formula point of view. However, they carry higher prepayment risk when market rate is down. On the other hand, it has advantages of collaterals and capital adequacy. Mortgages are collateralised with the purchased real estate. Additionally while consumer loans need 100% weight in capital adequacy calculation, mortgages need 50% weight in capital adequacy calculation.

There are three types of mortgages according to interest and principal payments; fixed rate mortgages, Indices rate mortgages and Balloon mortgages.

Fixed Rate Mortgages

Fixed rate mortgage is traditional type of home mortgages. Its maturity changes from 10 to 30 years. Its valuation formula same with the other monthly instalment based consumer loans.

Because of longer term, value can differ from nominal value. If market discount rate changes, this will directly changes present value of 10 or 30 years' payments present value. Addition to this, the option to pay loans affects value of the loan. If customer pays some or all of the loans remaining in time of decreasing interest rates, this will take profit of bank.

Indexed Rate Mortgages

In indexed rate mortgage, interest rate is indexed to a benchmark interest rate. For that reason changes in the market interest rate does not affect value of the loan. Because of being neutral against market rates, indexed mortgages is less subject to prepayment before maturity. Indexed rate mortgages valuation is same instalment based consumer loans. Existing interest rate is accepted to calculate future payments

Balloon Mortgages

Balloon mortgage includes provisions to make large payment at the maturity. Their terms are shorter than indexed or fixed rate mortgages. Balloon mortgages have two types; Interest only loans, amortized loans.

Interest only loans needs periodic interest payments during term and principal payment at the maturity. It is valued with the formula below:

$$\text{PV} = \frac{L(\frac{i_m}{m})}{PVIFA_{\frac{i}{m,n}}} + \text{L x } \frac{1}{(\frac{1+i}{m})^t}$$

L = Loan amount

m = Payments per year

n = Number of years

$L(\frac{i_m}{m})$ = Periodic interest payment

4.1.1.5 Non-Performing Loans

Non-performing loans are the receivables that could not be collected in contractual time. Generally the receivables that could not be collected since 90 days from payment time is accepted problematic or doubtful loans. When a loan becomes non-performing loan, a provision is set for this loan. Provision amount changes according to collaterals of the loans and non-payment period. Valuation of non-performing loans is the valuation of collaterals more than loan itself. Additionally because of higher risk, the discount rate should be higher. It is valued with the formula below:

$$\text{MV} = \frac{(ECF_t)}{(1+i)^t}$$

ECF = Expected cash flow

i = Discount rate plus risk premium (Discount rate express capability of collecting

n = Number of periods (Expected collection time)

4.1.1.6 Tangible Fixed Assets

Fixed assets consist of a small portion of total assets in bank balance sheet. The bank's tangible fixed assets are the assets that are used to maintain business at the bank. Since tangible assets are subtracted from shareholders equity in the calculation of capital adequacy of the bank. It also fixes bank capital to the long-term illiquid assets. For that reason, comes countries limit bank's tangible assets ownership proportional to their shareholders equity.

Normally commercial banks carry those fixed assets below:

- Buildings and their supplementary parts
- Land for future use
- Leasehold improvements
- Furniture
- Computers and network system
- Automated teller machines (ATM)
- Computer software
- Decorations
- Other equipments

The valuation of bank fixed assets should be done cost basis more than income or market approach. Since those fixed assets are compulsory to maintain business, it is not normal to sale of those assets. Then in the valuation, replacing cost can be used to valuate fixed assets. Secondly, economic and physical life of the assets should be revised in the valuation. Again, maintenance expenses should be taken in to consideration.

4.1.1.7 Intangible Assets

Intangible assets are the assets, which do not have a physical substance. However, they are part of business and they create an economic value. Intangible assets are defined for tax purposes because of their depreciation case but not all of the intangibles depreciate in real manner. Moreover, they may appreciate as time passes.

4.1.1.7.1 Core Deposit

Deposits are borrowing of banks from households. Although deposits are liability of the bank, it can be intangible assets in some cases. Main business of the commercial banks is to collect deposits and to place those deposits as loans. To collect customer deposits is something

different from to borrow money from a financial institution. It takes time to earn people credibility and to convince people to lend their money to bank needs time. In addition to this, banks should have a wide branches network, advertising, well educated staff and others. Because of this base of customer deposits, that can be and asset of the bank.

Not all of the deposits can be assumed as core deposits. Core deposits should have long life and stable structure. In this case, only demand deposits and time deposits can be assumed as core deposits. Certificate of deposits cannot be thought as core deposits. In addition, deposits with high volume, high interest rate, and short term are not core deposits. Holders of these deposits are continuously search and bargain about higher interest rates or extra economic benefits. When bank decrease interest rates, firstly, those depositors leave the bank and this can face the bank with unwanted situations because of outflow of these big funds. As it is seen, to define core deposits is not so easy. Valuation of core deposits is more difficult than this. There are some approaches to value core deposits.

Cost Saving Approach

The cost saving approach is the difference between cost of core deposits and cost of other borrowings. In the calculation, Future cash flows are calculated according to average period of core deposits, retention (percentage of deposits which is renewed at the maturity, for example if a bank collects 1.000.000 US$ deposits, and in the amount of 750.000 US$ is renewed at the maturity, retention rate is %75) maturity, and rate of growths. Costs of these cash flows are calculated. (These costs include not only pure interest but also maintenance and other expenses related with customer deposits such as deposits premiums). Total cash flows are discounted with alternative cost of borrowing. The difference of present value of those cash flows and amount of core deposits base is core deposit premium. (Annex 1.6: 1.7)

Future Income Approach

The difference of future income approach comes from using income of these deposits as discount rate. Discount rate should reflect both income of the placement and risk-factor. For example, we use deposits to extend loans. Loans have higher interest. However, some of the loans become bad loans. The bad loans percentage also should be taken from income of the loans. Application of future income method is difficult than the cost saving approach. Because calculating income of the deposit is not easy. For example, not all of the deposits are given as loans. Some of them are placed in to fixed income securities; some of them are placed as deposits at other banks. In this situation, a good composition of assets return should be calculated and an income rate should be used as discount rate. (Annex 1.8)

4.1.1.7.2 Safe Deposit Contracts

Commercial banks have safe deposit boxes in their branches. Banks rent these boxes to the customers against monthly or yearly fee. The cost of boxes is smaller comparing fees generated from these boxes. Moreover, depreciation of safe deposit boxes continues although their accounting life is over. The generated fees amount exceeding the cost of safe deposit boxes creates an intangible asset for the bank.

The safe deposit boxes intangible assets are not booked in the financial statements. This asset should be separately checked to analyse and value future cash flows.

4.1.1.7.3 Banking System Software

The main banking system of the bank is an intangible asset of the bank. In spite of there is no physical substance; bank cannot continue its operations without its banking software. The quality and usefulness of the software is directly affect bank operations quality and its operational risk exposure. Accordingly, the main software should be eligible to get completely related information in the analysis of credit and market risks as well.

Bank software is booked in the bank accounts. It generally depreciated in four years but its economic useful life can be more than this. Moreover, if the bank has rights to patch main system without having additional costs, its intangible assets value will be higher than booked amount.

4.1.1.7.4 Trust and Mutual Funds Accounts

Customers conserve their bonds and similar securities in banks trust account. The amounts of these securities are not shown in bank assets and liabilities since they are still under customer belongings. However, banks get periodic fees to offer this service from customers. Besides when these securities mature, banks make collection on behalf of customer. Then either this collection is put on customer demand deposit or new securities are bought with the brokerage fee of the banks. Both will generate a fee and income for the bank, which will create an intangible for banks.

Commercial Banks establishes mutual fund accounts for the customers. Their legal entity is independent from bank legal entity. For that reason, the securities in the funds are not shown in bank assets. Banks sells the shares of the mutual funds to their customers as an additional product. Bank will not generate a fee from customers but they get management commissions from these mutual funds.

4.1.1.7.5 Goodwill

Goodwill describes the market value of a business entity not directly attributable to its tangible assets and liabilities. It reflects the ability of the entity to make a higher profit than would be a normal on the tangible assets; either now, or expected in the future. If a firm paid to its

investment more than its fair value, the difference between the amount paid and fair value of that investment is goodwill of the firm.

Goodwill is not intangibles special to commercial banks. Any firm may have a goodwill if they purchased and investment with a price different from net fair value. Nevertheless, banks generally own financial firms to diverse their products and exposure. If the bank establishes a firm, than there will be no goodwill in its books but there is an investment, which generates profit or loss for the bank. In the analysis of the bank financials, this situation should be checked and other entity's financials should be tested for goodwill.

Goodwill may be either positive or negative value. If it is positive, it is booked in bank assets. Then this means bank paid more than fair value of the investment against future profit expectations. This future expectation should be checked that whether firm is generating profit as bank expected or not. Otherwise, there should be provision for the bank. On the other side, bank may have depreciated its goodwill in its book but bank may still have that investment which continues to generate profit. In this situation, goodwill will be an intangible asset of the bank, which is equal to its discounted expected future cash flows.

4.1.1.8 Investment

The investments of firms may have in the form of associates and subsidiaries. The main bank keeps records of investment by cost method or equity method.

In cost method, bank records how much it invested to the associates. Main bank does not look at associate's value. If bank does not have more than 20% of the associates or significant influence in the management, then cost method can be used.

The equity method is used if main bank carries more than 20 % of the shares of significant management power on investment. In the equity method, bank records not only payments to investments share capital, but also changes in the value of shareholders equity of investments from its retained earnings.

The valuation of investments in the form of cost method can be done by market price if associates are publicly held company. If not, cash flows can be used to valuation. The cash flows consist of dividend from associates.

4.1.1.9 Deferred Tax Assets

Deferred tax assets show temporal differences between local tax regulations and IFRS balance sheet. The deferred tax assets mean that bank have paid more tax comparing its IFRS record but will deduct this amount at the future. For example, valuations of held-to-maturity securities are done on IRR basis. But if tax regulation forces banks to value their securities according to their market value in case of market value is higher that IRR value, then the

difference will be treated as a deferred tax asset. This difference will be deducted during life of the security. At the end, tax amount will be same both IFRS point of view and tax point of view. Deferred tax assets should be analysed according tax planning of the bank.

4.1.1.10 Other Assets

Other assets show the items that cannot be classified according to items above. The list below shows some of the other assets;

- Advances and deposits given
- Real estate to be sold
- Prepaid expenses
- Inventories
- Receivables other than ordinary activities

The valuation of other assets changes from one to another. For example real estates to be sold should be evaluated according to market values. Inventories, advances and deposits given can be valued at book value. Receivables other than ordinary activities need check of quality of borrowers.

4.1.2 Analysis of Liabilities

Liabilities are the sources of assets. There are mainly four types of liabilities; Customer Deposits, Bank Borrowings, Loans and Shareholder's Equity. The main element of the liabilities is customer borrowings. Customer borrowings measure the share of the bank in the sector.

Composition of liabilities is very important in banking. Despite bank utilizes the margin between interest taken and interest given, banks are not free to borrow as much as they can. There are capital requirements and restrictions to protect householder's deposits. By this way, leverage and risk amount of banks are limited by their government agencies.

Generally average duration of the liabilities are the shorter than assets. Bank tries to match their assets and liabilities average duration by means of derivative instruments and other hedge instruments.

The book value of the liabilities and their present are very close to each other because of shorter maturity. Moreover, their valuation is easier than assets since they do not carry default risk.

4.1.2.1 Customer Deposits

The main liability of the commercial banks is the customer deposits. Deposits are lending of the customers to the bank, in which interest rate and maturity are specified before. In some

cases, interest rates can be indexed to market interest rates. For valuation purpose deposits can be separated in to two types;

4.1.2.1.1 Non Interest Bearing Deposits

Non-interest bearing deposits are also called demand or current deposits, which can be withdrawn without noticing bank. This withdrawal can be either by ATM, cheques or cash desk. Since non-interest deposits are not calculated interest, nominal value of the deposits and fair values are the same. Non-interest deposits are the most profitable sources of the commercial banks. Non-interest deposits holders can be individuals, companies or other organizations with different objective.

4.1.2.1.2 Interest Bearing Deposits

Interest bearing deposits are the type of deposits, which carries certain maturity and interest rate. They are also called saving account or time deposits. Interest bearing deposits serves saving needs of the individuals or companies. Since interest bearing deposits carries accrued interest, these deposits can not be withdrawn without notice. On the other hand, if deposit holders decide not to claim accrued interest, banks pay principals of the account.

Deposits account are not normally transferred or sold to other banks. But its fair value is different than nominal value because of the accrued interest. In IFRS reporting, principal and the amount of interest, which will be paid at the maturity, is discounted with the market with interest rate it self. For valuation purposes, market interest rates can be used to discount deposits.

4.1.2.2 Certificate of Deposits

Certificate of deposits are savings certificate entitling the bearer to receive interest. A CD bears a maturity date, a specified fixed interest rate and can be issued in any denomination. CDs are generally issued by commercial banks and are treated as deposits. The term of a CD generally ranges from one month to five years. The difference of CD is that the CD is not renewed at the maturity without demand of CD holder. Secondly, CD can be transferred to third parties with the endorsement.

The valuations of CD’s are different than ordinary time deposits. Firstly, they carry high volume and interest rate. For that reason, bank prefers ordinary time deposits instead of CD’s.

The way to discount CD’s is written on the CD, which involves penalties. The valuation of the CD can be done according to those provisions before maturity. At the maturity, principal and interest are paid to the CD holder.

4.1.2.3 Bank Borrowings

Bank borrowings are the short term borrowing of the banks with certain maturity and interest rates. Bank borrowings are used to satisfy short-term liquidity needs of the banks. The

lender can be a bank or an interbank institution. Bank borrowings generally include lower interest rate of floating rate. However bank borrowings cannot be preferred as sources of funds because of short term and lack of customer loyalty. The fair values of the bank borrowing are close to nominal value because of short term.

4.1.2.4 Loans Received

Commercial banks accept long-term loans from other banks or financial institutions. The most used forms of these loans are syndicated loans or foreign trade agency loans. A syndicated loan (or "syndicated bank facility") is a large loan in which a group of banks work together to provide funds for a borrower. One lead bank takes a small percentage of the loan and syndicates the rest to other banks. The syndicated loan can be given general or specific purpose such as foreign trade transactions. Generally, long term-syndicated loans are floated interest rate with basis points (for example Libor + 200 basis points). Payment plan can be different; such as biannually interest payment and principal at the maturity or there can be grace period.

Foreign trade agency loans are loans to support import from a certain country or to support exports of a specific countries. In this type of loans, Eximbank does not take customer risk. Instead of customer risk, they take bank risk. The agency bank borrows from Eximbank and lends those loans to the companies that compatible with the loans provisions. The difference between borrowing and lending rate is the profit of the agency bank.

Syndicated loans and foreign trade agency loans are valued according to their cash flow and they are discounted with the rate of loan itself.

4.1.2.5 Deferred Tax Liabilities

Deferred tax liabilities are the opposite of the deferred tax assets. It shows temporal differences between P&L result of the financials and tax regulations. Deferred tax liability is today’s financial tax burden but will be paid at the future. The valuation of tax liability is done according to future cash flow discounting with market interest rate. In fair value, accounting it is also recorded in that discounted basis. For that reason, it is very close to value in financials.

4.1.2.6 Retirement Benefits

Retirement benefits are financial support of companies to their employees. An independent trust is set to collect funds and to place funds. Payments to employees are done through trust. The retirement plan in liabilities shows obligations of the companies, which will be paid to the trust.

The amount is result of actuarial calculations according to past year’s realizations and to the provisions related with companies support. For that reason, figure can be thought as fair value of the companies’ obligations.

4.1.2.7 Shareholders Equity

Banks works with a smaller share of shareholders equity to their total liabilities. This is because of their way to earn money. They take deposits and lend this money as loans and securities. As long as banks marginal cost of deposit is higher than marginal return of the loans, bank will earn profit. Nevertheless, as it is said above, this is not endless. There are two reason of this; firstly, when banks increase their deposits, their marginal cost of deposit will increase because of physical limits (limited number of branch, employees, etc.) or bank will have to pay more to the additional borrowings. Secondly, government agencies limit bank's borrowing ratios both for the risk management purposes and to protect deposits of the depositors. This is said capital adequacy.

The general accepted capital adequacy level is 8%. This means banks have to keep capital as much as 8% of their risk-weighted assets. If the banks capital level is below than that, bank is obliged to increase their capital or decrease risk-weighted assets.

4.1.3Analysis of Off-Balance Sheets

Off balance sheet items are financial assets and liabilities that are not directly reflected to balance sheet. In case of net asset valuation, off balance sheet assets are important. Off balance sheets assets are uses of bank credibility against third party bearer for commission income purpose. By this way, bank earns commissions without having cash out. But bank may have possibility to have cash out against demand of bearer.

Secondly, banks may enter derivative transactions either in speculative purposes to get profit or to eliminate its balance sheet from credit and market risk. On the other hand, derivatives transactions may also result with market loss and credit defaults instead of getting profit or hedge bank itself. In the analysis of bank, outstanding derivatives transactions should be tested against credit default test addition to market profit and loss. Especially OTC derivatives may be faced with credit defaults.

Thirdly, increasing number of loan sold continues to be carried in the off balance sheet. Commercial banks sell the loans when they need liquidity or to get capital gain from decreasing interest rates. If the buyer of the loans sold has the right of recourse the bank in case of defaults, bank is obliged to compensate these loss (this amount changes according to sale contract) which is obligation of the bank which will be carried until loans matures. Especially mortgage loans are very liquid in the secondary market. In the analysis, both credit default analysis of the customers and real estate market, which is correlated with mortgage defaults, should be done.

4.1.4 Analysis of Bank Income

The bank income is the main carrier of the bank. If the bank does not have capacity to earn profit, then bank may be faced with liquidation. Since the valuations of firms are done according to future income expectations, then net profit from operations will decide the value of the bank.

In first years of establishment banks generally generate operating loss until reaching economy of scale. This type of banks should be analysed not only according to their operating activities but also more importantly than this, should be analysed if they reach their volume targets. If the bank is getting reach to its volume targets (especially total customer deposits) then the margin between interest gain and interest expense should be analysed. The decrease in negative margin means the bank may recover its establishment loss in following years. On the contrary, there is an increase in negative margin will lead a loss of capital invested and the strategy of the bank should be analysed again.

4.1.4.1 Net Interest Income

Net interest income is the difference between bank interest income from loans, fixed income securities or bank placements and interest expenses paid to customer deposits, bank borrowings, loan received etc. Net interest income is the result of the banks' main activity, which is to collect funds with lower interest rate and to place funds with higher interest rate. Net interest income also composes biggest part of the banks income.

There are two factors affecting net interest income; first, interest rate spread between funds collected and funds placed, second, the difference between interest earning assets and interest bearing liabilities. Banks, which have higher shareholders equity and low non-interest earning assets, will have higher net interest income. But this should be thought as a use of capital instead of customer funds. Since the capital is the most expensive sources of the liabilities, analyse should be renewed with adding cost of capital to the interest expense.

When analysing banks net interest income firstly profitability should be analysed. The average weighted interest rate of the interest bearing liabilities and average weighted interest rate of interest earning assets. The spread will give profit-earning base of the bank.

Secondly, amount of interest sensitive assets and liabilities should be taken. If this difference is minus, this will show extra capital needs of the bank.

4.1.4.2 Non Interest Income

Non-interest income comes from two main operations of the banks; first, the commissions and fees from services and second, treasury activities from foreign exchange trade and securities trade.

The commissions and fees also have two types; commissions and fees from services such as money transfers, account fees etc and commissions from cash and non-cash loans. The second one comes from risky operations from bank. Bank should try to increase first type of commissions, which will just increase profit of the bank. Second type of commissions is the function of bank risk base.

Treasury activities also create income but at the same time may result with the loss. Bank should not mix dealing activities and brokerage activities. Bank should expect fees or spreads from brokerage activities. But dealing activities can affect bank net interest income also. When a bank buys a security with higher price than market, bank will not have loss next day. Instead, bank will have higher cost and lower interest base. Additionally the positions come from dealing activities will change bank risk weighted assets and liquidity.

4.1.4.3 Non-Interest Expense

Non-interest expenses come from bank's operational expenses, staff expenses and commissions' expenses.

Operational expenses can be in two forms; cash and non-cash expenses. Cash expenses are; rents, electricity, water, gas, stationary, advertisements, protocol expenses and others. Non-cash expenses are; depreciation and amortizations of the tangibles and intangibles through useful life.

Commissions paid are fees paid to correspondents, clearing centres etc. These fees directly related with the business volume.

Staff expenses are the biggest part of the non-interest expenses. This is also related with bank business volume. When bank try to increase volumes, firstly increasing branch network comes in to mind. But staff in the head office should be in the minimum for the productivity. In order to increase productivity, bank should invest infrastructures and especially software that will decrease the need of extra staff.

4.1.4.4 Provisions

Provisions show risk degree of the assets or possible losses from operations. Bank leaves provisions if a credit is not paid in 90 days from contract written payment date. The collaterals and risk should be compared and collections possibility should be analysed. The amount of provision is left according to these criteria. However various countries compel bank allocate 100 % provision if credit is unpaid after 1 year.

4.2 CAMEL Model as an Integrated Bank Analysis Instrument

The Ratio Analysis has been widely used in analysing and evaluation banks. National Credit Union Administration (NCUA) firstly adopted the CAMEL rating system at 1987 to provide accurate and consistent assessment of the credit unions. Although it is intended to use internal tool

to measure risk and allocate resources, the outside financial analyst, rating institutions and stockowners also used camel system to compare banks and to see their performance.

The Camel system focuses on measuring performance of five areas; Capital Adequacy, Asset Quality, Management, Earnings, and Liquidity by key ratios. In practice, these key ratios change from examiners to examiners. The key ratios and figures measures quantitative aspects of the areas but there are also qualitative aspects, which cannot be measured from financials.

4.2.1 Capital

Measuring capital is to provide seeing risk volume of the banks. This is one of the main indicators, which official examiners use to decide if bank has enough capital to continue business. In measuring capital level, examiners look at interrelations with the areas below:

- Capital level and trend analysis
- Compliance with earnings transfer requirements and risk based net worth requirement
- Composition of capital
- Interest and dividend policies
- Adequacy of allowance for the loans
- Quality, type, liquidity and diversification of assets
- Loan and investment concentrations
- Growth plan
- Ability of the management to control and monitor risk, including credit and interest rate risk
- Stable historical and current earnings performance enables banks to fund its growth and maintain strong capital
- Liquidity and fund management
- Fields of membership
- Economic environment,

The key ratios to measure capital as follows:

- Net Worth / Total Assets
- Total Non-Performing Loans / Net Worth
- Solvency Evaluation
- Classified Assets / Net Worth

4.2.2 Asset Quality

Asset quality measures asset management performance of the bank. It shows level of the bad loans and non-interest earning assets, which determine bank profit earning base. Asset quality is rated according to interrelations to areas below:

- The level, distribution and severity of classified assets
- The level and composition of no accrual and restructured assets
- The ability of management to properly administer its assets, including the timely identification and collection of problem assets
- The existence of significant growth trends indicating erosion or improvement in asset quality
- The existence of high loan concentrations that present undue risk to the credit union,
- The appropriateness of investment policies and practices
- The investment risk factors when compared to capital and earnings structure
- The effect of fair (market) value of investments versus book value of investments

The key ratios to measure Asset Quality as follows:

- Non-Performing Loans / Total Loans
- Net Charge Offs /Average Loans
- Fair (Market) Value / Book Value (for investments held to maturity)
- Unrealised Gains or Losses of Available for Sale Securities / Cost of Investment Available for Sale
- Non-Performing Loans / Total Assets

4.2.3 Management and Productivity

Management is the forward-looking indicator of condition and a key determinant of whether a credit union is able to correctly diagnose and respond to financial stress. The management component provides examiners with objective, and not purely subjective, indicators. An assessment of management is not solely dependent on the current financial condition of the credit union and will not be an average of the other component ratings.

- Adequacy of the policies and procedures covering each area of the credit union's operations (written, board approved, followed),
- Budget performance compared against actual performance,
- Integration of risk management with planning and decision-making,
- Responsiveness to examination and audit suggestions, recommendations or requirements,

- Adequacy of the allowance for loan and lease losses account and other valuation reserves,
- Appropriateness of the products and services offered in relation to the credit union's size and management experience

As discussed above, to measure management is qualitative more than quantitative. On the other hand, some ratios below can be used to evaluate productivity of the banks:

- Deposits / Number of Employee
- Loans / Number of Employee
- Total Assets / Number of Employee
- Income / Number of Employee
- Non Interest Expenses / Number of Employee
- Deposits / Number of Branches
- Loans / Number of Branches
- Total Assets / Number of Branches

4.2.4 Earnings

The continued viability of a credit union depends on its ability to earn an appropriate return on its assets. It enables a credit union to fund expansion, remain competitive, and replenish and/or increase capital.

In evaluating and rating earnings, it is not enough to review past and present performance. Future performance is of equal or greater value, including performance under various economic conditions. Examiners should evaluate "core" earnings: that is the long-run earnings ability of a credit union discounting temporary fluctuations in income and one-time items. A review for the reasonableness of the credit union's budget and underlying assumptions is appropriate for this purpose.

- Level, growth trends, and stability of earnings, particularly return on average assets
- Quality and composition of earnings
- Adequacy of valuation allowances and their affect on earnings
- Future earnings prospects under a variety of economic conditions
- Net interest margin
- Net non operating income and losses and their affect on earnings
- Quality and composition of assets
- Net worth level
- Sufficiency of earnings for necessary capital formation

- Material factors affecting the credit union's income producing ability such as fixed assets and other real estate owned

The key ratios to measure Earnings as follows:

- Return on Average Assets
- Net Operating Expenses/Average Assets
- Fixed Asset /Assets Gross Income/Average Assets Cost of Funds/Average Assets
- Net Margin/Average Assets
- Cost of Funds/Average Assets
- Operating Expenses/Average Assets (excludes provisions, and cost of funds)
- Provisions Expense/Average Assets
- Net Interest Margin/Average Assets (excludes other operating and fee income)
- Operating Expenses/Gross Income (excludes provisions, and cost of funds)

4.2.5 Liquidity and Assets & Liability Management

Asset/liability management is the identification, monitoring and control of (a) interest-rate risk sensitivity and exposure; (b) reliance on short-term, volatile sources of funds, including any undue reliance on borrowings; (c) availability of assets readily convertible into cash; and (d) technical competence relative to asset/liability management, including the management of interest-rate risk, cash flow, and liquidity, with a particular emphasis on assuring that the potential for loss in the credit union's activities is not excessive relative to its capital. In short, asset/liability management is the process of identifying, measuring, monitoring, reporting, and controlling interest rate and liquidity risks (balance sheet risks).

- Interest-rate risk exposure at the instrument, portfolio, and balance sheet levels
- Balance sheet structure
- Qualifications of risk management personnel
- Earnings and capital trend analysis over changing economic climates
- Liquidity management
- Contingency planning to meet unanticipated events
- Policies and risk limits
- Business plan, budgets, and projections
- Integration of risk management with planning and decision-making

The key ratios to measure Liquidity and Asset & Liability as follows:

- Net Long Term Assets /Assets
- Regular Shares / Total Shares and Borrowings

- Total Loans /Total Shares
- Total Loans / Total Assets
- Cash + Short-term investments/Assets, (short term investments are less than a year based on average days to remaining maturity)
- Total Shares, Deposits, and Borrowings/Earning Assets
- Borrowings/Total Shares and Net Worth,
- Estimated Loan Maturity in Months

4.3 Credit Risk Valuation

Valuation of credits (either in the form of loans or bonds) presents difficulties because of risk level, tax issues. (Dermine 1985, 1987; Dermine and Hillion 1992) Putting tax aside, if there were no risk of repayment of principals and interest receivables at predefined maturities, the market value of the credits would be equal to discounted cash flows from those credits with the current risk free rate. However, normal life is not so easy in that. Banks place their funds both with risk free government bonds and loan and corporate bond and receivables as well as individual or small business enterprises loans. In that situation, measurement of risk size of the credits appears as important need to find appropriate discount rate to value truly.

The credit risk affects bank value. Banks are concerned about their loan customers repaying loans back, by this way the value of the bank can be maximized. In order to protect bank shareholder's interest and to maximize bank value, banks must investigate and monitors their loan customers. This is also their duty to against deposit customers and government in order to protect their insured deposits. By this way, banks execute a duty of "delegated monitors" against deposit customers.

Commercial banks are faced with some dangerous situation in lending. One of them is "agency problems" in which banks are principals and loan customers are agents. This problem arises between principals and agents because parties cannot easily control and observe each other. Secondly, there is a danger of "moral hazard" in which loan customer think not to pay loan taken but he shows reverse of this to the bank before loan granted. Thirdly, "adverse selection" may arise in analysing loan customers, bank may decide on high-risk customers instead of lower risk customers. Fourthly, "asymmetric information" may arise when there is a unequal information in the process of lending. Loan customers (insiders) know that what they would do the loan granted or real default risks of loan, but banks (outsiders) are restricted just with information publicly available or information, which presented to bank from loan customers.

Although the need of measuring risk level of credit has been one of the most engaging business of banking, the theoretical roots of the modern credit risk management was introduced with E. Altman studies in 1960's. Altman studies focused on finding key ratios to estimate default risk of companies. As a reaction to the *'univariate discriminant'* analysis of Beaver (1967), in which default is estimated based on a number of financial ratios of paired sample of defaulting and non-defaulting companies, Altman introduced statistical multivariate analysis to predict default structure of the companies. This model is said Z - score model. As time passes, there have been another studies based on Altman Z –score model. Altman also updated his model, which takes financial reporting standards in to account, which is called Zeta analysis. Altman's MDA (Multiple Discriminant Analysis) had been dominant in the measure of credit risk until 1980's.

After Altman's MDA model, his model is replaced with less statistical techniques demanding models; Logit Analysis (Ohlson 1980), Probit Analysis (Zmijevski 1984) and Linear Probability Modelling. Ohlson used financial ratios to predict default of firms. These models helped to discover of conditional probability models. (Zavgren, 1983-1985, Doumpos & Zopoudinis, 1999) conditional probability models (CPM) depend on combination variables, which distinguish best between the group of defaulting and non-defaulting firms.

CPM uses non-linear maximum likelihood estimation in order to get default conditional on a range of firm characteristics. The '*Logit'* models assume logistic distribution while *'Probit'* models assume cumulative normal distribution.

The classical models of credit risk measurement are explained above. More than these models there are newer models to measure credit risk. These models use financial theory and market information to estimate default probabilities. In this area also there are number of research. We can classify newer models as follows; Term structure credit risk models, Mortality rate models, *'Raroc'* models and Option models.

Term structure models based on market risk premiums are used to impute implied probabilities of default. Model firstly used by Jonkhart (1979) studies. Litterman and Iben developed the model in 1989. Model tries to derive implied risk rates by looking risk free and risky bonds in the market.

Mortality models have been developed by Altman (1989) and Asquith, Mullins, and Wolff studies (1989). These models try to derive actuarial type probabilities of default from past data on bond defaults by credit rating and years to maturity. Then models extended to loans as well as corporate bonds.

Bankers Trust in 1970 first used the Raroc model. Raroc approach was developed to analyse performance and shareholder's value maximization and to measure real profit among

separate bank units. The model then developed to price and measure credit risks. The idea here is to measure and calculate return of the loans according to their risk together with capital invested. Raroc models also use imputed credit scores from market data.

Option pricing models finds its roots on the studies of Black, Scholes and Merton. The model depends on the idea of if borrower's project fails so that it cannot repay the bondholder or the bank, it has option to default. Then rest of the net worth will be belonging of the bank. Against this, if project goes well, it will repay the debt and will keep rest of the net worth. The KVM Corporation used this idea in developing their model of KVM Credit Monitor. The classical and newer credit risk models explained below in detail:

4.3.1 Valuation of Individual Risky Loans and Bonds

The valuation of individual risky loans and bonds are explained above together with literature survey. Those models do not take correlation between firms in the credit portfolios of the banks. Each firm is individually measured by firm's own financial and market position. The individual models mostly appropriate for big loan customers in that cost of risk measure have feasibility.

4.3.1.1 Default Risk Models

Default risk models are used to price or value loan portfolio if there is no rating grade or these type of publicly available risk information about borrowers. Although there is many default risk models, they can be grouped in to six sub models; they are Qualitative models, Credit Scoring Models, Term Structure Derivation of Credit Risk, Mortality Rate Derivation of Credit Risk, Raroc Models, and Option Models of Default Risk. (Saunders, Cornett, 2006)

4.3.1.2 Qualitative Models

If there is no publicly available risk information about borrowers, there may be other type of private information about borrowers to Asses their risk grade. This information can be financial assets of the borrowers at the bank or information taken by central credit record bureaus. Generally, this information is about current debt of the borrowers and their financial strength to pay debt back. Such information can be borrower-specific factors or market specific factors

4.3.1.2.1 Borrower Specific Factors

Reputation of the borrower is one of the most important factors in lending, which shows lending history of the borrower. Since this information is acquired throughout time, old firms are assessed less risky and get lower interest rate comparing newer companies. (James, Weir, 1992)

Leverage of the borrower (ratio of debt to equity) shows capacity of the borrower to carry debt. Although high leveraged firms show management efficiency, large amount of debt increases risk grade of the borrower.

The firms having highly **volatile earnings** increases risk premium**.** Since firms pay interest and principals off the debt with its earnings, if there are volatilities of the firm earnings, this mean there may be problems in paying back loans. For this reason, new companies and seasonal or high technology companies pay higher interest comparing firms with fixed earnings or classical industrial companies.

Collaterals of the borrowers are the key component in lending process. For example, cash collateral loans almost guarantees granting loan with just a bit higher than cost of the bank. Liquid collaterals decrease risk premium of the loans. Nevertheless, un-liquid collaterals increases risk premium of the loans ceteris paribus.

4.3.1.2.2 Market Specific Factors

The Business Cycle is very important to Asses default of borrower. For instance, in the time of recession, engineering firms or durable goods manufacturing and commerce firm's risk increase. Each firm should be assessed according cyclical situation of the economy.

The level of Interest Rates also play important role in the risk assessment of borrower firms. The increasing interest rates increase default probabilities borrower firms. The firms working with high leverage carry higher probability of default when interest rates increase.

Sinkey (1998) puts five "C" subjective factors, which overlaps with Saunders's qualitative factors written above;

- Character (Willingness to pay)
- Capacity (Cash Flow)
- Capital (Wealth)
- Collateral (Security)
- Conditions (Economic Conditions)

4.3.1.3 Credit Scoring Models

Credit scoring models are the quantitative risk measurement models based on previously decided specific criteria, which show borrowers financial strength and ability to pay loans back. Credit scoring models work as if they are rating companies. The result of the model after borrower's specifications executed, gives the risk point of the customer and if borrower is available to be granted loan. The efficiency of the models is up to parameters, which put in to models to evaluate customers. Additionally parameters should be differentiated according to loans to be granted. For example, the commercial loans models would be based on parameters, which try to measure financial strength of the company and cash flow capacity to pay interests and principals while consumer loan credit scoring models would be based on parameters, which try to

measure if borrowers have fixed monthly income to pay instalments and enough collateral to secure debt. The result of the consumer credit scoring models gives answer of the question to grant credit more than individually measuring applicant's risk.

According to result of Federal Reserve Board Working Paper (Berger, Frame, Miller, 2002) the use of credit score models in the lending small business companies, banks succeed to:

- Reduce costs more and / or gain greater improvements in accuracy than at earlier points.
- Expand small business lending to more "marginal borrowers" than earlier points in the years of 1995 – 1997 in U.S. banking system.

This research also shows that banks are increasingly use credit score models in risk measurement. By this way, they succeeded to gain marginal borrowers. Before this, they were avoiding lending small business companies because of lack of measurement possibility of credit risk.

4.3.1.3.1 Linear Probability Model and Logit Model

Linear probability model use past data like key financial ratios to explain repayment experience on old loans in order to estimate default probability at the future. Briefly, model divides old loans into two observational groups; Defaulted and not defaulted. In addition, two observations are related with linear regression.

Probability of default (PD) = $\sum nj$ =1sßjXij + error

Where ß is the estimated, importance of the jth is variable in explaining past repayment experience.

Then E (PD_i) = (1- p_i) = expected probability of default where pi is the probability of repayment on the loan.

4.3.1.3.2 Linear Discriminant Models

Discriminant models divide borrowers into high or low default risk classes contingent on their observed characteristics. The model first developed by Altman in 1968. (Altman, Sabato, December 2005). He used multiple discriminant analysis technique (MDA) to solve inconsistency problem of univariate analysis and to assess a more complete financial profile of firms. His analysis was on a matched sample containing 66 manufacturing firms (33 failed, 33 none failed) that filed bankruptcy petition during 1946-1965. Altman found 5 key financial ratios among 22 potential helpful ratios in order to predict corporate bankruptcy. Those variables classified in to five Standard ratio categories; liquidity, profitability, leverage, solvency and activity ratios. His discriminant function was as follows;

Z=1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5

Where;

- X1= Working Capital / Total Assets
- X2= Retained Earnings / Total Assets
- X3= Earning Before Interest and Taxes / Total Assets
- X4= Market Value of Equity / Book Value of Long Term Debt
- X5= Sales to Total Assets

The higher value of Z score shows lower probability of default. Altman and Sabato developed another discriminant model to measure risk profile of SME companies according to Advanced Internal Rating Based Approach of new Capital Adequacy Accord of Basel II. In the process of developing model, they used financial data of 2.010 US SME companies from WRDS COMPUSTAT database in the period 1994-2002. In the model, they used financial ratios with their weight as written below;

• Leverage	Short term debt / Equity Book Value	%14, 57
• Liquidity	Cash / Total Assets	%18, 73
• Profitability	Ebitda / Total Assets	%20, 58
• Profitability	Retained Earning / Total Assets	%22, 62
• Coverage	Ebitda / Interest Expenses	%21, 10

4.3.2 Market-Based Risk Models

The market-based models are the models based on market risk premiums are used to impute implied probabilities of default from the term structure of yield spreads between default free and risky corporate securities (Cauette, Altman, Narayanan, 1998). The model based on market information use stock prices, bond prices or rating grades to measure corporate risks. The models use the idea of market efficiency. Since market is fully efficient information from market is healthy to price securities. However, the inefficient market such as emergent markets the inefficiencies may distort market-based information. Accordingly, efficient said market such as US markets has not proved that it is fully efficient and away from insider's information and manipulations.

4.3.2.1 Term Structure Derivation of Credit Risk (Intensity Based Models)

Term structure derivation of credit risk is one of the market-based methods of credit risk. The models assess credit risk exposure and default probabilities based on the risk premiums inherent in the current structure of yields on corporate debt or loans to similar risk-rated borrowers.

Rating agencies classifies borrowers according to their risk categories. Generally, the grades from AAA to BBB mean investment quality borrowers. The grades below BBB mean junk bonds with high risk of interest and principal.

Similar to risk free treasury yield curve, corporate bonds risk yield put on another yield curve, this is above risk free rate. According to these current market interest based yield curve of corporate debts, it is possible to imply risk premiums hidden in the yields of similar corporations.

4.3.2.2 Mortality Models

The mortality models analyse the historic or past default risk experience of bonds, and loans of similar category. The mortality rate models (Altman, 1989 and Asquith, Mullins and Wolf, 1989) are both depending on capital markets information. The mortality models try to find future estimation of default probability by actuarial calculations on past default and years to maturity information from Rating Agencies.

Altman (1989) studied to explore the further notion of default risk by developing an alternative way of measuring that risk and utilized that measure to assess the performance of fixed income investing strategies over entire spectrum of credit quality classes. His study tries to find expected mortality of bonds in a way similar to actuarial measurement in assessing human mortality.

Altman used Standard & Poor's Bond Guide statistics for the period 1971 – 1986 in his empirical study. In the study, made a specific cohort group and tracked that group's performance for multiple time periods. Since original population of bonds can change over time because of different reasons, he considered mortalities in relation to survival population and then he inputted the defaults to calculate mortality rates. He classified four events causing mortalities; Defaults, Calls, Sinking Funds, Maturities.

He formulated marginal mortality rate (MMR) for each year as follows;

MMR (t) = Total Value of Defaulting Debt in the Year t / Total value of the population of bonds at the start of the year (t)

When measuring cumulative mortality rate (CMR) over a specific period, he used formula below;

CMR (T) = 1 – II T t =1 SR

Where;

CMR (T)= Cumulative mortality rate in T

SR (t) = Survival rate in (t); 1- MMR (t)

In the study he showed that all bond ratings outperform risk less treasuries over a ten year horizon and that despite relatively high mortality rates, B rated and CCC rated securities out

perform all other rating categories for the first four years after issuance, BB rated securities outperforming all others thereafter. The tables of the Altman's study are presented in annex 1.9:1.13

4.3.2.3 Raroc Model

Risk-adjusted return on capital (RAROC) firstly introduced by Bankers Trust in 1970's. It is based on mark to market concept. Banker Trust defines RAROC as allocation of a capital charge to a transaction or a line of business at an amount equal to the maximum expected loss (at a 99% confidence level) over one year on an after tax basis. As volatility gets higher, capital allocated gets higher, meaning in case of increase in risk; the return also should increase proportionally to risk. The Raroc Model tries to estimate the amount of asset to carry amount of risk taken according to worst case. There are four basic steps in Raroc process; (Cauette, Altman, Narayanan, 1998)

- Analyse the activity or product and determine the basic risk categories that it contains, for example, interest rate (country, directional, basis, yield curve, optionally), foreign exchange, equity, commodity, and credit and operational risk.
- Quantify the risk in each category by a market proxy
- Using historical price movements of the market proxy over the past three years, compute a market risk factor, given by the following equation;

  Raroc Risk Factor = 2, 33 x weekly volatility x $\sqrt{52}$ x (1 – tax rate)

  In this equation, the multiplier 2, 33 gives the volatility (expresses as a percent) at the 99% confidence level. The term $\sqrt{52}$ converts number of weeks in a year, meaning yearly volatility. (1-tax rate) gives return after tax.
- Compute the dollar amount of capital required for each risk category by multiplying the risk factor by the size of the position.

Calculating completely different type of investments with their own risk structure and returns, Raroc model gives logical comparison between profit and loss among different investments.

In case of valuation of credits, financial intermediaries can decide and price different risk profiles with different prices. By this way, it is also possible to value credits according to risk and return structures on them.

Although Raroc model looks easy to apply, since all assets not having their market price, it may not be easy to find Raroc value. Additionally Raroc model does not take correlation impact in to account by which, potential risk amount can be calculated wrongly.

The Risk Adjusted Performance Measurements are presented in the annex 1.14

4.3.2.4 Option Models of Default Risk

An option is a type of contract between two people wherein one person grants the other person the right to buy a specific asset at specific price within a specific time period. Alternatively, the contract may grant the other person the right to sell a specific asset at a specific price within a specific time period. The person who has received the right, and thus has a decision to make, is known as the option buyer because he or she must pay for this right. The person has sold the right, and thus must respond to the buyer's decision, is known as the option writer. (Sharpe, Alexander, Bailey, 1998)

There are two basic option types; Call Options and Put Options. Call options gives the right to buy an asset or assets that are both quantitatively and qualitatively predefined. Put option gives the right to sell an asset or assets that are both quantitatively and qualitatively predefined.

After defining shortly, we can discuss development of options theory. Fisher Black and Scholes Myron (1973), opened a new road in corporate finance. By the way mathematically expressed in the paper made pricing of European type options very and put risk notion in a understandable manner.

Black and Scholes derived their formula from logic of arbitrage. They said, if options were priced correctly, it would not be possible to make profit from options positions either short or long. Using this principle they derived their option pricing formula. Although they made formula on common stock options, they say that this analysis can be used to price other corporate liabilities such as warrants and corporate bonds as well as common stocks. Especially they say that the analysis can be used to derive the discount that should be applied to a corporate bond because of the possibility of default, as we focused on this. When deriving their formula, they assumed ideal conditions as follows; (Black, Scholes 1958)

- The short term interest rate is known and is constant through time
- The stock price follows a random walk in continuous time with a variance rate proportional to square of the stock price. Thus, the distribution of possible stock prices at the end of any finite interval is lognormal. The variance rate of the return on the stock is constant.
- The stock pays no dividends or other distributions.
- The option is "European" that is only can be exercised at maturity.
- There are no transactions costs in buying or selling the stock or the option.

- It is possible to borrow any fraction of the price of a security to buy it or to hold it, at the short-term interest rate.
- There are no penalties to short selling. A seller who does not own a security will simply accept the price of the security from a buyer, and will agree to settle with the buyer on some future date by paying him an amount equal to the price of the security on that date.

Under the assumptions above, option value will be depend on the stock price and time on variables known constant. By this way, it is possible to have hedged position with long position of stock and short in option. In case of hedge position is kept continuously, the return on the hedged position will be completely independent of the change in the value of the stock. Then under the assumption written above, the stock price follows a continuous random walk and the return has a constant variance rate, the covariance between the return on equity and the return on common stock. As a result, Fischer Black and Myron Scholes derived formula below to price options:

$$W(x,t) = xN(d1) - ce^{r}(t^{*} - t)\ N(d2)$$

$$d1 = \ln\frac{x}{c} + \left(\frac{r+1}{2v^{2}}\right)(t^{*} - t) / v\sqrt{t^{*} - t}$$

$$d2 = \ln\frac{x}{c} + \left(\frac{r-1}{2v^{2}}\right)(t^{*} - t) / v\sqrt{t^{*} - t}$$

Black and Scholes also derived anther equation using CAPM, which is very important for our case of bond pricing. The CAPM describes the relation between risk and the return expected under market equilibrium conditions. The expected return is shows the discount that applied to find net PV of capital asset. By this way, CAPM gives method of discounting under uncertainty.

As well as common stock options, Black and Scholes applies the option pricing formulas all other corporate debts. They give an example of a company only assets share of another company. Liabilities are common stock and discount bond matures in 10 years. There in no restriction except for paying dividend before bonds are paid. Again, company plans to liquidate itself with selling whole assets and paying bonds with this and the rest to the stockholders. Under these conditions, the stockholders have the equivalent of an option on company's assets but they have given option to stockholders to buy assets back. Then the value of the common stock will be w (x,t) as the general formula of option pricing above and the value of bonds will be x- w (x,t)

As it is seen above, Black and Scholes model gave a basis to value corporate debt as well as common stock. However, usage of option pricing to value corporate debts waited contributions of Robert Merton. Merton (1973) added the assumptions below to the Black and Scholes Model:

- There are no transaction costs, taxes, or problems with indivisibilities of assets

- There are a sufficient number of investors with comparable wealth levels so that each investor believes that he can buy and sell as much as an asset as he wants at the market price.
- There exists an exchange market for borrowing and lending at the same rate of interest.
- Short sale of all assets, with full use of proceeds, is allowed.
- Trading in assets takes place continuously in time
- The Modigliani-Miller theorem that the value of the firm is invariant to its capital structure obtains.
- The term-structure is flat and known with certainty. I.e., the price of risk less discount bond which promises a payment of one dollar at time t in the future is P (t) = exp [-rT) where r is the (instantaneous) risk less rate of interest, the same for all time.
- The dynamics for the value of the firm, V, through time can be described by a diffusion-type stochastic process with stochastic differential equation

$dV = (\alpha V - C)\ dt + \sigma V dz$

Where;

α = the instantaneous expected rate of return on the firm per unit time

C= is the total dollar payouts by the firm per unit time to either its shareholders or liabilities holders if positive, and it is the net dollars received by the firm from new financing if negative;

σ^2 is the instantaneous variance of the return on the firm per unit time;

dz = is a standard Gauss Wiener process

His assumption above applied to risky corporate debt valuation as follows;

$$F(\tau) = Be^{-it}\left[(1/d)N(h1) + N(h2)\right]\ ][$$

Where;

τ = Length of time remaining to loan maturity

d = Borrowers' leverage ratio measured as Be^{-it}/A, where the market value of debt is valued at the rate i, the risk free rate of interest

Nh = Value computed from the standardized normal distribution statistical tables. This value reflects the probability that a deviation exceeding the calculated value of h will occur.

$$h1 = -\left[1 / 2\sigma^2\tau - \ell n(d)\right] / \sigma\sqrt{\tau}$$

$$h2 = -\left[1 / 2\sigma^2\tau + \ell n(d)\right] / \sigma\sqrt{\tau}$$

σ^2 = Measures the asset risk of the borrower

Again, default risk premium derived as;

$k(\tau) - i = (-1/\tau)\ell n[N(h2) + (\frac{1}{d})N(h1)]$

$k(\tau)$ = Required yield on risky corporate debt

ℓn = Natural logarithm

i = Risk free rate on debt of equivalent maturity

By this formulation, he showed the way that required risk premium in order to grant credit.

4.3.3 Valuation of Risky Loans and Bonds Portfolios

As we have seen credit risk measurement of individual corporate debts are possible in different way. Sometimes measuring individual credit risk is not so easy because of small amounts. Moreover, default of a credit may decrease or increase default risk of other credits. In this context, measuring risk of credit portfolios approaches arises.

Portfolio approaches are affected in great manner from Harry Markowitz ideas. He explained (1952) ideal portfolio composition with simple statistic terms. Although he had not been understood well that time, the increase in hedge and mutual funds made management of these funds very difficult with individual portfolio management approaches. By the way, his ideas were discovered again and new studies were done to develop his "Modern Portfolio Theory, (1959)"

Harry Markowitz measured risk with the variance in the prices of the asset. But in case of portfolio, meaning more than one investment, the variance of each asset may effect variance of other assets because of correlation among assets. This is said co-variance among group of securities. He prepared a table of variance matrix among each asset. Then he formulated that by weighing of each asset and treating them in to the co-variance matrix, the total risk of the portfolio can be found. With this formulation an investor can find targeted risk of the portfolio or targeted return of the portfolio composition.

Markowitz' ideas in measuring portfolio risk can be shown as below;

Primarily, individual return of each portfolio assets should be calculated. Then expected return ($\bar{R}_p$) of the portfolio calculated with the formula:

$$(\bar{R}_p) = \sum_{i=1}^{n} x_i \bar{R} i$$

The risk of the portfolio (σ_i^2) can be calculated as:

$$\sigma_p^2 = \sum_{i=1}^{n} x_i^2 \sigma_i^2 + \sum_{\substack{j=1 \\ i \neq j}}^{n} \sum x_i x_j p_{ij} \sigma_i \sigma_j$$

Where:

$\bar{R}_p$ = Expected or average return on the portfolio

$\bar{R}i$ = Average return on ith asset in the portfolio

x_i = Proportion of the asset portfolio invested in the ith asset (the desired concentration amount)

σ_i^2 = Variance of returns on the ith asset

p_{ij} = Correlation between the returns on the ith asset and jth asset

As a summary, in a portfolio structure of invested assets with different risk and return structures and imperfect correlations among assets, the targeted risk or return amount can be caught.

As much as advantages of the modern portfolio theory, there are disadvantages, which should be taken in to account measuring loan portfolio credit risk. (Cauette, Altman, Narayanan, 1998);

- The number of correlations calculated increase very rapidly as the number of securities (loans) being considered increase. For example, a covariance matrix of 30 different assets will have 435 different co variances.
- While correlations of equity returns are used with regard to fixed income assets is not so clear. Correlations of returns or correlations of factors explain returns? Correlations of default probabilities? Correlation of rating categories? Correlations of spreads? Equity return correlations may be measured, but correlation of default tendency is not observable. In the large corporate sector, defaults themselves are infrequent.
- Most correlations are unconditional, in that they are calculated without holding the other structural variables constant. It is difficult to model the change in correlation if the structural variables changes, or if the structure itself changes. A simple example of this problem arises when there is a sudden shock to the system (Such as the outbreak of hostilities or an oil embargo) in such situations; correlations of risk typically break down, when they are needed most.

4.3.3.1 Applications of MPT to Credit Risk Measurement

Modern Portfolio Theory has found great application in the field on fund management. Other academicians such as Sharpe have developed the studies of Markowitz. However, application of the theory has not been limited with fund management. Risk measurement of the financial institutions is one of these fields. Mean-Variance method of Markowitz' has been widely used in order to measure market risk of securities. Moreover, credit risk measurement of fixed

income assets also has been used. We already discussed advantages and disadvantages of his model in this field from Altman. Below we will discuss application of his model to the credit risk measurement of loan portfolios.

KVM Portfolio Manager

KVM Portfolio Manager Model can be seen as a full application of Modern Portfolio Theory to measure risk of the loan portfolio because of its usage of MPT key variable concepts to measure portfolio risk; Returns, Risks and Correlations. (Saunders, 1999)

Returns:

If there are no historical returns data on traded loans, the expected return can be calculated with the formula below;

R_{it} = [Spread $_i$ + Fees $_i$] – [Expected loss $_i$]

or

R_{it} = [Spread $_i$ + Fees $_i$] – [EDF $_i$ x LGD $_i$]

The return of loans can be calculated as the difference between interests applied to customer an benchmark interest cost such as Libor or Eurobor. The calculated spread is added to directly fees earned from the loan. The expected loss is the charge from banking costs from the normal credit activities. EDF (expected default frequency) is calculated from stock returns. LGD is (loss given default) generally estimated from bank database. At the equality of formulas comes from equality of expected loss to the multiplication of EDF and LGD.

Loan Risks:

If there are no historical returns data on traded loans, a loan risk (σ_i **)** can be calculated with the formula below;

σ_i = UL $_i$ = $\sqrt{(EDF_i)(1 - EDF_i)}$ x LGD

Calculation UL (unexpected loss on credits) is depending on assumptions made such as quality of credits, variability of LGD, correlation of LGD with EDF.

Correlations:

The calculation of default correlations is the most complex part changing on Default Models chosen. A joint probability of default is depending on assets values of two firms. If one of the companies shares prices decrease just because of reasons special to firm it and if there is a correlation, this relation is accidentally created.

The covariance of two firms' formula is as follows;

$$\rho_{GF} = (\mathrm{COV}_{GF}) = \frac{JDF_{GF} - (EDF_G x EDF_F)}{\sqrt{(EDF_G)(1-EDF_G)} * \sqrt{(EDF_F)(1-EDF_F)}}$$

Where;

G and F are different firms.

JDF_{GF} = Jointly distributed.

(EDF_G) x (EDF_F) = Independent distribution

Because of the reason above, KVM models try to estimate correlations based on multifactor stock return model from which correlations derived. The multifactor stock return model reflects the correlation among the systematic risk factors affecting each firm and their appropriate weights.

4.3.3.2 Partial Applications of MPT to Credit Risk Measurement

Since application of Modern Portfolio Theory to the credit risk measurement of the loan portfolio is often difficult because of lack of data, some other models tries to develop market benchmark loan data from some central database.

4.3.3.2.1 Loan Volume-Based Models

Because of Modern Portfolio Theory application to the credit risk measurement of the loan portfolio is often difficult because of lack of data, some other models tries to develop benchmark loan data from some central database.

These data provide market benchmark with this bank can compare its own credit data with central database. By comparing data, bank can check its loan allocation by sectors or types and can derive risk structure of its own credit portfolio.

When comparing loan concentrations between central database and bank data base following formula can be used;

$$\sigma_a = \sqrt{\frac{\sum_{i=1}^{N}(X_{iA} - X_i)^2}{N}}$$

Where;

σ_a = Standard deviation of 'Bank A's asset allocation proportions from the central benchmark

X_{ia} = Asset allocation proportions of the bank a

X_i = Central asset allocation

N = Number of observations

The standard deviation provides the bank a measure of degree of bank's composition deviation from central data. By this way, bank can see the efficient loan allocation (the central data which includes whole bank credit data inside) and its own allocation.

4.3.3.2.2 Loan Loss Ratio-Based Models

This partial use of Modern Portfolio Theory depends on historical loan loss data of the sector. This model tries to estimate systematic loan loss risk of a particular sector or industry. The instrument to estimate bank's own risk is to run time series regression of quarterly losses of the specific sector's loss rate with bank own loan loss data of that specific sector. This analysis can be done with the formula below;

$$\left(\frac{LoanLossoftheSectorA}{LoansGiventotheSectorA}\right) = \alpha + \beta_i \left(\frac{TotalLoanLosses}{TotalLoans}\right)$$

Where;

α = Loan loss rate for a sector that has no sensitivity to losses on the aggregate loan portfolio

β = Systematic loss sensitivity of the specific sector loans to total loan losses.

4.4 Off-Balance Sheet Valuation

Off-balance sheet items are contingent assets and liabilities that affect the future but commit bank. Often, off-balance sheet items are not being subjected to attention. Usually firms prefer publishing balance sheet and income statements but not off-balance sheet commitments. International Financial Reporting Standards find enough to show off-balance sheet items as a footnotes section in the Independent Audit Report. Additionally basic valuation models of stock market equity analysts do not include off-balance sheet items effects on future discounted cash flows.

Although off-balance sheet items have not found its important place in independent audit reports, they have very important effects on financial institutions cash flows.

According to FDIC (Federal Deposit Insurance Corporation) and OCC (Office of the Comptroller of the Currency) report of 1986 Off-balance Sheet activities of US Banks, there are some reasons creating difficult to Asses Off-balance sheet activities;

- Incomplete Reporting and Non-uniform Accounting; More detailed disclosure is needed for analysts to fully understand the risk associated with off-balance sheet activities
- Continuing Evolution and Development, Assessment is made difficulty by introduction of new off-balance sheet activities and the continually evolving nature of existing activities.

- The Complex and Technical Nature of Some Activities; Some off balance sheet activities are very complicated and difficult to comprehend. As a result, only a small number of traders and market experts may be able to assess the associated risk.
- Difficulties in Measuring and Quantifying Potential Loss Exposure; Quantifying the risks associated with these activities is a difficult task. In addition, loss exposures are frequently subject to constant fluctuations.

Off-balance sheet activities; involve risk for banks without requiring an immediate expenditure of funds. Since banking regulators increased capital requirements because of higher risk, banks have had increased off balance sheet activities especially after 1980's. However, this time risk comes from off-balance sheet activities also increased. The increase in capital ratios let banks increased their fee generating off balance sheet activities. Inadequate reporting in financial reports made very difficult for the users of bank in order to evaluate the risk. By increasing disclosure requirements, regulators hope to impose market constraints on off-balance sheet activities and avoid additional government regulation. Regulators believe that banks are more likely to exercise care in the management of off-balance sheet activities if investors are adequately informed the potential risks associated with such activities. Now we will see details of these transactions, which are presented below;

4.4.1 Guarantees and Commitments

The guarantees and commitments are the use of bank own credibility on behalf of customers. The volume of guarantees and commitments as much as other types of off balance sheet activities has been growing for years. Since banks do not use their financial sources to give guarantees and legal requirements are less than in case of cash loans, banks prefer giving guarantees and commitments. Additionally the collection of fee without increasing assets will increase bank's ROA and profitability.

On the other hand, guarantees and commitments carry risk as much as cash loans and even more in some cases. Bank should do same analysis issuing guarantees and commitments as well as cash loans. Otherwise, banks may be faced with liquidity and credit risk in case of default of guarantees and commitment's customers.

4.4.1.1 Loan Commitments

A loan commitment is a contractual commitment by Financial Intermediary to lend to a firm a certain maximum amount at given interest rate terms. The loan commitment agreement also defines the length of time over which borrower has the option to take down this loan. (Saunders, Cornett, 2006) Commercial Banks charge up-front fee in order to grant this option to the firm. By

giving this option, commercial banks commit it to supply loan amount whenever firms wants during commitment period.

Loan commitments represent put options on debt claims or call options on interest rate mark-ups. In case of borrower's own spot market, risk premium is greater than the mark-up promised in the commitment; the option is in the money, and the borrower benefits ex post at the bank's expense. By this way, a bank loan commitment is a credit risk derivative. (Shockley, Thakor, 1997)

Shockley and Thakor searched SEC data from Loan Pricing Corporation. Data were included 2.513 loan commitments from 1989 to 1990. They found that firms are using loan commitments for Commercial Paper Back-up, Liquidity, Capital Structure, General Corporate Purposes, and Takeover, Leveraged Buyout, and Debtor-in-Possession intentions. According to their findings loan commitment contracts have three main features;

- A loan commitment is an option through which the borrower receives an ex post benefit (an interest rate subsidy) in states of nature in which the option is exercised. In variable rate commitments, the subsidy is not with respect to the market wide index but rather with respect to borrower's own credit risk premium (the mark-up).
- Loan commitments are customized to meet the needs of individual borrowers. In contrast to standard risk-management tools that are predicated on market wide interest rates, loan commitments are conditioned on borrower specific variables. This raises the possibility of moral hazard stemming from the borrower's ability to manipulate the values of these conditioning variables bank's detriment. The bank responds this by incorporating MAC clause (Material Adverse Change, which gives the bank the option to escape its lending commitment under ambiguously defined conditions) and restrictive covenants in the loan commitments contract; these contract design features provide the bank a powerful tool in mitigating asset substitution and under investment moral hazard.
- Loan commitments involve a complex fee structure, which often includes an up-front fee and fee on the unused balance of the commitment. This gives bank to compensate its potential losses deriving from unused loan.

Saunders and Cornett (2006) enumerated four potential risks for loan commitments, which affect loans commitments valuations:

- Interest Rate Risk: Interest rate risk in loan commitments derives from either fixed rate loan commitments against changes in the market interest rates or variable interest rate commitments against change in interest spreads.

- Takedown Risk: Takedown risk is somewhat liquidity risk. Since commercial banks give option to borrowers to use credit during loan commitment term, bank does not know when customer will demand loan. In this case, bank should be prepared to give demanded loan upon request, which obliges to keep some amount of liquidity.
- Credit Risk: Credit risk derives from change in financial strength of the borrower. When loan committed to borrower, risk premium are calculated according to borrowers that time situation. However, a decline in the financial strength, put bank under credit risk and wrong pricing. Although commercial banks can put MAC clause against credit risk, this clauses generally applicable in case of serious decline in financial situation of the borrower.
- Aggregate Funding Risk: Aggregate funding derives when government or other externalities forces general level of increase in funding cost. This can be either increase in tax burden on loans or abnormal increase in level of spot interest rates. In this case, because of decrease in spot loan supply, borrowers become much more willing to use these credit lines comparing with previous time. On the other hand, banks are forced to use costly funds to grant previously committed loans.

4.4.1.2 Commercial Letters of Credit

Commercial letters of credit are contingent claims on bank assets. By giving these claims, banks earn fee income. As well as other contingent assets and liabilities, commercial letters of credits are not shown on-balance-sheet; instead, they are put in footnotes in financial reports. Generally, commercial letters of credits are used in international commerce. There are three parties in a commercial letter transaction; importer or buyer (bank customer), exporter or seller (beneficiary) and the bank. Banks act as if they are importers. They own risk of non-payment of purchase amount to the seller. If customer of the bank does not make payment in time, bank makes payment to the beneficiary. Seller takes risk of the bank instead of buyer.

In the banking theory, there are different motivations of banks issuing commercial letters of credit; Theory of financial intermediation says that credit-granting activities are the natural function of the banks. By giving commercial letters, banks minimize cost of asymmetries among parties (buyer and seller). Bank monitors and evaluates financial and ethical credibility of the customer and issues them commercial letters. By this way, commercial letters of credit represent a substitution of allocation of credit with supplementary in bank production. The risk-return trade-off between selling information services and warehousing assets will induce bank to divide its business between loans and commercial letters of credit. The diversification hypothesis implies

that commercial letter of credits can decrease bank's total risk except for systematic risk. (Hassan, 1992)

The leverage hypothesis says that fixed rate deposit insurance, together with capital requirements, motivates banks to increase financial leverages through commercial letters of credit, which requires lower capital requirements. By increasing financial leverage with commercial letters, bank may fund deposit insurance.

As it is seen above, although commercial letters of credit are seen as supplementary income sources without outsource and low capital requirement, it has some risks, which affect its valuation:

- Commercial letters of credits guarantees entails credit risk of the bank customer. Because the bank has to make payment in case of non payment of the customer
- Overextension of commercial letters of credit creates liquidity risk for the bank.
- A commercial letter of credit is likely to be a signal of reduced risk of the bank customer.
- A commercial letter of credit may signal higher credit standing for the bank, and reduced risk of bank's portfolio. But it is difficult to conclude a priori which effect of commercial letters of credit's risk exposure

4.4.1.3 Standby Letters of Credit

A standby letter of credit is a contractual agreement issued by a bank in customer behalf (Letter of guarantees). This is contingent liability of the bank against third party and contingent asset of the bank against customer of the bank. A standby letters of credit are not shown on the balance sheet, instead it is shown on off-balance-sheet until third party request payment of the bank. Banks demand fee income to issue standby by letter of credit. This fee is generally paid quarterly until expiry date comes. Since standby letters of credits are not shown on the balance sheet, bank profitability looks like more profitable. ROA and ROE increase if bank largely active in issuing standby letters of credit. Additionally lower capital requirement motivates bank to issue standby letters of credit as well as commercial letters of credit and loan commitment.

At first appearance, it looks a like commercial letter of credit. Like commercial letter of credit, there are three parties; bank, customer, and beneficiary. However, commercial letter of credits is firstly an instrument of payment in a purchase agreement. On the other hand, standby letter of credit requires bank commitments to the third party. If customer does not meet with the conditions of contract between customer and third party, bank is obliged to pay an amount written on the standby letter.

Generally, standby letter of credit is needed in case of tenders and construction liabilities of customer either to the government agencies or to the private companies. In addition, they find great amount of usage in the borrowings activities. Additionally it has started to find a use of area in merger and acquisitions transactions. In fact, the use of standby letter of credits grows increasingly. Third parties demand standby letters to decrease the risk of credit and losses from the actions of customers.

The standby letters of credit are also used banking cash loans issuing. Banks see standby letters of credits, which are issued on behalf them, are treated as second degree of collateral after cash collateral. These borrowing are mostly used in foreign borrowings in which foreign bank does not know the customer but knows bank issuing letter of credit on behalf of credit granting bank. By this way, firms utilize arbitrage opportunities between local level of interest rates and foreign level of interest rates. However, these types of standby by letters of credit are treated as a cash loan in case of capital requirement. At the same time, this letters carries higher risk than the letters, which are issued to guarantee the liabilities of the constructer against third party.

As it is written above, banks are willing to be active in issuing standby letters of credit because of advantages of them. Nevertheless, they carry not only return as a fee income but also financial risks. Standby letters of credit carry credit, liquidity, and capital (default) risks in a significant amount. The most important risk is off course credit risk. Other risks are also mostly related with credit risk. Banks have to measure historical payment request rate of third parties. When this ratio is multiplied with the outstanding standby letters of credit, bank roughly can estimate the amount of reserve to be kept to meet request of payment. Although historical loss ratios are lower than those on typical commercial loan portfolio are, the fact that the majority of standby letters of credit contracts lack formal collateral arrangements may point to a greater credit risk. Further probability is higher that a standby letter of credit will be called for funds when the markets for credit desert the borrower. (Johnson, Murphy, 1987) Additionally liquidity and capital risks are also possible if many beneficiaries request payment at the same time. It should be also noted that borrowers generally activate standby letters and loan commitments when the market is down and money supply is in deep.

4.4.2Derivatives

Derivative is a generic term for specific types of investment from which payoffs over time are derived from the performance of assets (such as commodities, shares or bonds), interest rates, exchange rates, or indices (such as a stock market index, consumer price index or an index of weather conditions). This performance can determine both the amount and the timing of the

payoffs. The diverse range of potential underlying assets and payoff alternatives leads to a huge range of derivatives contracts available to be traded in the market.

Derivative contracts include such agreements as interest rate, foreign exchange, and commodity forwards, futures, options and swaps.

Banks use derivatives for hedging, speculating, or selling risk management or transaction services to clients. The benefits of the derivatives come from the generation of fee income and opportunities for bankers to create value through cross-selling and enhanced customer relationship. (Sinkey, 2002)

In derivatives transactions, there are two parties. In OTC market, two parties know each other and they fix the contract details (amount, settlement time, underlying assets etc.) themselves. However, in exchange market, parties do not know each other and exchange market represents other side. Additionally, in the exchange market, the contracts are standard and parties do not change these standards.

Derivatives are main tools for risk management. Risk may either derive from on balance sheet structure (such as to restore interest gap on the balance sheet, bank may enter in to interest rate swap contract) or derive from other derivatives transactions (such as a customer request a option on US$/€. Not to carry currency risk, bank should enter €/US$ transactions.) There are two types of risk can be managed by derivatives; market risk or credit risk. Derivatives also carry those risks inside them. In the end, the derivatives are zero-sum games. The loss of the one side is equal to profit of the other side.

4.4.2.1 Futures and Forwards

Future contracts are commitments for delayed delivery of securities or money market instruments at a mutually acceptable price or yield. According to future agreements, the buyer agrees to purchase and the seller agrees to deliver a specific instrument on a pre-specified time and amount. Future contracts are done on organized exchange markets. Either party liquidates future obligation on pre-specified delivery date.

Future transactions may be done either for speculative or hedge purposes. They include high leverage. It is enough to keep a security margin amount for both parties (seller and buyer). This margin changes according to risk structure of the product or country. If the prices of the underlying security fluctuate highly, margin amount is higher. On the other hand, if a price of the underlying security does not fluctuate too much, then lower margin is possible on the market. This margin amount can be 1% of the contract amount or 20% of the contract amount.

One of the main characteristics of the future transactions is that settlement is done daily. Accounts of each party are changed according to end of day closing price. Since it is zero game, profit of the one party will be loss of the other party.

Forward contracts are very similar to futures contracts. However, forward contracts are done OTC (over-the-counter) market in which both parties know each other they fix all details themselves. These contracts are more flexible than futures since both parties put conditions. Additionally they can terminate the contract if both parties want.

The main motivation of the futures and forward transactions is to cover and manage the position comes from balance sheet. The position may come from reprising maturity or foreign exchange. Forwards and futures let commercial banks close or hedge their position without using their liquidity.

Both futures and forward contracts carry financial risk on them. The main risk is the market risk of the underlying assets. Moreover, credit risk is also possible according to financial strength of the counter party. However, credit risk is largely eliminated in futures because of margin amount kept in exchange. However, credit risk is also possible for future transactions in specific cases.

Forward contracts carry credit risk. Although parties' do not exchange principal amount until maturity, in case of default of one party, other party will be exclusive from unearned profit or will have burden of un-hedged position. For this reason, parties may demand also margin amount like futures in some forward agreement.

The valuation of forwards and futures are depending on their market value. Since these contracts have mainly traded underlying assets, their accrued income or expense put on the balance sheet and income statements. Nevertheless, credit risk of the parties also should be considered and added to discount rate in case of valuation.

4.4.2.2 Options

Option contracts give their purchaser the option (not obligation) to sell or buy a financial instrument at a specified time or during specified period. In the option contracts seller of the option oblige himself to sell or to buy a financial instrument at a specified time or during specified period. Because of this financial risk of the seller of the option, he or she requests a premium from buyer of the option. As well as future transactions, option transactions are done on either the organized exchange markets or OTC market.

- European Type Options versus American Type Options:

European Type Options: these options can be exercised on their expiration dates. Additionally it is assumed there is no cash flow from underlying assets (such as dividend from common stock option)

American Type Options: these options can be exercised anytime till the expiry date. Additionally it is also possible to get cash flow from underlying assets.

- Writing Options versus Buying Options:

Option Writer: option writer sells the option right either to sell or to buy a financial instrument to himself. By writing option, he demands an option premium.

Option Buyer: option buyer pays to option writer a premium. By this premium, he gets the right of selling or buying a financial instrument from option writer

- Call Options versus Put Options;

Call Options: call option gives the right of buying a financial instrument from option writer.

Put Options: put option gives the right of selling a financial instrument to the option seller.

Options are very specific derivative instruments. In the first appearance, they look like forwards or futures but specifically looking, options are much more complicated than they are. In the forwards and futures, counter parties seem equal from the risk point of view. However, in option contracts, option writer mainly carries the risk. Because of this reason, option writer demand a premium, which is much more expansive comparing futures and forward contracts. However, with this premium he is obliged to sell or buy a financial instrument at a specified amount and specified period independently from market prices. For this reason, option writing of commercial banks are limited or forbidden by many countries.

European type options are generally priced by Black and Scholes formula, which is explained in the section of credit risk measurements of loans, by option pricing. For that reason, we will not explain it here again. American type options are not suitable to be priced by Black and Scholes formula. In order to price American type options, in which option right can be exercised anytime until expiry date, Binomial Option Pricing Model is widely used;

The natural probability p is that of and up move, while 1 – p is the probability of down move: p = 1 – p = 50%. Similar definitions apply to p* and 1 – p* in a risk-neutral world. There is a set of risk-neutral probabilities p* such that the expectation becomes equal to 90:

$p^* \times 150 + (1 - p^*) \times 50 = 90$

Or:

$p^* = (90-50) / (150-50) = 40\%$

The risk-neutral probability p^* differs from natural probability p = 50% of the real world because of risk aversion. Generalizing, the expected value of any security using risk-neutral probabilities is E^* (V), where E is the expectation operator and * stands for the risk-neutral probability in calculating E^*(V). This risk-neutral expected value is such that it provides the risk-free return by definition. Since we know the risk-free return r, we have a first equation specifying that u and d are such that E^*(V) = 1+r for a unit value. The expectation of the value after one time interval is:

$p \times u$ + (1-p) x d = 1 + r

This is not enough to specify u and d. We need a second equation. A second specification of the problem is that volatility should mimic the actual volatility of rates.

The volatility in a risk-neutral world is identical to the volatility in the real world. Given natural or risk-neutral probabilities, the variance over a minor interval Δt of the values is:

$[p^*u^2 + (1-p^*)d^2] - [p^*u + (1-p^*)\,d]^2 = \sigma^2\,\Delta t$

This equality holds with both p and p*. Under risk-neutrality, the expected return is the risk-free return r. Under risk aversion, it has the higher expected value of μ. Therefore, p and p* are such that:

$p = (e^{\mu\Delta t} - d) / (u - d)$

$p^* = (e^{r\Delta t} - d) / (u - d)$

Using p* x u + (1-p*) x d = 1 + r and $p^* = (e^{r\Delta t} - d) / (u - d)$, we find the values of u and d:

$u = \exp[\sigma\sqrt{\Delta t}]$ and $d = \exp[-\sigma\sqrt{\Delta t}]$

The yearly volatility is σ and Δt is the unit time for one-step, say in years. Hence, u and d are such that the volatility is the same in both real and risk-neutral worlds. However, the return has to be the risk-free return in the risk-neutral world and the expected return, above, in the real world. (Bessis, 2005)

Using options as a speculative or hedge purposes requires an intellectual mind and true pricing formula changing according to market efficiency and volatility of underlying assets. Option profit (Rubinstein, 2001) is defined as follows:

Option Profit = Volatility Profit + Formula Profit + Asset Profit + Pure Option Profit

Since derivatives are zero sum game vice versa is also true:

Option Loss = Volatility Loss + Formula Loss + Asset Loss + Pure Option Loss

Rubinstein made Monte Carlo simulation tests to show performance of a sample option transaction (European call, underlying asset price 100, 60 days to expiration, realized volatility is

assumed 20%, risk less rate 7%, payout rate 3%) in different environments in which benchmark formula is standard binomial option pricing model:

- Efficient (risk–neutral) market with continuous and correct benchmark trading; Market knows the true population volatility and the correct formula; benchmark formula also correct with benchmark trading to target delta taking place at every binomial move
- Efficient (risk-neutral) market with discrete but correct benchmark trading; except benchmark trading takes place after more than one binomial move
- Efficient (risk-neutral) market with incorrect benchmark formula; except benchmark formula is wrong since it underestimates leptokurtosis and underestimates left-skew ness
- Inefficient (risk-neutral) option market (wrong volatility but correct formula); Market knows the correct formula but wrongly prices the call because it underestimates or overestimates true population volatility.
- Inefficient (risk-neutral) option market (correct volatility but wrong formula); Market knows the true population volatility but is using a formula that overprices the call.
- Inefficient (risk-neutral) option market (wrong volatility and wrong formula); Market wrongly prices the call because it uses both wrong volatility and the wrong formula
- Inefficient (risk-averse) asset and option markets; Market wrongly prices the call because it uses the wrong underlying asset price, wrong volatility forecast, and wrong option formula

4.4.2.3 Swaps

A swap is financial transactions in which two parties agree to exchange streams of cash payments over an agreed, and potentially unlimited, period, and the payment streams any extend over any time. Swaps are exchange of two cash flows. In swap derivatives, there are two transactions; spot transaction and forward transaction. At the validity day, spot transaction is done. At the maturity day, reversing spot transaction with a specified price and amount in the validity day does forward transaction.

There are two main types of swaps: Interest Rate Swaps and Currency Swaps. Following these, many compositions of interest and currency swaps have been developed. Latterly, credit risk instruments were developed; credit default swaps and total return swaps.

In interest rate swap, no principal is transferred either at validity or at maturity day. The counters parties mostly try to hedge themselves against interest rate risk. In order to avoid interest rate risk, one of the party get fixed interest the other party gets floating interest rate. Principal is just used to calculate interest amount to be settled between parties.

There are also three main types of interest swaps: the first one is coupon swap (plain vanilla swap) in which one party gets fixed other party gets floating interest rate flows. No principal amount is exchanged.

The second type of interest swap is basic swap in which both parties are received different type of floating interest rate based on different indices.

The third type of swap is said Circus swap, which is linked to a currency swap. In a currency swap, both parties exchange currencies together with fixed interest rates. At the maturities, reversal of transaction is done; principals and calculated interest are paid. Additionally a swap with different currencies and different interest structure is also done in swap transactions. This is said Cross Currency Swap in which, parties exchange different currencies one with fixed interest rate, other is floating interest rate. In swap transactions including different currencies at both validity date and maturity, date principal amounts also exchanged differing from interest rate swaps.

In the academic literature, two issues are dominant about swap derivatives. (Cooper, Mello, 1991) The first is the reason of using swaps. An arbitrage imperfection in capital markets was the original cause of their appearance (Price, Henderson, 1984). Thurnball shows that lowering borrowing costs by a synthetic transaction-involving swap is not possible in a complete, integrated capital market. Additionally Wall and Pringle (1988), Arak, Estrella, Goodman, and Silver (1988), Wakeman (1987) showed in their studies that swaps are useful in case of market incompleteness and agency costs. The second concern of the swap in the literature is that pricing and hedging of the swaps, which our main concerns also.

There are two main risk of swap transactions; Market Risk and Credit Risk: Market Risk arises because of change in the level of interest rates and foreign exchange rates. In fact, it is one of the main motivations of doing swaps in capital markets; by swaps, parties' tries to hedge position, which comes from on balance or off balance. If one party wants to prevent its position loss from changes in interest rates and foreign exchange rates, he or she would take reverse of the position taken before, in swap transactions. This means if he or she suffers from his or her position on balance or off balance, he or she would utilize in swap side. At the end, parties would just take the original forecasted profit or loss not profit or loss because of change in the market rates. Off course, this motivation is true for hedge players of the market. However, other risk, Credit Risk is much more difficult to hedge and for this reason to price and to value. Cooper and Mello (1991) list determining factors of cost of default as;

- The Value of the swap at the default date
- The event that trigger the swap

- The relation between the value of the swap and the event triggering default
- The rule of sharing claims in default

In addition to these factors above, in default on its original debt could be either to make or to receive swaps payment. If it is due to make a payment, it will default on the swap contract as well as on the debt if the swap payment is subordinated to debt. Alternatively, it could be due to receive a swap payment, in which case the swap payment could be reversed.

4.4.3 Securitization

Securitization is the sale of securities representing an income flow backed by packaged assets. In securitization, heterogeneous and illiquid individual loans are combined into relatively homogenous pools and transformed in to liquid bonds traded in dealer markets and generically referred to as asset-backed securities. (Ambrose, Lacour, Saunders, 2005) The largest and well-known example of securitization is mortgages but securitization market has been growing rapidly including securitization of commercial loans, credit card receivables, car loans, small business loans, corporate loans and others.

As it is seen above, securitization is the sale of loans. There are two types of sales of loans; in the first one, buyer of this pool of loans cannot recourse to the seller in case of defaults of borrowers. In the second one, the buyer has the option to recourse the seller in case of defaults of the borrowers. That is the point that why securitization create a contingent claim for banks. On the other hand, it is argued that seller (loan originating financial institutions) of the securities can allow the buyer to recourse them although there is provision of non-course to the seller in case of default in order to protect their reputations. (Gorton and Pennacchi, 1988)

Securitization of loans increases liquidity and reduces or reallocates credit and interest risk, improves leverage and allows recognizing capital gains. In addition, issuing these asset-backed securities enlarges and deepens securities and derivative markets.

Securitization has started with residential mortgage market in USA in the early 1980. Specially established government agencies (Government National Mortgage Association, “Ginnie Mae” and Federal Home Loan Mortgage Corporation, “Freddie Mac”) for mortgage created a secondary market for mortgage receivables to ensure liquidity for housing loans. These agencies purchase loans from originating institutions either by swap or cash payment. In the swap payment, large pool of loans of a originator is swapped with a bonds backed by this pool. In the cash payment, government agencies pay to the originators against smaller pools. Agencies combine these pools and issue securities backed by these pools. In either case of payment, originators of loans collect all fees and continue to earn fee income as a loan servicing. In this method, loans are bought as non-recourse base and they do not have any credit risk.

To the end of 1980's, non-governmental corporations were also established. These private corporations purchased loans, which are not obeying governmental standards of mortgage loan. These loans either very large or having higher rate of risk. In this case, buyers do not completely carry credit risk of the loan pools. Loan originators classified their loans according to risk structure and sold them participating credit risk. In case of securitized loans default, the originator accepts to compensate losses. This type of loan sales is recourse sales.

Since originators of loans are not happy with recourse, they have developed "spread account" or "over-collateralisation". This account is supported with excess interest generated by the difference between the interest rate earned from portfolio and that paid on those securities. The spread accounted is intended to compensate future losses on loans securitized.

Advantage of securitization is not limited to providing liquidity. The way also decreased capital requirement of the originators. According to Basel accord, the hosing loans are required to keep 50% capital. However, in case of selling loans although carrying in off balance, 20% capital is enough. In non-recourse method, there is no capital requirement since originators do not carry any credit risk.

4.5 Off-Balance Valuation Models Literature Survey

The valuation of off-balance sheet claims has both similarities and dissimilarities comparing cash credit valuation. The main similarity is both having credit risk as well as market risk. But in off-balance sheet claims, cash out is depending on the situations.

Although models developed by academicians more or less than cash credit risk valuation, there still are number of models in the valuation and pricing of off-balance sheet claims. Some of them are developed for specific off-balance sheet claims; some others are developed for broader cover range. But many of them are based on option pricing models since either guarantees and commitments or derivatives shows an option type of structure.

We have dealt of Fisher Black and Myron Scholes option pricing as well as Merton contributions to their model. Based on his previous papers and Modigliani-Miller (1958) theory, Merton (1977) developed contingent claims pricing model. In the paper presented a model that the price of a security whose value under specified conditions is a known function of the value of another security. He derived an alternative formula in addition to his arbitrage technique of Merton (1974) to derive the price of risky debt. In that, formula is applicable even if arbitrage is not possible because of restrictions.

Cox, Ross and Rubinstein (1979) presented a simple discrete-time model for valuing options. However, as they pointed their approach can be used to value ant financial contract where the outcome to each party depends on a quantifiable uncertain future event. They used arbitrage

technique in order to simplify and rewrite of option pricing of Black and Scholes model, binomial option pricing model and Jump Process Option Pricing models.

Melnik and Plaut (1986) developed a model of loan commitment contract. They valued loan commitments as a package of loan terms including the interest rate, the commitment fee, maturity, the credit quota or takedown limit and collaterals.

In their model, loan commitment contract was described as the vector B [L*, T, m, k, C] Where;

L^* = The maximum amount of credit that can be obtained under contract

T = The length of the contract

m = Risk premium or mark-up over prime

k = The loan commitment fee rate

C = The amount of collateral placed with the lender.

Model is based on expected behaviour of borrower since he has the option of using loan or not using. Additionally, L_T (loan taken) depends on L*. Lenders and borrowers will negotiate L*, given their knowledge of how L* will affect borrowing L_T . Whenever a credit line is used, borrower pays interest of (r_t +m) on the outstanding liability in each period t. The lender is assumed to use r_t as the instantaneous discount rate for the period, t. r_t is viewed as alternative cost to the lender, who is assumed to have access to lending in an alternative market where r_t is the risk less rate of return.

Then the profit of the lender from loan in case of L_T $\{0 \le t \le T\}$, and assuming no default, is;

$$k + \int_0^T L_t \, e^{mt} \, dt$$

In addition, in case of default the lender retains the collateral C, but loses the liability, L_T . In this case the expected utility of lender is;

$E(U) = \pi E_N(U) + (1-\pi) E_D(U)$ where:

$E_N(U)$ = Expected utility when default does not occur, and

$E_D(U)$ = Expected utility when default occur.

Melnik and Plaut also analysed 420 U.S. non-financial firms information about their loan commitments. They found that loan commitment size positively correlated with the risk premium or interest mark-up, the commitment fee, the length of the contract, and the existence of a collateral requirement, higher firm current ratios, and firm size.

Shockley and Thakor (1997) observed bank loan commitments. They described contractual structure of bank loan commitments based on data pertaining to over 2.500 loan commitments contracts of U.S. firms. They also developed a model that demonstrates that the observed structure of bank loan commitments is important when bank faces borrower adverse selection and moral hazard problems.

In the model they developed, they assumed three firms Good (G), Medium (M) and Bad (B). The firms are identical and have assets in place at date t=0 worth V_0; the G and M firms have investment opportunities while B firm does not. Immediately after investment is made, the project will yield a cash flow $C. The option to delay investment is valuable due to uncertainty in the rate of return of the project. If G or M firm wishes to adopt the project at t = 0, the required investments is $\$I^-$ with probability qi and $\$I^+$ with probability 1-qi. In a risk-neutral world, they have two propositions;

- There exists a $\Phi \in (0,1)$ sufficiently high that it is a pure-strategy Nash equilibrium for both the G and M firms to invest at t = 0, for the B firms to do nothing, and for the capital markets to respond to investment at t=0 with a price;

$$p = V_0 + C[1+r^{-1}] - I$$

- With the menu of loan commitment contracts, there exists a sequential equilibrium that survives the '*Cho-Kreps Intuitive Criterion'* in which managers of the G and M firms choose the commitment contract and pays a non-refundable t=0 commitment fee calculated for G as;

$$\Pi_{LC}^{G} = q_G Z_G [1+r]^{-1} - [1- q_G]\ \alpha_G\ Z_G [1+r]^{-1},$$

And calculated for M as;

$$\Pi_{LC}^{M} = q_M Z_M\ [1+r]^{-1} - [1- q_M]\ \alpha_M\ Z_M [1+r]^{-1}$$

The manager of the B does nothing in the model.

Their model is consonant with the data set they searched. Empirical results of their survey states even if banks have no loans on their balance sheets and loans are provided by non-banking sources, banks may have role to play in the provision of credit that is value enhancing for borrowers.

Lastly, Loukoianova, Neftci, and Sharma examined the replication and pricing of loan commitments is by, (2004). They have shown that a cap written on the credit spread of the company, where underlying caplets are reverse knockout options, can replicate loan commitments. In the model to price loan commitments, they used the discounted payoff from replicating

portfolio consisting of caplet and the associated knockout option. The generalized formula as follows;

$(\mathrm{CCL})_{t0} = B(t_0, t_2)\ \mathrm{N}\ \delta\ \mathrm{E}\ [\ Max(c_{t1} - s_{t0}, 0)\ 1\ \{c_{t<}H, t_0 \le t \le t_1\}\ ]$

Where;

CCL= Loan commitment

$B(t_0, t_2)$ = Risky discount factor

$1\ \{c_{t<}H, t_0 \le t \le t_1\}$= the indicator function representing the requirement that the firm is not downgraded before time t_1.

They found that the pricing of loan commitments are harder to price comparing simple option since an option is exercised in full or not exercised at all, but this is not possible for loan commitments that can be exercised partly based on maximum limit exposure. In addition to findings above, they assumed that the material adverse change clause (MAC) could be specifying as a credit rating downgrade or as an upper-limit on the market credit spread. For the firms who do not issue commercial papers can be negatively affected by MAC specification.

Hassan (1992) looked over risk structure of commercial letters of credit. In his study, he examined the risk-exposure and the existence of market discipline of commercial letters of credit activities of banks by two implied asset risk measures calculated from equity and debt option pricing models (Bank-implied asset risk under Ronn-Verma option pricing methodology and Bank-implied asset risk under Gorton-Santomero subordinated debt pricing methodology) together with equity and beta risk. In his capital market tests of commercial letters of credit activities, he found that;

- Commercial letters of credit reduces equity risk but does not affect beta risk
- Commercial letters of credit does not affect asset risk calculated from Gorton and Santomero subordinated debt risk premium option pricing methodology
- Commercial letters of credit decreases assets risk calculated from the Ronn-Verma equity option-pricing model. Several balance sheet and income statement accounting risk variables also show statistically significant correlations with various market measures of risk.

He commented that bank stockholders view commercial letters of credit activity as reducing risk. Additionally commercial letters of credit contribute to the overall diversification of the bank's assets.

The derivatives pricing methods have broader place comparing pricing methods, which specifically developed for guarantees and commitments. Cooper and Mello (1991) have described

the exchange of financial claims arising from risky swaps. The exchange of claims is among shareholders, debt holders, and swap counter party. They have also derived equilibrium swap rates and their relation with market spreads. They obtained closed form solutions for the value of the default risk in swap by Brownian motion. They also extended the analysis to the coupon payments and swaps between two risky parties. In order to determine the value of the default risk spread in fixed and variable markets, they firstly determine fixed coupon rate that makes a default free bond sell at price equal to its face value "F" for variable coupons (r_t). For fixed coupons it is the coupon rate g, such that;

$G(r,0,g,F)$ = F. To determine the coupon rate required for a bond subject to default risk to sell at par at the date of issuance. Bond prices correlated with short-term interest rate, the value of the firm, and time to maturity. Then, the default risk spreads will reflect these factors. The spread of risky variable bonds is defined by the fixed mark-up to the coupon rate, which reflects credit risks of that bond. This spread S_x is defined as $B(V,r\ 0$, (r+ S_x) F =F. Accordingly, the spread for fixed coupon bonds is given by the coupon rate differential S_F defined as $B(V,r,0(g+S_F)$=F. Again, to determine the spreads they used Hopscotch method, which is developed by Gourley (1970) can be applied to solve parabolic and elliptic equations in two dimensions with a mixed derivative term.

Jarrow and Turnbull developed a new methodology to price and hedge derivatives securities involving credit risk (1995). They split the credit risk in to two in derivative contracts; one is default risk of underlying security; another is default risk of writer of the derivative security. Their approach used the foreign currency analogy of Jarrow and Turnbull (1991), which takes as given a stochastic term structure of default-free interest rates, and a stochastic maturity specified credit-risk spread. Given these two structures, option type features can be priced in an arbitrage free manner using the Martingale measure technology. This approach is a modification of the compound options approach. In that, capital structure is seen irrelevant. Bankruptcy can occur anytime. It can be modelled by assuming when the identical but levered firm's value hits some exogenous boundary, default occurs in the levered firm and the firm's debt pays off a fixed fractional amount.

Rubinstein (2001) analysed that the realized profits from an option have two components; one is the mis-pricing of the option at time of purchase, second id the profit from subsequent fortuitous changes or mis-pricing of its underlying asset. He wrote an equation to define the profit of the option:

"Volatility Profit + Formula Profit +Asset Profit + Pure Option Profit"

Moreover, he defined true relative value as;

$V^e \equiv r^{-t} C_1 + [C\text{-}r^{-t}, C_1(S...S_T)]$

Then if there is a mis-pricing of underlying asset;

$V^e \equiv r^{-t} C_1$ would reflect correct price.

Lastly, G. R. Duffee (1996) reviewed current practices of measuring credit risks of derivatives. He used Monte Carlo simulation method to calculate potential exposures of three models; Cox, Ingersoll, Ross (1985) model for interest rates with fixed parameters, Cox, Ingersoll, Ross model with probabilistically selected parameters and a bootstrap method from historical data. He found that the model risk might mis-price credit risks of derivatives and counter parties. He also found that stochastic models in projecting future values are approved at face value, without understanding behaviour of underlying financial variables. In addition to this, the financial variables driving interest rate paths are not used to determine the firm's credit quality. Beyond this, correlations among derivatives are not taken in to account in the pricing and measuring exposures.

4.6 General Contingent Claims Pricing Theory – John Hull

Hull (December 1989) separated off-balance sheet commitments risks in to two types: Market Risk and Credit Risk. Since market risk can be hedged and measured easily, he focused on credit risk in valuation of off balance sheet commitments. His approach that he explained in the paper above is a general approach and can be used to take credit risk in to account in the process of off balance sheet commitments valuation as well as on balance sheet loans.

His approach is based on the assumptions below:

- Modigliani and Miller (1958), which says the value of the firm is independent from its capital structure
- Black and Scholes (1973), which says the call option is a contingent claim and pricing of corporate liabilities are viewed as contingent claims and their values are contingent on the value of the firm
- Merton (1974), which says the Miller-Modigliani theorem, is valid that the presence of bankruptcy provided that there are no differential tax benefits to corporations or transactions costs

These assumptions can be summarized as borrower has the option on a debt contract. When the value of a company's liabilities exceeds the value of its assets, the company goes bankrupt and defaults on its liabilities.

Contradictory from guarantees and commitments, some derivatives such as swaps and forwards can either positive or negative values to one of the counter parties, which mean these contracts, can be assets or liabilities according to market conditions. This specific situation is important to extend his approach to cover derivatives pricing as well as guarantees and commitments.

Hull sees the default option in an off-balance sheet contract can be viewed as a contingent claim. In a risk neutral environment, an off balance sheet contract depends on number of variables and time (t);

$V(t)$ = Value of off-balance sheet contract to bank at time t, if there has been no bankruptcy by the counter party up to and including time (t),

$f(t)\,\Delta t$ = Probability of bankruptcy by the counter party between times (t) and (t + Δt)

$U(t)$ = Value of contract to bank at time (t), assuming no default options,

$W(t)$ = Value of future default options to the counter party at time (t)

T = Life of the contract

V and U can be either negative or positive. The value of contract to the counter party is reversal of value of the contract to bank. With no default possibilities, its value to counter parties – U and, when default possibilities are taken in to account, its value to counter party is – V. No recovery is assumed in case of default of counter party. Additionally the states of variables affecting the bankruptcy probability have no market price of risk and independent of the state variables affecting U. In deriving formulation, Hull made assumptions below:

- There is no possibility of default by bank
- If the counter party goes bankrupt, it has the option of selling the contract to another party whose default is zero

The second assumption means, when bankruptcy occurs, the original counter party can choose between; either defaulting on the contract, or realizing loss – U fro the contract. Then default is possible in case of U > 0. Since the loss to the bank arises from bankruptcy of counter party, max (U,0). This loss can be thought as the payoff from contingent claim. In a risk-neutral environment, W (0) is the discounted expected value of the default option in case of all state variables has risk-adjusted drift rates. Since the variables affecting bankruptcy probabilities assumed zero market value, no risk adjustments are necessary to (f). Moreover, the variables affecting U are independent of the variables affecting bankruptcy probabilities the equation can be derived as follows;

$$W(0) = \int_0^T C(t)f(t)\,dt,$$

Where:

$C(t)$ Is the value of a contingent claim that pays off $\max(U,0)$ at time (t). The value of the contract at time 0, $V,0$ can be calculated from

$V(0) = U(0) - W(0)$

Secondly, it is assumed;

- There is no possibility default by the bank
- If the counter party goes bankrupt at time (t), it has the option of selling the contract to a new counter party that has probability $f(t)\,\Delta t$ of going bankrupt between times (t) and $(t+\Delta t)$ $(t \geq t)$.

As a result, in case of bankruptcy and contract is sold, it is worth – V to the new counter party. In the event of bankruptcy, the counter party can choose between defaulting on the contract and realizing amount – V for the contract. The default will take place in case of V>0. The default costs to the bank U. If V<0, there is a chance that there will be future defaults. Hence in case of bankruptcy, W = U if V >0 and W = U – V if V < 0. The formula is;

W = U + max [-V, 0]

The value of application $W(0)$ is given by first equation with $C(t)$ being defined as contingent claim that pays off $U(t)$ + max [- V, (t), 0] at time (t). The model presented above can be used to value any financial contract when there is a credit risk. In case of swaps since there are mutual rights and obligations he proposes extension of Cox, Ross, and Rubinstein approach. (1979)

5 MERGER AND ACQUISITIONS IN BANKING

The merger and acquisitions in the financial sector have been increasing since 1980's. This increase is both in numbers of M&A and volumes. The comparison of the 1989 world's top ten largest banks and 2002 world's top ten largest banks shows that none of the bank succeeded to keep its rank. Some of them disappeared, some of them decreased and some of them increased in total assets by merging and takeover of other commercial banks. The table below shows the comparison of market capitalization of largest 15 banks between 1990 and 2003. The biggest bank of the 1990 is Industrial Bank of Japan with 57, 1 billions of US$. The biggest bank of the 2003 is Citigroup with 210, 9 billions of US$. The increase is dramatic and Industrial Bank of Japan is not in the list of top 15 financial firms together with any Japanese bank!

Table 1- Top Financial Firms by Market Capitalization (in US $ Billions)

1990		**2003**	
Industrial Bank of Japan	57,1	Citigroup	210,9
Fuji Bank	52,0	AIG	151,0
Mitsui Taiyo Kobe Bank	46,3	HSBC Holdings	127,0
Sumitomo Bank	46,0	Bank of America	111,1
Dai-Ichi Kangyo Bank	44,8	Berkshire Hathaway	109,0
Mitsubishi Bank	44,0	Wells Fargo	81,7
Sanwa Bank	41,2	RBS Group	75,1
Nomura Securities	25,5	Fannie Mae	73,2
Long-Term Credit Bank	24,8	UBS AG	67,6
Allianz AG	24,6	J.P.Morgan Chase	66,7
Tokai Bank	21,3	American Express	54,7
Mitsubishi Trust & Banking	17,2	Wachovia	54,2
Deutsche Bank	16,4	Morgan Stanley	49,6
AIG	16,3	Barclays	46,2
Bank of Tokyo	15,9	US Bankcorp	45,5

Source: Mergers and Acquisitions in Banking and Finance, Walter, Oxford University Press 2004

The figures and the developments in the world economy show the dramatic fact of monopolistic takeovers in the world. Then what are the motivations behind takeover activities? Lastly, what are costs of these takeovers to the acquiring banks? We will explain these questions below.

5.1 The Motivations of Takeovers

The main motivation of the merger and acquisitions in banking is to maximize shareholders' wealth as well as in other industries. Firms try to maximize their wealth in many means. Merger and acquisitions is one of these means.

According to financial theory, the value to an acquirer of taking over a firm is the present value of the target's earnings and the discounted expected future cash flows. If the expected return of the target is bigger than the cost of capital of the acquiring company, then the deal is done. If not, deal is not done.

In the analysis of expected future cash flows, the synergy affects of the consolidation should also be taken in to account. Otherwise, bank will loose the chance of decreasing cost of capital and growing.

In the literature, many papers have been written in order to explain the motivations of the merger and acquisitions. Although these papers offer wide range of motivations that lead banks to merge or acquire other bank, as we wrote above the main motive is to increase shareholders value. However, there are some motivations derives from information asymmetric other than increase shareholder value. The main example of this is agency cost, which is explained below.

In the merger and acquisitions, the shareholders wealth can be increase three main means; increasing revenues, decreasing costs and decreasing risks.

5.1.1 Increasing Revenues

One of the main motivations of mergers and acquisitions is increasing the revenue. The extension of market share is one the way of this. Firms want to increase their market share and by this way their sales of products. The increase of market expansion may potentially result with the increase in revenues. If a bank is not located in a geographic area, to takeover or merge with another bank which is located there could be much cheaper than establishing a network there. Secondly, to wait to be known as a bank in different geographic area and the trust of customers may have a long time in banking. Instead of waiting long time, banks are ready to buy the banks, which have established branches network and customers.

Another motivation behind revenue increasing to have a new customer portfolio those are potential cross sale customer of the acquiring bank. Banks think to buy banks, which do not have their products. The banks in same geographic area but with different customer or product segments can be target of one of the parties. By this way, they can sell their own products to the customers of target bank.

Thirdly, Commercial banks can increase their selling by buying a investment bank. Also vice verse is true. By this way, commercial banks both can offer investment-banking products to existing customers of purchased bank and can offer risk management products to their own customers. Moreover, commercial banks can sell loan products to their investment banking customers especially for M&A transactions. The insurance and commercial banks also are examples of this. Banks can offer their customer portfolio the life or non life insurance products.

At the same time, the customer portfolio of insurance firms can be offered commercial bank products. However, it is also argued that the cross selling target cannot be achieved if the target and acquiring institutions customer base is common. These consequences should be thought and analysed well before transaction. Otherwise, revenue-increasing target by means of cross selling can be resulted with high costs.

Fourthly, especially banks may have unused infrastructure and delivery channels. On the other hand, target bank may have need of new infrastructure and capital investments to serve in accordance with their customer will. In this case, acquiring bank may use their own delivery channels and infrastructure to serve better to customers of both bank and the increase of sale.

Another result of increasing revenues is to dominate market by increasing market share. This is one of the main motivations of the merger and acquisitions transactions in banking sector. The increase in market share and high concentration will provide acquiring banks monopolistic or oligopolistic power. Since banking sector is already highly concentrated, this motivation is much more evident in the MA transactions among banks.

The monopolistic or oligopolistic power in the banking sector provides banks to imply or force prices of products offered. This is a rent revenue and intangible of the banks in those positions. By this way, banks can maximum their profits over the equilibrium point of demand and supply.

There are also negative thoughts and arguments against this. The main argument is about anti trust legislation. The concentration of economic power and reduced competition in the banking can decrease wealth level of the whole economy. Moreover, high concentration in banking and higher interest spreads is observed together. On the other side, the supporters of concentrations say that although there is high concentration in the banking sector for recent years, there is little evidence of the market power. There is Herfindahl index measurement (Herfindahl-Hirschman Index or HHI, is a measure of the size of firms in relationship to the industry and an indicator of the amount of competition among them. It is defined as the sum of the squares of the market shares of each individual firm. As such, it can range from 0 to 1 moving from a very large amount of very small firms to a single monopolistic producer. Decreases in the Herfindahl index generally indicate a loss of pricing power and an increase in competition, whereas increases imply the opposite.) of Smith and Walter in the banking sector (2003). According to their studies the combined value of global fixed income and equity writing, loan syndications, and M&A mandates, the HHI is 549 in a range of 0-10.000 in year 2002. The table below shows the results of their studies. As a result, it can be argued that M&A in banking can create a monopolistic

power but this power is not easy to be reached and to sustain because of new entries to the market or competition of non-banking firms.

Table 2-Global Wholesale Banking and Investment Banking Market Concentration

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Top Ten Firms													
% of market share	40,6	46,1	56,0	64,2	62,1	59,5	55,9	72,0	77,9	77,0	80,0	74,1	71,3
Herfindahl Index	171,6	230,6	327,8	459,4	434,1	403,0	464,6	572,1	715,9	664,0	744,0	603,0	549,4
Number of Firms from													
United States	5	7	5	9	9	9	8	8	7	8	8	7	7
Europe	5	3	5	1	1	1	2	2	3	2	2	3	3
Japan	0	0	0	0	0	0	0	0	0	0	0	0	0
Top Twenty Firms													
% of market share			80,5	75,6	78,1	76,0	81,2	93,3	97,1	96,3	97,5	91,5	91,0
Herfindahl Index			392,7	478,4	481,4	439,5	517,6	620,9	764,0	709,0	784,0	639,0	591,1
Number of Firms from													
United States			8	15	15	14	14	13	11	12	9	8	10
Europe			11	4	5	5	6	7	8	8	11	11	10
Japan			1	1	0	1	0	0	1	0	1	1	0

Another outcome of increasing revenue incentive is to get knowledge by merger and acquisitions. In finance, some areas like, wholesale banking, asset management, need the technical information. If the banks buy the firms having knowledge, the acquiring banks can increase their revenue.

5.1.2 Decreasing Costs

To reach cost synergy is one of the main incentives of merger and acquisitions. Larger size firms can decrease costs mainly by decreasing average fixed costs per product. There are three types of cost efficiency; scale efficiency, scope efficiency and X-efficiency. (Berger-2000)

Cost scale efficiency means to how close average costs are for best-practice firm at a given scale and mix of output to the average costs of a best-practice firms at the minimum-average-cost point for that product mix. The merger and acquisitions of financial services firms in to larger institutions can create cost scale efficiency gains through spreading fixed costs over more units of output, taking better advantage of technology, issuing securities in larger size etc. Financial institutions can create cost scale gains spreading fixed expenses over more output, taking advantage of technologies that require large scale to achieve minimum costs, issuing securities in larger to reduce the effect of fixed costs; reusing managerial expertise; information and physical outputs; or economies of scale in marketing and brand name recognition. On the other side,

integration of larger firms can be resulted in diseconomy as well. To monitor lower level of decision markers will be difficult. Moreover, the serve retail customers as well as corporate customers who need of close relations of marketing representative will be more difficult. It is also argued that the cost scale efficiency is more evident in the merger and acquisitions of same area banks, which will allow horizontal integration of distribution channels or merging head offices and combining retail branches.

Cost scope efficiency means to how close the sum of costs for two best practice firms that each specializes in some of the outputs is the costs of a single best-practice firm that produces all of the outputs. Cost scope efficiency gains from integration may occur through sharing physical inputs, information systems, databases etc. For example, merged commercial bank and insurance companies can decrease cost of distributing. Merged firms can use more cheaply the database of other firm. However, the integration can be resulted with cost scope losses because of organizational diseconomies from producing or distributing more products especially if the management stays far from its area of core competency. For example, since managers are specialist in only one of these fields, it may be difficult to monitor commercial banking, investment banking, and insurance segments together.

Cost X efficiency means how to close a firm's actual costs of a best practice firm producing the same quantity of product. Financial integration may increase cost X-efficiency if the acquiring firm is more efficient than the target, and the acquirer spreads superior managerial expertise over more resources. However, cost X-efficiency can decrease if the target is in another region or nation, which makes it difficult to overcome barriers of distance, different language, etc. Organizational diseconomies may also make it difficult to establish and maintain retail deposit, mutual fund, insurance policy relationships with households, lending, investment and group insurance relationships with small medium size customers since these relationships requires local information and local focus.

5.1.3 Reducing Risks

The commercial banks not only think to increase revenues and decreasing costs in the merger and acquisitions transactions. They also think to diversify their income base by means of increasing products offered, customer segments, geographic areas, and loan portfolios. These diversifications help banks to keep and sustain their growth and profits by reducing their risk structure. The banks, which have limited customer base or not enough networks, will have to feed the liquidity needs of this limited customer groups. Nevertheless, if they expand their markets and customer segments will be able to find better customer who have better credit worthiness.

According to perfect capital markets theory, risk consideration should not affect shareholders value. Since their risk structure is already, priced, firm takeovers should not be an incentive to reduce risk. However, there are some market imperfections, which lead banks to merge, and takeover other banks in order to reduce risk: (Berger, 2000)

Firstly, according to financial intermediation theory, financial institutions are delegated monitors who produce information about opaque assets. Then financial institutions try to diversify their loans portfolio to increase their credibility. When their credibility increased, their cost of capital is also decreased and this will decrease their possibility not to pay debts borrowed. By this way, they can reduce their risks.

Secondly, risk diversification of financial institutions may improve revenue efficiency by allowing them to provide better products of risk pooling and risk bearing. Since commercial banks give guarantees, commitments and underwrites, the value of these guarantees and commitments and the capacity to provide them depends on decreasing risk. By this way, they can increase their profitability without cash out by decreasing risks.

Thirdly, reducing risk by diversification and with other ways, financial institutions can decrease their danger of failure and bankruptcy. Moreover, to decrease bankruptcy costs can reduce shareholders wealth and market value.

Fourthly, Government regulations and supervision can force commercial banks to diversify their portfolios and decrease their risk. This will also decrease the possibility of failure and bankruptcy and shareholders value.

Finally, small banks cannot diversify their own risk because their shares are not publicly traded. Then shareholders of the small banks will search the way to decrease their risk in order to increase shareholders value.

On the other hand, cross-border (geographic) mergers have the potential to reduce bank risk of insolvency. (Amihud, DeLong, Saunders, 2002) The idea comes from diversification of assets can reduce the risk. But they opposite this with two hypothesis;

- Firstly, banks have incentives to increase their risk exposure beyond the level that would be privately optimal in a world in which there were no safety net guarantees or the safety net – deposit insurance, capital requirements, and implicitly, bank closure – is fairly priced. One way in which safety net might be exploited is for a bank to acquire other risky banks by cross- merger expansion. If the risky investment pays off, then acquiring bank has the potential to keep any upside returns. If acquisition fails, acquirer bank’s solvency is threatened. As a result, cross – border mergers may increase the insolvency risk exposure of either one or both (domestic and target) country’s bank regulators.

- Secondly, extending operations in to new overseas markets, the acquiring bank is confronted with potentially new risk and risk increasing monitoring problems related to loan customer base, operating cost structure, etc.. of the target bank. If monitoring problems high, these problems may also increase the insolvency risk of the domestic acquiring bank.

In the research, they found out that on average the risk of decreasing effects of cross – border bank mergers are offset by risk increasing effects, and the nature of the merging partner's operation changes in a way so as to leave the acquirer's risk unchanged.

Another incentive in reducing risk is to achieve of too big to fail guarantees. (Walter, 2004) As is known that the fail of a big commercial banks danger and threat whole economy and financial system. For that reason, governments or its agencies see themselves forced to help big banks. Commercial banks try to achieve enough size in order to get guarantees of defaulting by merger acquisitions.

5.1.4 Agency Costs

Up to now, we have analysed the motivations that lead firms to merger and acquire other firms. Those are grouped as increasing revenue, decreasing costs and decreasing risk. All three of the motivations have a rational basis are which simply done to maximize shareholders value, which is achieved or not. However, there is also another incentive that lead firms to merge and acquire with other firms, is agency costs.

An agency cost is the cost incurred by an organization that is associated with problems such as divergent management-shareholder objectives and information asymmetry. The information asymmetry that exists between shareholders and the CEO is generally considered to be a classic example of a principal-agent problem. The agent (the manager) is working on behalf of the principal (the shareholders), who does not observe the actions of the agent. This information asymmetry causes the agency problems of moral hazard and adverse selection.

Roll (1986) explained agency costs in takeovers. The Hubris hypothesis is as an advanced explanation of corporate takeovers. Hubris on the part of individual decision-makers in bidding firms can explain why bids are made even when a valuation above the current market price represents a positive valuation error. Bidding firms infected by Hubris simply pay too much for their targets. The empirical evidence in mergers and tender offers is reconsidered in Hubris context. It is argued that the evidence supports the Hubris hypothesis as much as it supports other explanations such as taxes, synergy, and efficient target management.

In order to analyse Hubris Hypothesis, Roll summarized firm takeover steps;

- Firstly, the bidding firm identifies a potential target firm.

- Secondly, valuation of firm is done both to measure intrinsic value of the firm and to search synergy effects of the takeover, which can increase or decrease the result of the valuation for a bidding firm.
- Thirdly, the value of the analysis of above is compared with market price of target shares. If the value is lower than market price, the bidding firm knows that there is no need to make offer since shareholders will not accept the offer.

If there are absolutely no gains to takeover, the Hubris hypothesis implies that the average increase in the target firm's market value should be then be more than offset by the average decrease in the value of bidding firm. Takeover expenses would constitute the aggregate net loss. The market price of the target firm should increase when a previously unanticipated bid announcing, and it should decline to the original level or below if the first bid is unsuccessful previous level or below if offer is if no further

5.2 The Determinants of Bank Merger Premiums

The consolidation and concentration trend has been growing in financial sector. This trend is both applicable to the inter-country and cross-border mergers. As takeover transactions increase, the premiums paid to the target banks also increased. There are researches to analyse takeover premiums of the commercial banks in literature. These researches are about to find correlations between premiums paid and financial ratios as well as performance indicators.

5.2.1 Research of T. H. Hannan – S. A. Rhoades (1987)

Differing from previous studies of merger and acquisitions, which were mostly about industrial companies, Hannan and Rhoades focused on their research "Acquisition Targets and Motives: The Case of the Banking Sector" to the Banking sector. They analysed the relationship between the likelihood of a bank being acquired and various characteristics of the bank and the market in which bank operate. They also tested the hypothesis of "Poorly managed firms are particularly attractive acquisition target". They used data, which is about acquisition of banks more than thousand during 1971-1982 in Texas. They made analysis by estimation procedure, which distinguishes between the prospect of acquisition from inside and outside the target's bank market and accounts for multivariate effects overtime. The tasks of the analysis; to assess dependence of the acquisition event on the explanatory variables and to distinguish between the prospect of being acquired by firms in the same geographic market and prospect of being acquired by firms in the different geographic market. The results are classified as; it may not be acquired, a firm operating within its market may acquire it or a firm operating outside its market may acquire it

Variables

- Management Quality Ratios

  ROA = Bank return on assets during the year previous to t

  ROE = Bank return on equity during the year previous to t

  RELROA = Bank return on assets divided by the average return on assets of other banks operating in the same market during the year previous to t

  RELROE = Bank return on equity divided by the average return on equities of other banks operating in the same market during the year previous to t
- Market Share Ratio = Bank market share one year previous to t
- Capital / Assets Ratio = Bank capital – assets ratio during the year previous to t
- Bank Growth Ratio = Growth in bank's deposit during the three years previous to t
- Market Growth Ratio = Growth in market deposits during the three years previous to t
- Bank Size = Size of the bank in terms of assets one year previous to t
- Loans / Assets= Bank loan-to-asset ratio during the year previous to t
- Concentration ratio = Concentration of three firms concentration ratio, measured as the proportion of total market deposits accounted for by the largest three firms in the market during the year previous to t

Results

- The management performance ratios did not show any statistical significant value. This is opposite of the idea of bad managed firms are more likely acquisition targets than others.
- Market share shows highly significant positive impact from outside acquisition but insignificant impact from inside market acquisitions.
- Capital to assets ratio shows statistically significant negative effect on both market inside and market outside acquisitions. This is consistent with the opinion of "low capital – assets ratio firms are good to buy" market financial analysts and creates an attractive target.
- Market growth and bank growth shows insignificant impact. This is consistent with the hypothesis of "either bank growth or market growth does not make likely to be acquired.
- Market concentration variable shows significant negative impact for market inside acquisition but significant positive impact for market outside acquisition. This distinction is consistent with antitrust enforcement against horizontal mergers in more concentrated markets but does not create significant entry barrier to the outside mergers.
- Loans to assets and bank size variables do not show significant impact. This means neither size nor loan performance of the banks creates attraction for acquisitions either from market inside or from market outside.

5.2.2 Research of D. C. Cheng – B. E. Gup – L. D. Wall (1989)

Cheng, Gup, and Wall made empirical analysis of 136 bank takeovers in the Southeast USA during the 1981-1986 periods. They used not only target's variables but also acquirer's variable in order to find determinants of purchase price book value. In the analysis, both Ordinary Least Squares and Principle Components Regression methods are used to compare results. The general task of the analysis; to assess dependence of the acquisition event on target's own future earnings may be related to its historic profitability, and growth, the composition of its assets, and other factors and assess dependence of the target's contribution to the acquirer's future earning may depend on characteristics of the acquirer.

Variables

- Target's total assets
- Target's return on assets
- Target's return on equity
- Target's net income growth
- Target's total asset growth
- Target's earning assets growth
- Target's core deposit growth
- Target's equity growth
- Target's retail loans to total loans
- Target's charge off to total loans
- Target's total assets to acquirer's total assets
- Acquirer's total assets
- Acquirer's return on assets
- Acquirer's return on equity
- Acquirer's net income growth
- Acquirer's total asset growth
- Acquirer's earning assets growth
- Acquirer's core deposit growth
- Acquirer's equity growth
- Acquirer's retail loans to total loans
- Acquirer's Charge off to Total Loans
- Acquirer's market value to earnings
- Acquirer's market value to book value

Results of Ordinary Least Squares (OLS)

- General support for the importance of the target's profitability and growth is provided. However, target's return equity and charge-off to total loans are statistically important. Interestingly target's charge-off to total loans is negative.
- Target's percentage to total loans is statistically insignificant that means acquirers do not pay for the target's growth in retail loans
- Acquirers market to book value ratio is positively significant. On the other hand, acquirer's profitability, growth and charge offs are either negatively significant or positively insignificant. This may be result of the idea that acquirers with low profitability and low rate of growths may be willing to pay premiums to takeovers of profitable-growth oriented targets.
- The relative asset size of the two organizations is negatively significant. This is consistent with add more value than relatively small acquirers. The acquirer's presence in retail loans is insignificant.

Results of Principle Components Regression (PCR)

- Additional support for the importance of the target's profitability and growth is provided. Return on equity is significantly positive. Moreover, growth of assets, earning assets, charge-off to total loans, and core deposit ratios are positively significant.
- Acquirer's return on assets is negatively which may be because of the idea that acquirers try to increase their profitability by taking over profitable targets. In addition to this, acquirer's rate of growth is significantly negative may be because of the idea that acquirers with high rate of growths are less willing to pay high premiums for takeovers.
- The rate of growth of core deposit ratio of acquirers is significant and positive. The acquirer's market earning assets ratios and market to book value ratios are significantly positive. This may be result of the idea that value-maximizing behaviour in the firms having high market values is expected to earn higher profits from their acquisitions.
- The relative asset size is negatively significant which supports that bidder's ability to enhance target's service is inversely related to their relative size.

5.2.3 Research of D. Palia (1993)

Palia made analysis of all bank mergers for the period of 1984 and 1987, in which target bank assets size 25 millions of US$ and higher and acquirer bank assets size 100 millions of US$ and higher. Data includes 137 bank mergers.

Differing from previous bank merger determinants analysis, he tested also agency costs of bank mergers in addition to financial determinants. He tested hypothesis of "Managerial ownership levels cause managers to have a high proportion of their wealth invested in their non-diversifiable

human capital hypothesis; in order to diversify this risk, they may attempt to merge with another bank." He also made analysis spreading over the USA.

He defined bank merger premiums as the ratio of the price paid for the target to the book value of the target equity.

Variables

- Target's return on assets
- Target's five-year growth in total assets
- Target's equity capital to total assets
- Target's charge off to total assets
- Target's non-performing loans to total assets
- Target's provision for loan losses to total assets
- Target's four-bank concentration ratio in the state
- Target's total assets to acquirer's total assets
- Percentage of stock owned by the managers of an acquirer bank
- Square of percentage of stock owned by the managers of an acquirer bank
- Percentage of stock owned by the managers of a target bank
- Square of percentage of stock owned by the managers of a target bank

Results

- Targets return on assets is statistically significant and positive sign as expected
- Target's capital to total assets is negatively significant impact on merger premiums
- Target's five-year growth in total assets, charge off to total assets, and provision for loan losses to total assets ratios are statistically insignificant
- Target's non-performing loans to total assets ratio is highly, and negatively significant, which means acquirers are not likely to takeover bank with big non performing loan portfolios
- Target's four-bank concentration ratio in the state ratio is also highly significant and positive sign that means acquirers wants to enter concentrated markets
- Target's total asset to acquirer's total assets is significant with negative sign, which means larger banks offer higher premiums
- Managerial ownership ratios are all statistically significant. He measured acquirer's managerial ownership benefit as $dLM = \frac{\partial mergerpremium}{\partial M}$. The relationship between M and dLM is negative and then turns positive with U shaped by the diversification-control hypothesis. Since the turning point for managerial ownership is 5, 90%, and the null is rejected at 1%, it confirmed the diversification-control hypothesis. In addition to this, he measured

target's managerial ownership benefit as $dLD = \frac{\partial mergerpremium}{\partial D}$. The relationship between D and dLD is firstly positive and then turns negative with U shaped by the diversification-control hypothesis. Since the turning point for managerial ownership is 48, 32%, and the null is rejected at 1%, it confirmed the non-monotonic relationship hypothesis

5.2.4 Research of R. Jackson – A. Gart (1999)

Jackson and Gart analysed the determinants of bank merger premiums for the period 1990 to 1996. They examined the relationship between merger premium as dependent and key financial, regulatory, other independent variables. The Ordinary Least Squares method is used to measure relationships between dependent and independent variables. They found out that merger premiums are not related with acquirer's financial strength. On the other hand, the financial strength of the target is directly changes the premium paid in same direction. They also measured the synergy effects in the research.

Variables

- Target's core deposits to total assets
- Target's assets to equity ratio
- Target's non-performing to total assets
- Target's rate of return on assets
- Target's absolute size
- Acquirer's core deposits to total assets
- Acquirer's assets to equity ratio
- Acquirer's rate of return on assets
- Acquirer's absolute size
- Intra-states, inter-states merger type
- Deal structure
- Acquirer's assets to target's assets ratio
- Interactive-Intradum* Acquirer's assets to target's assets ratio
- Deposit cap dummy for target's state

Results

- The financial strength of the acquirer (measured by size, profitability, leverage, and core deposits) has statistically insignificant which is consistent with previous researches. This can be commented as the highest bidder takes in to account the value of the target's bank potential contribution to shareholder wealth measured by target's key financial structure.

- The financial strength of the target largely determines the premium paid for acquisition. The merger premium increases as target's rate of return on assets increases and decreases as target's non-performing assets in the portfolio increases.
- Target's core deposit has positively significant effect on merger premiums. By this way, acquirer wants to buy low financing sources of the target's bank.
- Target's absolute size is statistically insignificant in the calculation of merger premium.
- The premium increases as target's leverage ratios increase. This is not consistent with the idea of "highly leveraged bank increases risk of the merged banks and extra capital is needed after merge. For that reason, highly leveraged banks are not likely to buy".
- The merger type variables have statistically positive effect on merge premiums. Intra-states variable says that intra-states mergers are paid more premiums than inter-state mergers.
- The comment of synergy variables is strange. Acquirer's assets to target's assets ratio is statistically insignificant. However, the variable of Interactive-Intradum* Acquirer's assets to target's assets ratio is statistically and positively significant, which means relatively large banks are willing to pay high premiums but only for intrastate mergers. It is also being commented that synergy is possible only for merger transactions in which target and acquirer are in same geographic area.
- The regulatory variable deposit cap dummy for target's state has statistically significant negative effect in the calculation of merger premiums. This can be commented as premiums are constrained by regulatory limits on the share of deposits controlled by one bank and bank mergers for dominant market share are important in deciding merger premiums.

5.2.5 Research of T. J. Shawyer (2002)

Shawyer used data of 178 mergers throughout U.S.A. between 1996 and 2001 in order to analyse determinants of bank merger premiums. The dependent variable is the premium paid in those mergers. He used simple regression method in order to find the relationship between independent variables and dependent variable of merger premiums. Then model is tested with stepwise regression.

Differing from previous researchers of bank mergers, he examined the estimated cost savings and estimated restructuring costs effects on deciding merger premiums in order to find effects of synergy and cost decreasing motivation of mergers.

Variables

- Target's total assets
- Target's rate of return on average assets
- Target's rate of return on average equity

- Acquirer's total assets
- Estimated cost saving ratio
- Estimated restructuring charges
- Accounting model for the merger

Results of Simple Regression

- Target's total asset, rate of return on average assets, and rate of return on average equity have a statistically significant and positive effect on merger premiums. These mean that acquirer is willing to pay more for size, name recognition, economies of scale, profitable and growth potential banks, and effective management.
- Acquirer's total asset has also statistically significant and positive effect on merger premiums, which means larger banks have capacity to pay more premiums in mergers.
- Estimated cost saving ratio has insignificant and negative relationship with merger premiums. This result is unexpected and expected to be positive and effective on merger premiums. This is also against to idea of decreasing cost motivation of mergers.
- Accounting model for the merger has positive and significant relationship with bank merger premiums, which means acquirer is willing to pay more premiums for targets that accept to be accounted for a pooling of interest.
- Estimated restructuring charges and bank merger premiums relationship has positive and significant relationship. This is against the result of cost savings and indicates opposite of the cost saving comment. That means acquirers are willing to pay more premiums for the banks have capacity to create synergy and cost saving in another way.

Results of Stepwise Regression

All the independent variables above were entered in to the model R^2. The model tries to find the explanatory percentage of the independent variable on dependent variable. After entering all variables, R^2 is found 0, 44 means that independent variables can explain 44% of the bank merger premiums. Then high correlation is found between target ROA and ROE. Their correlation is 0, 729. Following, target's ROA is taken out of the model and next R^2 is found 0, 427 meaning independent variables can explain 42, 7% of the bank merger premiums.

6 THE BANK VALUATION – TURKISH EVIDENCE

The valuation methodology is set up for the financial analysts who do not have the opportunity to get detailed information beyond independent audit reports. The banks in Turkey are compulsory to have independently audit reports in each quarter according to BDDK accounting standards. The formation of financial tables is the same but the details of footnotes changes from quarter to end of year. The end of year reports includes the highest detailed information in footnotes.

The accountings standards of BDDK are mostly in correlation with International Financial Reporting Standards. However, there are some variations; these are mainly regulations about provisions and classification of financial instruments. In addition to these, there are differences in the notation of financials.

The main difficulty in the analysis of financials is notation of FX indexed assets. According to Turkish FX legislation, banks cannot grant FX loans to the individuals or firms other than exporting firms. To pass over this rule, banks are granting FX indexed loans to those firms and individuals. However, these loans are shown in TRY. Moreover, the FX gain or loss of these loans is shown in other operating income or operating expense. Naturally, these loans and their gains and losses are shown in FX side and FX gain/loss section in IFRS financial table. To recover this, we used footnotes in the independent audit reports which also express FX indexed assets and their FX gain/loss separately. Then we created adjusted financials in order to value the banks. Unfortunately, some of the banks have not expressed FX gain and losses of FX indexed assets. This may cause an error in the valuation. On the other hand, we have not adjusted figures according to our estimation more than expressed information in the footnoted. We hope that this issue will be changed next year after using Turkish Accounting Standards which almost same with IFRS.

Secondly, banks in Turkey make provisions in accordance with the regulation of credit losses provisions. This regulation does not use PD and LGD in allowing provisions. In order to pass over this, we used risk weighted assets footnotes of the independent audit reports. We used each bank's risk weighted assets footnotes with the sector (privately owned commercial banks) risk weighted assets. Since we know the amount of sector risk weighted assets and the total problematic loans of the sector, we adjust the sector rate to each bank's financial tables.

6.1 The Methodology

We have used adjusted net profit in order to find future cash flows. In cases of bank valuations, it is not very easy and understandable to use cash flow financials. Since banks are not engaged in trade of goods, all transactions of commercial banks are monetary. The use of change in assets and liabilities do not produce good results vis-à-vis non-bank firms. Instead we utilised adjusted net profit.

Our adjustments include; cancelling provisions, which are not monetary transactions except for provisions for problematic loans. Moreover, we added reversal of provisions to at the beginning of equity. Additionally, almost all banks in the group have the item of revaluation fund of securities portfolio. This item is included in case of change in the purchase cost of available for sale portfolio securities. Turkish banks have enjoyed huge benefits as a result of the inclusion of this item because of continuous interest rate decrease following 2001 economic crises. However, we have not assumed capital gain in the method. Then we added balance of the revaluation fund to the beginning equity.

Our rate of growth in the model assumes profit based internal growth. We have not assumed dividend payment and cash capital injection. For that reason, the ROE of the previous period has become the rate of growth of the next period.

As it is mentioned above, the problematic loans are calculated based on the comparison of bank's risk weighted assets table with sector's risk weighted assets table. The figured sum represents future loss of the bank. For this reason we have used 100% provision for bad loans. This created big decrease or increase for loans following 2005 financials comparing with forecasted 2006 year. In order not to affect ROE, the gain or loss from 2006 provisions movements are reversed in the calculation of 2006 ROE. However, following year's provision of gain/loss is added both net P&L and ROE.

6.1.1 Balance Sheet Drivers

In order to forecast future cash flows, we have prepared 10 years balance sheet and p/l. Although we wanted to use average of 3 years balance composition, we saw that there are important changes in the weights of assets and liabilities in the total assets. Even comparisons of 31.12.2005 financials and 30.06.2006 financials have showed important change in the structure. This is mainly related to the big rates of growth after 2001 crises in the banking sector.

As a solution, the balance sheet structure of the 30.06.2006 is kept in the forecast for the next 10 years financials. There are some exceptions as follows;

i- The reserves in the TCMB accounts are legally identical and binding for all banks. This is 6% of TC liabilities except for local bank deposits and repo and 11% for FX local liabilities with the same exception. We have used this ratio for deposits.

ii- Net balance sheet position and net off-balance sheet position are kept with the same rate with 30.06.2006 figures. In order to keep the same rate, there may be change in FX ban accounts / total assets ratio.

iii- No new investments of fixed assets and subsidiaries are assumed. For that reason, the amount of fixed assets and subsidiaries are kept same with 30.06.2006 figures.

iv- No additional provisions are assumed other that calculated according to risk weighted assets table. Additionally no new capital gain or loss assumed and off course no movement of revaluation fund.

Table 3 - The list of Balance Sheet Drivers

- Cash TC / Total Assets
- Cash FX / Total Assets
- TCMB TC / Customer Deposits TC
- TCMB FX / Customer Deposits FX
- Securities Portfolio TC / Total Assets
- Securities Portfolio FX / Total Assets
- Loans TC / Total Assets
- Loans FX / Total Assets
- Accrued Interest Income TC / Total Assets
- Accrued Interest Income FX / Total Assets
- Other Assets TC / Total Assets
- Other Assets FX / Total Assets
- Customer Deposits TC / Total Assets
- Customer Deposits FX / Total Assets
- Funds Borrowed TC / Total Assets
- Funds Borrowed FX / Total Assets
- Accrued Interest Expense TC / Total Assets
- Accrued Interest Expense FX / Total Assets
- Other Liabilities TC / Total Assets
- Other Liabilities FX / Total Assets
- Letters of Guarantees / Total Assets
- Bank Acceptances / Total Assets
- Letters of Credits / Total Assets
- Other Guarantees / Total Assets
- Irrevocable Commitments / Total Assets
- Total FX Assets / Total Assets
- Total FX Liabilities / Total Assets
- FX Buys / Total Assets
- FX Sells / Total Assets

6.1.2 P&L Drivers

As P&L drivers, profitability and cost measuring ratios of first half of 2006 are used. In order to determine the profitability ratios, we have used first half averages of assets and liabilities items (average of 31.12.2005, 31.03.2006, and 30.06.2006 figures) and related income and expenditure results of 30.06.2006 P/L.

Here are the exceptions that had to be taken into consideration;

A- The exchange rates of foreign currency indicated high fluctuations since 2001. Since fluctuation means risk, banks afforded to work with non-position of FC which is opposite of the situation before 2001. Because of fluctuation in the foreign currency rates, the ratios of position profitability are meaningless. To pass over this, we used 10% yearly increase in the foreign currency rates and fixed cross parity of foreign currencies.

B- Provisions gains/losses are the difference of beginning period and closing period. No other provision gain and losses are assumed for future periods. Additionally, no depreciation expense assumed.

C- 20% tax rate is assumed which applicable to corporate firms in Turkey. We have assumed that all income and expenses are used in the calculation of tax base without exemption.

D- Configuration excluded capital gain/loss. However, the brokerage gains are natural outcome of keeping securities portfolio. Thinking this, we assumed (2/1000) yearly brokerage gain from securities portfolio. This equals to 1/1000 brokerage fee from buying and 1/1000 brokerage fee from selling in the name of customers.

Table 4 - The list of P/L Drivers

- Interest Earning Assets / Interest Income =
Interest Rate (%)
- Interest Bearing Liabilities / Interest Expense =
Interest Rate (%)
- Cash Loans / Cash Loans Commissions =
Cash Loans Commissions Rate (%)
- Non-Cash Loans / Non-Cash Loans Commissions =
Non-Cash Loans Commissions Rate (%)
- Cash & Non-Cash Loans / Other Commissions =
Other Commissions Rate (%)
- Funds Borrowed / Cash Loans Commissions Expense =
Cash Loans Commissions Expense (%)
- Non-Cash Loans / Non-Cash Loans Commissions Expense =
Non-Cash Loans Commissions Expense Rate (%)
- Banks, Interbank, Non-Cash Loans / Other Commissions Expense =
Other Commissions Expense rate (%)
- Securities Portfolio x (2/1000) =
Trading Gain
- Balance Sheet Positions x (10%) =
FX Gain / Loss from Balance Sheet
- Off-Balance Sheet Positions x (10%) =
FX Gain / Loss from Off-Balance Sheet Positions
- Cash & Non-Cash Loans / Other Operating Income =
Other Operating Income Rate (%)
- Operational Expense / (Net Interest Income + Net Commissions Income) =
Cost to Income Ratio

6.1.3 Valuation

Value assessments of banks are made with consideration to Discounted Cash Flow Analysis. In DCF models, depreciation and other non-monetary gains and losses are added to P&L. For this reason, we do not keep the same level of fixed assets and provisions. General provisions are the provision for the performing assets as a security. It is the part of previous year's profit. Consequently, we added general provisions to the shareholders equity.

6.1.4 Discount Rate

The main factor in the DCF analysis, which affects the value of the firm, is the discount factor. This factor should normally include risk free interest rate plus market premium. There are two fundamental approaches to calculate discount rate; CAPM and Gordon's Dividend Growth Model. We will calculate both of them in the analysis. The net profit of the each year is discounted with cost of equity rate.

6.1.4.1 **CAPM**

Although there are significant criticisms, the CAPM model is largely used in financial circles. The main criticism of the CAPM is that it works in a market efficient world but it does not work properly in unstable and developing market. The CAPM is calculated with a formula indicated below;

$E(R^i) = R^f + \beta (R^m - R^f)$

Where;

$E(R^i)$ = Expected return of capital

R^f = Risk-free interest rate

β = The sensitivity of firm returns to market returns

R^m = Expected Return of Market

In our case, we found risk free interest rate as 16,47%, which is average yield of one year treasury bonds during first half of the 2006. In the methodology, we use banking sector beta instead of each bank's own beta. The average banking beta is 1, 17 (for the purposes of simplification we will use 1, 2) which is cumulative return differences of banking indices and IMKB 100 indices.

The main difficulty in the CAPM model is to calculate the risk premium. Risk premium is the difference between market return and risk free interest rate. The average Turkish Treasury bond interest rates and average annual return of the Istanbul Stock Exchange (IMKB) is presented below in order to find risk premium since IMKB opened:

Table 5-Comparative Returns of Istanbul Stock Exchange and Treasury Bonds

NUMBER OF YEARS	YEAR AVERAGE	ANNUALLY IMKB RETURNS	ANNUALLY TREASURY BONDS	NET PREMIUM	IMKB / TREASURY
1	2006	62,22	16,47	45,75	3,78
2	2005	47,77	15,19	32,58	3,14
3	2004	65,71	27,46	38,25	2,39
4	2003	13,58	54,61	- 41,02	0,25
5	2002	9,98	57,63	- 47,65	0,17
6	2001	- 27,55	80,13	- 107,68	- 0,34
7	2000	223,15	36,79	186,36	6,07
8	1999	96,81	107,06	- 10,26	0,90
9	1998	81,04	98,98	- 17,94	0,82
10	1997	195,88	120,56	75,32	1,62
11	1996	67,41	123,63	- 56,22	0,55
12	1995	100,33	107,76	- 7,43	0,93
13	1994	143,99	136,94	7,04	1,05
14	1993	170,03	85,26	84,77	1,99
15	1992	11,51	75,57	- 64,07	0,15
16	1991	- 2,34	69,63	- 71,96	- 0,03
17	1990	458,27	51,73	406,54	8,86
18	1989	100,99	57,93	43,05	1,74
19	1988	- 52,39	63,01	- 115,40	- 0,83
Average		**92,97**	**72,96**	**20,00**	**1,75**
Standard Deviation		**115,17**	**36,10**	**118,69**	**2,37**
Return Positive		**16**	**19**	**9**	**16**
Return Negative		**3**	**-**	**10**	**3**

As it is seen from the table, IMKB returns have fluctuated too much during the period. Three years returns of the IMKB are negative value. Standard deviations of both returns explain fluctuations well. Standard deviation of the IMKB is higher than its average return; 91, 17 % and 115, 17 %. The difference of average market return and average Treasury bond return is 20%. However, this rate is absolute rate. Since interest rates have high figures history, to use absolute difference may mislead the result. Thus, we have used IMKB return / Treasury return ratio. The average of IMKB return and Treasury return ratio is 1, 75. This means risk free interest rate should be multiplied with the ratio of 1,75 in order to find market return:

Expected Market Return = 16, 47%. * 175%

Expected Market Return = 28, 79 %

The risk premium of the market = 28, 79 % – 16, 47 %

The risk premium of the market = 12, 32 %

Then all the variables are ready to use in order to calculate cost of capital;

$E(R^i)$ = 16, 47 % + (120% * 12, 32 %)

$E(R^i) = 31, 25\ \%$

The 31, 25 % cost of capital includes very high volatilities of the last 20 years Istanbul Stock Exchange history. In addition to this, it includes very high real interest rates. Since inflation figures are around 10 % yearly, the decrease in the long-term premiums can be expected. Taking critics of CAPM in developing markets (Erdogan-Berk-Katircioglu, 2000; Fama-French, 2001; Paulo, 2003) in to account, dividend growth model to find cost of capital is used in our case.

6.1.4.2 Dividend Growth Model

The Gordon dividend growth model is used to price common stock. It is formulated as follows;

$$P = \frac{D}{(k_e - g)}$$

Where:

P= Price of common stock

D= Current annual dividend

k_e = Discount rate of markets to value stocks

g = Annual dividend rate of growth

The model is formulated to find value of the shares. However, rearranging the formula, cost of equity can be found;

$$k_e = (\frac{D}{P}) + g$$

Then, if the price and dividend amounts are known, the rate of growth is forecasted; cost of equity can be calculated. Here the important issue is the rate of growth. Differing from CAPM, the rate of growth is the expectations about the future dividends. Dividend growth model requires the future cash flows should be forecasted logical, reliable assumptions. Historical indicators can be used just to help us to make forecast for the future. Dividend growth model is not affected from historical volatilities as CAPM are affected. Secondly, if there is no dividend payment, dividend growth model can still be used. The book value of the equity contains retained earnings. Then if there is no dividend payment, the return on equity rates can be used instead of dividend.

In our case, we used related information to make a reliable forecast;

Table 6- Dividend Rate of Turkish Banks in IMKB in 2006

			CASH PAID DIVIDEND		
	AVERAGE	TOTAL	PAID	PAYMENT	PAYMENT
BANKS	EQUITY	PROFIT	AMOUNT	RATE	DATE
AKBANK	6.317.581	1.461.170	540.001	30%	29-March-2006
ALTERNATİFBANK	124.851	22.071	0	0%	---
DENİZBANK	982.220	226.452	0	0%	---
FİNANSBANK	1.374.305	470.161	0	0%	---
FORTISBANK	975.574	110.005	0	0%	---
GARANTİBANK	3.513.579	769.957	105.000	5%	12-April-2006
İŞBANK	8.447.876	2.752.313	306.856	29%	3-April-2006
SEKERBANK	297.915	84.524	0	0%	---
TEB	461.755	102.239	18.743	32%	6-April-2006
TEKSTİLBANK	150.979	9.686	0	0%	---
VAKIFBANK	3.027.109	622.359	399.352	31%	31-May-2006
GRAND TOTAL	**25.673.742**	**6.630.937**	**1.369.952**		

Table 7- Dividend and Retained Earnings of Turkish Banks in IMKB in 2006

BANKS	TOTAL ASSETS	NUMBER OF SHARES	SHARE PRICE	MARKET CAP.	DIVIDEND PRICE RATIO	RETAINED PROFIT	ROE
AKBANK	55.198.829	1.800.004.540	11,00	19.800.050	2,7%	921.169	23,1%
ALTERNATİFBANK	1.486.422					22.071	17,7%
DENİZBANK	11.975.550					226.452	23,1%
FİNANSBANK	17.919.302					470.161	34,2%
FORTIS BANK	7.657.358					110.005	11,3%
GARANTİBANK	41.290.335	2.100.000.000	4,90	10.290.000	1,0%	664.957	21,9%
İŞBANK	69.733.241	1.968.942.000	11,70	23.036.621	1,3%	2.445.457	32,6%
SEKERBANK	3.324.057					84.524	28,4%
TEB	6.962.733	115.600.000	21,70	2.508.520	0,7%	83.496	22,1%
TEKSTİLBANK	2.028.871					9.686	6,4%
VAKIFBANK	33.708.313	1.279.000.000	7,15	9.144.850	4,4%	223.007	20,6%
GRAND TOTAL	**251.285.011**			**64.780.041**	**5,3%**	**5.260.985**	**25,8%**

The tables above show 2005 dividend payments of publicly held banks in IMKB and their assets and ROE's. Turkish banks do not pay dividends. When we look at the ROE amount, the more reliable estimation can be made. Including paid dividend, the average ROE of the Banks in IMKB is 25, 8 %. Moreover, the assets rate of growth of last four years as follows:

Table 8 – Banking Sector Yearly Asset Rate of Growth

2006*	29,3%
2005	30,1%
2004	23,2%
2003	17,8%
Average	**25,1%**

* First Quarter Multiplied with 2

The rates of growth of both figures are very similar. The dividend growth models look more reliable than CAPM result (31, 25%)

6.1.5 Credit Risk Measurement

The credit risk measurement is the vital part of the bank valuation. In common bank valuation methodologies, credit risks are not taken in to consideration properly. Financial analyst looks at the historical non-performing loans / total loans ratio in order to calculate credit provisions loss. Nevertheless, as we allocated a large section of in our thesis, this is not sufficient enough to value a bank. Although financial analysts do not have opportunity to have information about the risk structure of the bank, the publicly issued financial reports can be used to measure credit risk.

The BDDK standards necessitate Turkish Banks to provide information about bank's capital adequacy, credit risk weights of the whole assets, commitments and contingencies. Credit risk weights table is prepared according to credibility of the borrower, collaterals of the receivables, and country where placement is made. Thus, we can measure credit risk of the analysed bank by using these footnotes in the published financial report.

The process of measuring credit risk is carried out according to the following example:

Table 9 – Calculation of Banks Non-Performing Assets Amounts and Provisions.

Sector Risk Weights

0 % Risk	**20 % Risk**	**50 % Risk**	**100 % Risk**	**Net**
1.000	2.000	30.000	100.000	109.400

	1.000	x	0%	0
	2.000	x	20%	400
	30.000	x	30%	9.000
	100.000	x	100%	100.000
Total =	**133.000**		**Total =**	**109.400**

Sector Risk Weighted Assets / Total Assets =	82,3%
Sector Non-Performing Loans Amount =	5.000
Net Risk Weighted Assets / Non Performing Assets =	4,6%

Bank Risk Weights

0 % Risk	**20 % Risk**	**50 % Risk**	**100 % Risk**	**Net**
50	740	10.000	50.000	53.148

	50	x	0%	0
	740	x	20%	148
	10.000	x	30%	3.000
	50.000	x	100%	50.000
Total =	**60.790**		**Total =**	**53.148**

Bank Risk Weighted Assets / Total Assets =	87,4%
Net Risk Weighted Assets / Non Performing Assets =	4,9%

Non Performing Loan Amount =

60.790	x	4,9%	=	2.953

The rationale of this arises from measuring risk-weighted assets of each bank. Thus the cash flows of the bank are shaped according to their risk weights. If the ratio of net risk weighted assets / balance sheet is low, then the provision rate is considered, low. If the ratio of net risk weighted assets / balance sheet is regarded as high, therefore the provision rate is also high. Then all banks' net profit / loss will have the same risk ratio. This model of credit risk measurement depends on historical loan loss data of the sector as we discussed loan –loss ratio based models. Since all banks' non-performing assets are re-measured according to their risk structure, all banks' P&L balances have same risk score. The same discount rate is applicable for all banks in the analysis.

6.2 Results of the Valuations

Results of the model are generally consistent with the sale prices of Turkish Banks for two years. In the analysis, the BDDK independent audit reports of the Akbank, Alternatifbank, Denizbank, Finansbank, Fortisbank, Garanti Bankasi, Isbank, Sekerbank, TEB, Tekstilbank and Vakifbank were examined. As of 30.06.2006, these are the publicly held commercial banks. Due to the merger process with Kocbank, Yapi Kredi Bank's financial tables are not included in the analysis. Details of the study can be seen in annex 2.

The total assets size of the publicly held banks is YTL285.66million. This sum corresponds to 65% of total deposit taking banks in Turkey. Total loan of publicly held commercial banks are YTL140.22million, total deposits are YTL172.82million. The weight of total loans is 74%, total deposits are 59% comparing total deposit taking banks.

Table 10 - Comparatives Values of Turkish Commercial Banks in IMKB 1

	Sales Value	**DCF Value***	**Market Cap***	**Book Value***
Akbank	20.900.000	23.145.398	16.588.000	6.328.714
Alternatifbank	494.437	640.185	414.890	158.134
Denizbank	4.760.226	3.212.898	4.460.171	1.200.071
Finansbank	7.371.340	3.760.609	7.334.000	1.794.249
Fortisbank	3.000.000	24.845	1.477.540	1.041.149
Garanti	8.174.000	18.095.811	8.358.000	4.103.585
Isbank	N/A	26.355.438	15.298.679	8.429.552
Sekerbank	1.250.000	776.332	682.500	305.822
TEB	1.305.976	533.271	890.460	566.824
Tekstilbank	N/A	286.444	486.000	313.179
Vakifbank	N/A	14.983.646	7.891.430	3.918.155
Total	**47.255.979**	**91.814.878**	**63.881.670**	**28.159.434**

* As of 30.06.2006

Average DCF Value / Book Value	3,26
Average Market Cap / Book Value	2,27
Average Sales Value / Book Value	3,05

Turkish banks have been subject to increasing number of merger and acquisition transactions for three years. The common comments about those transactions arrogating the banks have been sold expensively. However, results of analysis show that average sales value / book value ratio of the banks that have been subject to sale agreements is lower than average DCF value / book value ratio. (3, 05 and 3,26). Moreover, some banks' financials did not give approximately results of the realized sale prices or share price outstanding. They are Fortisbank, TEB, and Tekstilbank. If we exclude these banks' results from the analysis, the average DCF value / book

value is 3,57, average sales value / book value ratio is 3,09. The result obviously shows that recent Turkish Banks sales transactions have not been expensively.

Table 11 - Comparatives Values of Turkish Commercial Banks in IMKB 2

	Sales Value	**DCF Value***	**Market Cap****	**Book Value**
Akbank	20.900.000	23.145.398	16.588.000	6.328.714
Alternatifbank	494.437	640.185	414.890	158.134
Denizbank	4.760.226	3.212.898	4.460.171	1.200.071
Finansbank	7.371.340	3.760.609	7.334.000	1.794.249
Garanti	8.174.000	18.095.811	8.358.000	4.103.585
Sekerbank	1.250.000	776.332	682.500	305.822
Total	**42.950.003**	**49.631.233**	**37.837.561**	**13.890.575**

* As of 30.06.2006

Average DCF Value / Book Value	3,57
Average IMKB Value / Book Value	2,72
Average Sales Value / Book Value	3,09

Three commercial banks in IMKB have not been subject to sale agreements. They are Isbank, Tekstilbank and Vakifbank. Their DCF analyses also are consistent with other banks that have been subject to sale agreements. According to that, average DCF value / book value ratio is 3,29.

Table 12 - Comparatives Values of Turkish Commercial Banks in IMKB 3

	DCF Value*	**Market Cap***	**Book Value***
Isbank	26.355.438	15.298.679	8.429.552
Tekstilbank	286.444	486.000	313.179
Vakifbank	14.983.646	7.891.430	3.918.155
Total	**41.625.528**	**23.676.109**	**12.660.886**

* As of 30.06.2006

Average DCF Value / Book Value	3,29
Average IMKB Value / Book Value	1,87

6.2.1 Akbank

As of 31.12.2005; Akbank's consolidated total assets are YTL55.19million. As of 30.06.2006; bank's forecasted DCF value is calculated at YTL23.45million. In November 2006; Akbank has been subjected to sale agreement with the total value of YTL20.90million.

6.2.2 Alternatifbank

As of 31.12.2005; Alternatifbank's consolidated total assets are YTL1.48million. As of 30.06.2006; bank's forecasted DCF value is calculated at YTL500million. In November 2006; Alternatifbank has been subjected to sale agreement with the total value of YTL640million.

6.2.3 Denizbank

As of 31.12.2005; Denizbank's consolidated total assets are YTL11.98million. As of 30.06.2006; bank's forecasted DCF value is calculated at YTL3.25million. In June 2006; Denizbank has been subjected to sale agreement with the total value of YTL4.76million.

6.2.4 Finansbank

As of 31.12.2005; Finansbank's consolidated total assets are YTL17.92million. As of 30.06.2006; bank's forecasted DCF value is calculated at YTL3.80million. In April 2006; Finansbank has been subjected to sale agreement with the total value of YTL7.37million. However, the DCF value is also found lower than expected. When future forecasts analysed, it is seen that lower profit level comes from FX loss. 2007 FX loss is forecasted as YTL700million although 2005 loss realized as YTL61.96million. As of 30.06.2006 bank' balance sheet FX position is %11 of the total assets (YTL2, 8billion). The bank closed balance sheet position with derivative instruments totalling up to YTL2, 9billion. In the model; the cost of open balance sheet and to close position at the off-balance sheet is also %10. These costs increase the FX forecasted loss. Usually the bank should decrease the volume of balance sheet position. This may decrease future expected loss. But we have not adjusted the figures.

6.2.5 Fortisbank

As of 31.12.2005; Fortisbank's consolidated total assets are YTL7, 6billion. As of 30.06.2006; Fortisbank's forecasted DCF value is calculated at YTL26million. In August 2005; the bank has been subjected to sale agreement with the total value of YTL3billion. The model dramatically miscalculated the value of the bank. When future forecasts analysed, it is seen that lower profit comes from FX loss and other operating expenses. As of 30.06.2006; bank's balance sheet FX position is %6 of the total assets (YTL628million). The bank closed balance sheet position with derivative instruments totally YTL677million. In addition; in the first half of the 2006 the bank's cost to income ratio is 91%. Compared with the peer-group banks, this ratio is dramatically high. The joint effect of other operating expense and FX position loss resulted with regular losses in the future forecasts. We have not adjusted these figures.

6.2.6 Garanti Bankasi

As of 31.12.2005; Garanti's consolidated total assets are YTL41billion. As of 30.06.2006, Garanti's forecasted DCF value is calculated at YTL18.33million. In December 2005 the bank has been subjected to sale agreement with the total value of YTL8.57million. Garanti's high value derives from lower cost to income ratio. The bank has decreased cost to income ratio to 55% from 62%. If the ratio were 62%, the DCF value would be YTL14billion.

Following this point, bank's sales price book value is about 2 at the time of sale. However, in the Finansbank deal, this multiple reached the figure 4. We can interpret that lower multiple derives from not selling the entire management of the bank to the buyer and increasing banking prices of Turkey market.

6.2.7 Isbank

As of 31.12.2005; Isbank's consolidated total assets are YTL69.73million. As of 30.06.2006; Isbank' forecasted DCF value is calculated at YTL26.67million. As of 30.06.2006; the bank's market cap is found at YTL15.29million and as of 30.09.206; YTL15.95million respectively. It can be commented that bank's share price is lower than it should be. Although 20% of the Akbank shares sold with 3,3 multiple (November 2006), Isbank market value / book value is 1,8. If we apply Akbank sale multiple to Isbank, then Isbank market value would be YTL28billion.

6.2.8 Sekerbank

As of 31.12.2005; Sekerbank's consolidated total assets are YTL3.32million. As of 30.06.2006; Bank' forecasted DCF value is calculated at YTL782million. In June 2006 Sekerbank has been subjected to sales agreement with the total value of YTL1.25million. However, as of 30.06.2006 bank market cap is YTL683million and as of 30.09.2006; YTL618million respectively. This shows that market regards the sale value higher than it should be.

6.2.9 TEB

As of 31.12.2005; TEB's consolidated total assets are YTL6.96million. As of 30.06.2006; TEB's forecasted DCF value is calculated at YTL539million. In November 2004, the bank has been subjected to sales agreement with the total value of YTL1.30million. The bank's forecasted DCF value is deemed lower than expected. When bank forecasts examined, it is observed that the lower value comes from high cost-to- income ratio. Until end of 2005, the average of TEB's cost-to-income ratio is 57%. However, during first half of the 2006, cost to income ratio is realized as 73%. In order to obey drivers of the model, we have applied 73% cost-to-income ratio for TEB. This caused bank future cash flows decrease. According to us, such a high cost to income ratio may be result of FX indexed loan losses and some other extraordinary expenses. Since BDDK

reporting standards do not request detailed explanation of non-interest expense, we could not reach healthy data. But we do not expect such expenses for TEB.

6.2.10 Tekstilbank

As of 31.12.2005; Tekstilbank consolidated total assets is YTL2billion. As of 30.06.2006; Bank' forecasted DCF value is calculated at YTL289million. As of 30.06.2006; this is lower than the book value of the bank, which is YTL313million. Upon examining the analysis it is observed that the lower profit comes from high cost-to-income ratio (86%) and low net interest margin (2,21%, which is almost half of the 2005 figure 4,14%)

6.2.11 Vakifbank

As of 31.12.2005; Vakifbank's consolidated total assets is YTL33.71million. As of 30.06.2006; Vakifbank's forecasted DCF value is calculated at YTL15billion.

As of 30.06.2006; Bank' market value is YTL7.89million and as of 30.09.2006; YTL 8.54million respectively. But we envisage that market value of the bank is lower than it should be.

7 CONCLUSION

The firm valuation techniques come together with valuation techniques of the single stocks, which also have quite a long history in conjunction with stock markets. However, the modern valuation era starts with Graham and Dodd who introduced “Intrinsic Value” concept.

Fundamentally, there are three main approaches; models of these approaches have found great base between both academics and financial analysts. They are as follows;

- Discounted cash flow models / Income Approach
- Relative Valuation / Market Approach
- Net Asset Valuation / Balance Sheet Approach

However, new models have been developed as well. The option pricing method is one of them, which found a great application base in finance. Some of the other models have been developed as derivatives of the DCF method.

The relative valuation has been very popular due to its ease in application and understanding. It also gives approximate market price for Mergers & Acquisitions. The P/B ratio of the Turkish Banking sector is an example of it. In recent years, the bank shareholders in Turkey have been demanding to get prices higher than 3 P/B ratios.

The valuation processes of commercial banks differ in many ways from the other sector firms. These differences come from some unique specialties of the commercial banks. For example in many countries and in order to protect savings of the householders; state authorities do not and cannot allow a bank to default. More so, they are being monitored very closely. Due to the fact that they are important actors of the economic world, they are not treated as ordinary firms.

From time to time, it is argued that banks get high premiums in the M&A cases. According to studies of the researchers on the subject, the conditions, which affect bank valuation, also affect premiums of the bank mergers and acquisitions. The barriers on the entry and exit to the banking system are the determinants in the concept of Bank Value Assessment.

The limitations on the banks’ defaults need a completely different valuation approach other than non-banking firms. Under these circumstances, the measure of the credit risk and profitability dominates the bank valuation process.

In this study we have provided a DCF valuation methodology dealing with valuation problems deriving from financial reporting in emerging markets such as Turkey. The problems are mostly related with the usage of foreign currencies in big amount as a substitution of local

currency and high inflation. In the methodology, adjusted net P&L figures are used instead of change in assets and liabilities.

The one of the main problem of the valuation process in emerging markets is to find true equity premium. The volatilities in the equity market do not allow the use of CAPM model. Instead we have used Dividend Growth Model. The growth rate is set with ROE of the each bank that does not assume dividend pay out and new capital injection. Future cash flows forecast do depend on the existing balance-sheet structure and profitability ratios. The methodology involves a technique of measuring credit risk by using the risk weighted assets footnote.

In the valuation study, IMKB banks financial reports are used excluding Yapi Kredi. The total assets size of the publicly held banks in Turkey is YTL285.66million. This sum corresponds to 65% of total deposit taking banks. Total market value of the publicly held banks is YTL63, 8billion. According to results of our study, the average DCF value / book value ratio is 3,266. However, excluding three banks results that give abnormal profit figures because of inconvenient balance sheet structure for our valuation methodology, the average DCF value / book value ratio is 3,57. Contrary to this, average sales value / book value ratio is 3,09. This result proves that recent Turkish Banks sale agreements have not been expensively sold as commonly expressed.

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1 Annex 1

1.1 EVA, EP and MVA of a company without debt.

IRR of investment = Required return to equity (Ke) = 10%

Balance Sheet	**0**	**1**	**2**	**3**	**4**	**5**
WCR (Working Capital Requirements)	2.000	2.000	2.000	2.000	2.000	0
Gross Fixed Assets	10.000	10.000	10.000	10.000	10.000	10.000
-Cumulative Depreciation	0	2.000	4.000	6.000	8.000	10.000
NET ASSETS	**12.000**	**10.000**	**8.000**	**6.000**	**4.000**	**0**
Debt	0	0	0	0	0	0
Equity (Book Value)	12.000	10.000	8.000	6.000	4.000	0
NET WORTH & LIABILITIES	**12.000**	**10.000**	**8.000**	**6.000**	**4.000**	**0**
Income Statement						
Sales		10.000	10.000	10.000	10.000	10.000
Cost of Sales		4.000	4.000	4.000	4.000	4.000
General &Administrative Expenses		2.730	2.730	2.730	2.730	2.730
Depreciation		2.000	2.000	2.000	2.000	2.000
Interest		0	0	0	0	0
Taxes		432	432	432	432	432
PAT		**838**	**838**	**838**	**838**	**838**
+Depreciation		2000	2000	2000	2000	2000
$-\Delta WCR$						
		0	0	0	0	2000
ECF = Dividends = FCF		**2.838**	**2.838**	**2.838**	**2.838**	**4.838**
ROE = ROA		6,98%	8,38%	10,48%	13,97%	20,95%
ROGI		6,98%	6,98%	6,98%	6,98%	6,98%
Ke = WACC	**10,00%**	**10,00%**	**10,00%**	**10,00%**	**10,00%**	**10,00%**
E = PV (Ke; ECF)	**12.000**	**10.362**	**8.560**	**6.578**	**4.398**	**0**
MVA = E-Ebv	**0**	**362**	**560**	**578**	**398**	**0**
EP = EVA		**-362**	**-162**	**38**	**238**	**438**
MVA = PV (Ke; EP) = PV (WACC;EVA)	**0**	**362**	**560**	**578**	**398**	**0**

Source: Three Residual Income Valuation Methods and Discounted Cash Flow Valuation, Pablo Fernandez

1.2 Cash Value Added of a Company Without Debt

IRR of investment = Required return to equity (Ke) = 10%

Cash Value Added	**1**	**2**	**3**	**4**	**5**
NOPAT	**838**	**838**	**838**	**838**	**838**
+Depreciation	2.000	2.000	2.000	2.000	2.000
-Economic Depreciation	1.638	1.638	1.638	1.638	1.638
-Cost of Capital Employed	1200	1200	1200	1200	1200
CVA	**0**	**0**	**0**	**0**	**0**

Source: Three Residual Income Valuation Methods and Discounted Cash Flow Valuation, Pablo Fernandez

1.3 EVA,EP and MVA

Company with constant debt level ($4.000 million). IRR = 10%

Balance Sheet	**0**	**1**	**2**	**3**	**4**	**5**
WCR (Working Capital Requirements)	2.000	2.000	2.000	2.000	2.000	0
Gross Fixed Assets	10.000	10.000	10.000	10.000	10.000	10.000
-Cumulative Depreciation	0	2.000	4.000	6.000	8.000	10.000
NET ASSETS	**12.000**	**10.000**	**8.000**	**6.000**	**4.000**	**0**
Debt	4.000	4.000	4.000	4.000	4.000	0
Equity (Book Value)	8.000	6.000	4.000	2.000	0	0
NET WORTH & LIABILITIES	**12.000**	**10.000**	**8.000**	**6.000**	**4.000**	**0**
Income Statement						
Sales		10.000	10.000	10.000	10.000	10.000
Cost of Sales		4.000	4.000	4.000	4.000	4.000
General &Administrative Expenses		2.730	2.730	2.730	2.730	2.730
Depreciation		2.000	2.000	2.000	2.000	2.000
Interest		320	320	320	320	320
Taxes		323	323	323	323	323
PAT		**627**	**627**	**627**	**627**	**627**
+Depreciation		2000	2000	2000	2000	2000
$-\Delta WCR$						
		0	0	0	0	2000
ECF = Dividends		**2.627**	**2.627**	**2.627**	**2.627**	**4.627**
FCF		**2.838**	**2.838**	**2.838**	**2.838**	**4.838**
ROE		7,84%	10,45%	15,68%	31,35%	N.A
ROA		6,98%	8,38%	10,47%	13,97%	20,95%
ROGI		6,98%	6,98%	6,98%	6,98%	6,98%
Ke		**10,62%**	**10,78%**	**11,08%**	**11,88%**	**20,12%**
E = PV (Ke; ECF)	**8.516**	**6.793**	**4.898**	**2.814**	**522**	**0**
WACC		**8,91%**	**8,74%**	**8,47%**	**8,00%**	**6,99%**
E=PV (WACC;FCF)-D	**8.516**	**6.793**	**4.898**	**2.814**	**522**	
MVA = E -Ebv	**516**	**793**	**898**	**814**	**522**	
EP=PAT - Ke x Ebv		**-232**	**-20**	**184**	**389**	**627**
MVA = PV (Ke;EP)	**516**	**793**	**898**	**814**	**522**	**0**
EVA		**-232**	**-36**	**160**	**358**	**558**
MVA = PV (WACC;EVA)	**516**	**793**	**898**	**814**	**522**	**0**
EP - EVA		**9**	**16**	**23**	**32**	**68**

Source: Three Residual Income Valuation Methods and Discounted Cash Flow Valuation, Pablo Fernandez

1.4 Cash Value Added

Firm with constant debt (4.000 million). IRR of the investment = 10%

Cash Value Added	**0**	**1**	**2**	**3**	**4**	**5**
NOPAT		**838**	**838**	**838**	**838**	**838**
+Depreciation		2.000	2.000	2.000	2.000	2.000
-Economic Depreciation		1.712	1.712	1.712	1.712	1.712
-Cost of Capital Employed		1070	1049	1017	961	839
CVA		**57**	**77**	**110**	**166**	**287**
PV (WACC:CVA)	**516**					

Source: Three Residual Income Valuation Methods and Discounted Cash Flow Valuation, Pablo Fernandez

1.5 EVA,EP and MVA of a company without debt

IRR of investment = Required return to equity (Ke) = 10%

Balance Sheet	**0**	**1**	**2**	**3**	**4**	**5**
WCR (Working Capital Requirements)	2.000	2.000	2.000	2.000	2.000	0
Gross Fixed Assets	10.000	10.000	10.000	10.000	10.000	10.000
-Cumulative Depreciation	0	2.000	4.000	6.000	8.000	10.000
NET ASSETS	**12.000**	**10.000**	**8.000**	**6.000**	**4.000**	**0**
Debt	0	0	0	0	0	0
Equity (Book Value)	12.000	10.000	8.000	6.000	4.000	0
NET WORTH & LIABILITIES	**12.000**	**10.000**	**8.000**	**6.000**	**4.000**	**0**
Income Statement						
Sales		10.000	10.000	10.000	10.000	10.000
Cost of Sales		4.000	4.000	4.000	4.000	4.000
General &Administrative Expenses		2.730	2.730	2.730	2.730	2.730
Depreciation		2.000	2.000	2.000	2.000	2.000
Interest		0	0	0	0	0
Taxes		432	432	432	432	432
PAT		**838**	**838**	**838**	**838**	**838**
+Depreciation		2000	2000	2000	2000	2000
$-\Delta WCR$						
		0	0	0	0	2000
ECF = Dividends = FCF		**2.838**	**2.838**	**2.838**	**2.838**	**4.838**
ROE = ROA		6,98%	8,38%	10,48%	13,97%	20,95%
ROGI		6,98%	6,98%	6,98%	6,98%	6,98%
Ke = WACC	**10,00%**	**10,00%**	**10,00%**	**10,00%**	**10,00%**	**10,00%**
E = PV (Ke; ECF)	**12.000**	**10.362**	**8.560**	**6.578**	**4.398**	**0**
MVA = E-Ebv	**0**	**362**	**560**	**578**	**398**	**0**
EP = EVA		**-362**	**-162**	**38**	**238**	**438**
MVA = PV (Ke; EP) = PV (WACC;EVA)	**0**	**362**	**560**	**578**	**398**	**0**

Source: Three Residual Income Valuation Methods and Discounted Cash Flow Valuation, Pablo Fernandez

	Number of Accounts Open at Date					Retention Rate	
Age of Account (yrs)	12/31/95	12/31/96	12/31/97	12/31/98	12/31/99	Age of Account (yrs)	Probability of Account Remaining Open in Next Year
0-1	1.000	360	548	429	419	0-1	67,9% (1)*
1-2	----	690	234	370	300	1-2	76,8% (2)**
2-3	----		518	176	296	2-3	77,0 %(3)***
3-4	----			400	135	3-4	87,5% (4)****
4-5	----				350		
Total	1.000	1.050	1.300	1.375	1.500		

Notes:
*(1)((690/1000)+(234/360)+(370/548)+(300/429))/4 =67,9%
*(2)((518/690)+(176/234)+(296/370))/3 =76,8%
*(3)((400/518)+(135/176)))/2 =77,0%
*(4) (350/400) =87,5%

Source: Rezaee Zabihollah - Financial Institutions, Valuations, Mergers and Acquisations-2001-John Wiley & Sons

1.6 Illustration of Historical Retention Rate Calculation

1.7 Calculations of Projected Balances of Acquired Deposit Accounts

Calculations of Projected Balances of Acquired Deposit Accounts (Acquisition Date is 12/31/94)

	Age of Acquired Deposits Accounts					Total Acquired	Avg.No.	Average
	0-1	1-2	2-3	3-4	5+	Accounts	of Accts.	Balance*
12/31/99	419	300	296	135	350	1.500		2.000
12/31/00	285	230	228	118	306	1.167	1.334	2.040
12/31/01	218	177	199	103	268	967	1.067	2.080
12/31/02	168	155	175	90	234	823	895	2.125
12/31/03	147	136	153	79	205	720	771	2.175
12/31/04	129	119	134	69	180	630	675	2.200
12/31/05	113	104	117	61	157	551	591	2.250
12/31/06	99	91	102	53	137	482	517	2.300
12/31/07	86	80	90	46	120	422	452	2.350
12/31/08	76	70	78	41	105	369	396	2.400
12/31/09	66	61	69	36	92	323	346	2.440
12/31/10	58	53	60	31	81	283	303	2.490
12/31/11	51	47	52	27	70	247	265	2.535
12/31/12	44	41	46	24	62	216	232	2.590
12/31/13	39	36	40	21	54	189	203	2.640
12/31/14	34	31	35	18	47	166	178	2.690
12/31/15	30	27	31	16	41	145	155	2.750
12/31/16	26	24	27	14	36	127	136	2.800
12/31/17	23	21	24	12	32	111	119	2.860
12/31/18	20	18	21	11	28	97	104	2.920
12/31/19	17	16	18	9	24	85	91	2.970
12/31/20	15	14	16	8	21	74	80	3.030
12/31/21	13	12	14	7	19	0*	37	3.100

* 5% annual increase

** it is assumed that when the remaining accounts reach 5% of original number acquired (75 in this example), all accounts run off the next year

Source: Rezaee Zabihollah - Financial Institutions, Valuations, Mergers and Acquisitions-2001-John Wiley & Sons

1.8 Cost Saving Approach to Valuation of Core Deposit Base

Year	Average Deposits During Year From Acquired Accounts 1	Cash Outflows Associated Deposits				Discount Rate 4	Discounted Value of Cash Outflow
		Interest 2	Maintenance 3	Runoff	Total		
2000	$2.721	$177	$54	$279	$510	7,85%	$473
2001	2.219	144	44	502	691	8,05%	592
2002	1.902	124	38	317	479	8,16%	378
2003	1.681	109	34	221	364	8,17%	266
2004	1.487	97	30	194	320	8,17%	216
2005	1.332	87	27	155	268	8,23%	167
2006	1.191	77	24	141	242	8,26%	139
2007	1.065	69	21	126	217	8,30%	114
2008	953	62	19	112	193	8,34%	94
2009	847	55	17	106	178	8,35%	80
2010	754	49	15	93	157	8,37%	65
2011	674	44	13	80	137	8,39%	52
2012	601	39	12	73	124	8,40%	43
2013	536	35	11	65	111	8,41%	36
2014	479	31	10	57	98	8,41%	29
2015	429	28	9	50	86	8,40%	24
2016	381	25	8	48	80	8,41%	20
2017	340	22	7	41	70	8,41%	16
2018	304	20	6	36	62	8,39%	13
2019	271	18	5	33	56	8,35%	11
2020	242	16	5	29	50	8,35%	9
2021	115	7	2	127	137	8,33%	24
						TOTAL	$2.862

CORE DEPOSIT VALUE
=
DEPOSIT ACQUIRED ($3.000) - DISCOUNTED VALUE OF OUTFLOW ($2.862) = $138 (4,5% PREMIUM)

1 Average number of accounts that were open during year times average balance (from table 1-2)
2 At 6,5 %
3 At 2 %
4 Using a yield curve on zero coupon bond 30-year U.S. Government instruments

Source :Rezaee Zabihollah - Financial Institutions, Valuations, Mergers and Acquisitions-2001-John Wiley & Sons

Corporate Bond Total New Issue Amounts by S & P Bond Rating, 1971 - 1986 ($ Million)

Numbers of issues of low-rated bonds are in parentheses. Data are from S&P Bond Guides

Bond Rating	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
AAA	5.125	3.179	4.046	7.420	11.348	9.907	11.046	7.967	10.400	10.109	11.835	6.197	3.920	2.350	9.016	14.438
AA	5.467	4.332	3.670	8.797	9.654	9.560	7.494	7.374	5.910	10.497	11.748	14.597	14.110	18.291	23.223	46.978
A	6.688	4.745	4.254	8.388	12.752	8.103	5.236	5.330	6.489	12.195	12.432	13.315	5.516	12.252	23.381	34.173
BBB	2.139	1.198	937	1.246	2.367	2.938	1.558	1.513	1.225	2.595	3.900	5.738	5.827	5.194	11.068	21.993
BB	292	258	105	250	20	397	579	408	359	418	290	1.378	2.894	4.698	2.041	7.098
						-10	-15	-10	-8	-9	-6	-16	-24	-23	-23	-37
B	112	101	140	18	27	59	526	1.029	917	879	894	1.122	3.713	6.485	5.945	21.260
						-3	-17	-39	-33	-28	-15	-24	-46	-68	-77	-133
CCC	0	0	0	0	14	75	78	34	91	25	0	145	285	1.901	1.668	4.668
						-1	-5	-1	-3	-1	0	-2	-5	-9	-14	-40
Total Rated	19.823	13.813	13.152	26.119	36.182	31.039	26.517	23.655	25.391	36.718	41.099	42.492	36.265	51.171	76.342	150.608

Source: Measuring Corporate Bond Mortality and Performance, E.Altman, The Journal of Finance, Sep 1989

1.9 Corporate Bond Total New Issue Amounts by S & P Bond Rating

1.10 Adjusted Mortality Rates

Adjusted Mortality Rates by Original S&P Bond Rating Covering Defaults and Issues from 1971 to 1987

Mortality rates are adjusted for defaults and redemptions. Data were derived from S&P Bond Guides

	Years After Issuance									
Original Rating	1	2	3	4	5	6	7	8	9	10
AAA										
Yearly	0,00%	0,00%	0,00%	0,00%	0,00%	0,13%	0,00%	0,00%	0,00%	0,00%
Cumulative	0,00%	0,00%	0,00%	0,00%	0,00%	0,13%	0,13%	0,13%	0,13%	0,13%
AA										
Yearly	0,00%	0,00%	1,81%	0,39%	0,14%	0,00%	0,00%	0,00%	0,13%	0,00%
Cumulative	0,00%	0,00%	1,81%	2,20%	2,33%	2,33%	2,33%	2,33%	2,46%	2,46%
A										
Yearly	0,00%	0,31%	0,39%	0,00%	0,00%	0,06%	0,12%	0,00%	0,04%	0,00%
Cumulative	0,00%	0,31%	0,71%	0,71%	0,71%	0,77%	0,89%	0,89%	0,93%	0,93%
BBB										
Yearly	0,04%	0,25%	0,17%	0,00%	0,45%	0,00%	0,17%	0,00%	0,23%	0,84%
Cumulative	0,04%	0,29%	0,46%	0,46%	0,91%	0,91%	1,07%	1,07%	1,30%	2,12%
BB										
Yearly	0,00%	0,62%	0,64%	0,31%	0,29%	4,88%	0,00%	0,00%	0,00%	0,00%
Cumulative	0,00%	0,62%	1,25%	1,56%	1,84%	6,64%	6,64%	6,64%	6,64%	6,64%
B										
Yearly	1,98%	0,92%	0,74%	4,24%	4,16%	4,98%	3,62%	4,03%	8,47%	4,33%
Cumulative	1,98%	2,88%	3,60%	7,69%	11,53%	15,94%	18,98%	22,24%	28,83%	31,91%
CCC										
Yearly	2,99%	2,88%	3,97%	22,87%	1,37%	N / A	N / A	N / A	N / A	N / A
Cumulative	2,99%	5,78%	9,52%	30,22%	31,17%	N / A	N / A	N / A	N / A	N / A

Source: Measuring Corporate Bond Mortality and Performance, E.Altman, The Journal of Finance, Sep 1989

1.11 Average Price After Default by Original Bond Rating

Average Price After Default by Original Bond Rating (1971 - 1987)

Data are from S&P Bond Guides, 1971 - 1987.

Original Rating	Average Price After Default (Per $100)	Number of Observations
AAA	78,67	5
AA	79,29	13
A	45,90	19
BBB	45,30	22
BB	35,71	13
B	42,56	64
CCC	41,15	12
CCC	10,00	2
NR	31,18	23
Arithmetic Average or Total	44,58	173

Source: Measuring Corporate Bond Mortality and Performance, E.Altman, The Journal of Finance, Sep 1989

1.12 Average Price After Default by Number of Years After Issuence

Average Price After Default by Number of Years After Issuance (1971 - 1987)

Data are from S&P Bond Guides, 1971 - 1987.

Number of Years After Issuance	Average Price After Default (Per $100)	Number of Observations
<1	45,41	10
1-2	44,74	19
2-3	63,43	27
3-4	38,97	18
4-5	41,70	17
5-6	50,46	15
6-7	43,50	11
7-8	37,17	6
8-9	28,33	6
9-10	43,52	7
>10	44,45	34

Source: Measuring Corporate Bond Mortality and Performance, E.Altman, The Journal of Finance, Sep 1989

1.13 Yield to Maturity on Various Bond Rating Categories

Yield to Maturity on Various Bond Rating Categories: 1973-1987 (Yield is the Average for the Twelwe Monthly Rates)

Data are from S&P Bond Guides supplemented by data from a number of securities industry firms, including Shearson
Lehman for Treasury bonds and Drexel Burnham Lambert, Merrill Lynch, and Salomon Brothers for high-yield bonds

Year	Treasury Bond	AAA	AA	A	BBB	BB	B	CCC
1973	7,15	7,56	7,71	7,87	8,40	NR*	NR	NR
1974	8,13	8,33	8,56	8,65	9,37	NR	NR	NR
1975	8,28	8,64	8,89	9,31	10,12	NR	NR	NR
1976	7,88	8,36	8,37	8,81	9,45	NR	NR	NR
1977	7,76	8,12	8,34	8,48	8,87	NR	NR	NR
1978	8,57	8,74	8,93	9,05	9,53	NR	NR	NR
1979	9,27	9,53	9,80	10,01	10,62	11,66	13,16	NR
1980	11,22	11,66	12,02	12,31	13,09	14,15	14,98	NR
1981	13,20	13,91	14,32	14,60	15,50	16,54	17,33	NR
1982	12,51	13,32	13,73	14,19	15,45	16,32	17,76	21,86
1983	11,09	11,66	11,86	12,17	12,79	13,63	14,61	18,62
1984	12,34	12,43	12,94	13,25	13,97	14,99	15,53	17,71
1985	10,74	10,94	11,41	11,66	12,16	13,65	14,52	16,75
1986	8,16	9,02	9,40	9,64	10,19	11,79	12,82	15,98
1987	8,76	9,32	9,66	9,92	10,42	11,46	12,96	16,12

NR* = not relevant due to small samples and unreliable data.

Source: Measuring Corporate Bond Mortality and Performance, E.Altman, The Journal of Finance, Sep 1989

1.14 Risk-Adjusted Performance Measurements

Risk-Adjusted Performance Measurements

Acronym	Definition	Numerator	Denominator
ROA (return on assets) expresses in bps.	This is the venerable ratio that banks have historically used to measure performance. Unfortunately this measure does not account for risk.	Net income after loan loss provision	Average or end of period assets (book value)
ROE (return on equity) expressed as a percentage	This is measure does not take risk into account. It also begs the question of what the denominator should be for a single loan or line of business.	Net income after loan loss provision	Average or end of period equity (equity capital and retained earnings)
VAR (value at risk) expressed in maximum $ loss at 99% confidence level	This is a late arrival on the scene, but the quantity it represents is based on the long-held view that capital allocated should serve as the cushion against all unexpected losses. VAR is a measure of maximum expected loss from an asset. Sometimes VAR = allocated capital. At other times the relationship is governed by the confidence level desired.	Maximum dollar loss expected with probability of 99 %.	Acquisition cost of the asset. (Note that this quantity will account for the premium or discount paid when the asset was acquired. For a bank, most of the time it will be the book value of the asset.)
MTM (mark to market) expressed as a percentage of par (book value)	This is present market value of an asset. The relationship between VAR and MTM is that MTM is a realization of a statistical distribution; whereas VAR is the value associated with the 99 % probability in the distribution. MTM is a measure of value as it is.; VAR is a measure of the impact of value as it could be under adverse conditions.	Market value of asset.	Book value of asset
MTM (mark to model) expressed as a percentage of par (book value); sometimes also as a distribution	Mark to model is the imputed (or the estimate) of the market value of an asset according to a model. This model will try to capture all the variables that have an impact on market value. Mark to model is sometimes used to derive the VAR.	Market value of asset as estimated by the model.	Book value of asset

RORAA (return on risk adjusted assets)	This is refinement of ROA, with the denominator adjusted to account for the varying riskiness of the asset classes.	Net income	Assets grossed up or down based on credit risk. For example, AA bonds or credits may have a risk weighting of 2%, whereas B rated bonds or credits, weighting of 0 %.
RAROC (risk adjusted return on capital)	Return based on capital allocated to the business. The allocation is based on unexpected loans.	Net income	Position size multiplied by the risk factor. Risk factor is based on volatility of market value.

Managing Credit Risk, J.B.Cauette, E.I.Altman, P.Narayanan, John Wiley & Sons, 1998 pages 258-259

2 Annex 2

2.1 Akbank

AKBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**3.460.137**	**4.116.906**	**8.031.725**	**6.576.048**	**8.805.535**	**11.491.374**	**14.891.557**	**19.141.687**	**24.439.190**	**31.015.539**	**39.149.865**	**49.176.353**	**61.494.421**
Cash TC	118.451	148.636	232.058	253.798	331.499	425.105	543.606	691.730	876.355	1.105.551	1.389.044	1.738.483	2.167.786
Cash FC	111.849	123.803	167.008	201.036	262.584	336.729	430.596	547.926	694.169	875.717	1.100.275	1.377.069	1.717.124
TCMB & Deposit Reserves TC	480.657	705.724	2.719.254	1.186.441	1.549.674	1.987.255	2.541.219	3.233.658	4.096.737	5.168.168	6.493.427	8.126.960	10.133.842
TCMB & Deposit Reserves FC	1.190.227	1.225.605	1.633.994	3.104.642	4.055.136	5.200.186	6.649.780	8.461.732	10.720.209	13.523.894	16.991.789	21.266.366	26.517.910
Banks & Interbank Placements TC	110.550	97.113	769.153	-601.658	-571.813	-535.860	-490.344	-433.451	-362.538	-274.505	-165.617	-31.400	133.492
Banks & Interbank Placements FC	1.448.403	1.816.025	2.510.258	2.431.788	3.178.456	4.077.959	5.216.700	6.640.093	8.414.257	10.616.714	13.340.947	16.698.876	20.824.267
SECURITIES PORTFOLIO	**15.420.607**	**15.569.340**	**20.991.916**	**22.041.799**	**28.789.952**	**36.919.380**	**47.210.963**	**60.075.144**	**76.109.487**	**96.014.608**	**120.635.369**	**150.983.279**	**188.267.282**
Securities Portfolio TC	7.087.403	6.170.980	10.294.071	10.543.004	13.770.771	17.659.228	22.581.884	28.735.062	36.404.587	45.925.577	57.702.147	72.218.118	90.051.752
Securities Portfolio FC	8.333.204	9.398.360	10.697.845	11.498.796	15.019.181	19.260.152	24.629.079	31.340.082	39.704.900	50.089.030	62.933.222	78.765.161	98.215.530
LOANS PORTFOLIO	**9.534.639**	**13.222.916**	**22.875.184**	**29.900.859**	**39.055.083**	**50.083.079**	**64.044.153**	**81.495.091**	**103.246.520**	**130.248.862**	**163.648.219**	**204.816.754**	**255.394.464**
Loans TC	4.556.516	7.584.772	14.423.846	18.114.474	23.660.266	30.341.223	38.799.091	49.371.180	62.548.584	78.907.085	99.141.012	124.081.645	154.722.524
Loans FC	4.978.123	5.638.144	8.451.338	11.786.385	15.394.817	19.741.856	25.245.062	32.123.910	40.697.935	51.341.777	64.507.207	80.735.109	100.671.940
Non Performing Loans	120.868	204.119	359.113	889.217	1.161.453	1.489.412	1.904.598	2.423.569	3.070.431	3.873.449	4.866.707	6.091.012	7.595.134
Non Performing Loans Provision	-120.868	-204.119	-359.113	-889.217	-1.161.453	-1.489.412	-1.904.598	-2.423.569	-3.070.431	-3.873.449	-4.866.707	-6.091.012	-7.595.134
ACCRUED INTEREST GAIN	**2.803.366**	**1.734.841**	**2.259.338**	**1.328.735**	**1.735.531**	**2.225.593**	**2.845.996**	**3.621.481**	**4.588.072**	**5.788.003**	**7.272.204**	**9.101.653**	**11.349.226**
Accrued Interest & Income Accruals TC	2.091.178	1.001.214	1.569.296	801.575	1.046.979	1.342.615	1.716.880	2.184.700	2.767.807	3.491.679	4.387.040	5.490.676	6.846.551
Accrued Interest & Income Accruals FC	712.188	733.627	690.042	527.160	688.552	882.979	1.129.116	1.436.781	1.820.265	2.296.324	2.885.164	3.610.976	4.502.676
SUBSIDIARIES & ASSOCIATES	**385.500**	**264.679**	**22.889**	**16.197**	**16.197**	**16.197**	**16.197**	**16.197**	**16.197**	**16.197**	**16.197**	**16.197**	**16.197**
Subsidiaries & Associates TC	145.747	123.608	22.860	16.051	16.051	16.051	16.051	16.051	16.051	16.051	16.051	16.051	16.051
Subsidiaries & Associates FC	239.753	141.071	29	146	146	146	146	146	146	146	146	146	146
FIXED ASSETS	**668.494**	**704.225**	**708.354**	**690.031**	**690.031**	**690.031**	**690.031**	**690.031**	**690.031**	**690.031**	**690.031**	**690.031**	**690.031**
Fixed Assets TC	661.492	693.393	701.843	683.089	683.089	683.089	683.089	683.089	683.089	683.089	683.089	683.089	683.089
Fixed Assets FC	7.002	10.832	6.511	6.942	6.942	6.942	6.942	6.942	6.942	6.942	6.942	6.942	6.942
OTHER ASSETS	**83.105**	**64.053**	**309.423**	**522.169**	**682.032**	**874.618**	**1.118.425**	**1.423.177**	**1.803.030**	**2.274.581**	**2.857.845**	**3.576.786**	**4.460.042**
Other Assets TC	68.483	54.412	283.623	466.362	609.140	781.143	998.893	1.271.075	1.610.331	2.031.485	2.552.413	3.194.517	3.983.375
Other Assets FC	14.622	9.641	25.800	55.807	72.892	93.475	119.532	152.102	192.699	243.096	305.432	382.269	476.667
TOTAL ASSETS	**32.355.848**	**35.676.960**	**55.198.829**	**61.075.839**	**79.774.361**	**102.300.273**	**130.817.321**	**166.462.807**	**210.892.526**	**266.047.820**	**334.269.731**	**418.361.053**	**521.671.664**

AKBANK	ACTUAL			FORECASTED										
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**19.403.042**	**19.250.717**	**29.315.532**	**36.381.902**	**47.520.312**	**60.938.639**	**77.925.789**	**99.159.235**	**125.625.309**	**158.480.437**	**199.119.139**	**249.210.997**	**310.751.477**
Customer Deposits TC	6.400.857	6.693.139	16.283.613	19.774.025	25.827.892	33.120.923	42.353.654	53.894.302	68.278.948	86.136.127	108.223.777	135.449.337	168.897.368
Customer Deposits FC	13.002.185	12.557.578	13.031.919	16.607.877	21.692.420	27.817.716	35.572.134	45.264.934	57.346.361	72.344.310	90.895.362	113.761.660	141.854.109
BANKS & INTERBANK BORROWINGS	**2.221.065**	**3.336.140**	**8.118.720**	**4.588.996**	**5.944.035**	**7.341.637**	**9.041.933**	**11.036.553**	**13.370.088**	**16.077.836**	**19.195.794**	**22.756.710**	**26.787.955**
Banks & Interbank Borrowings TC	893.482	2.226.188	6.254.495	3.571.385	4.608.960	5.624.116	6.840.249	8.229.679	9.808.885	11.580.206	13.539.890	15.673.101	17.950.336
Banks & Interbank Borrowings FC	1.327.583	1.109.952	1.864.225	1.017.611	1.335.075	1.717.521	2.201.684	2.806.874	3.561.203	4.497.631	5.655.904	7.083.609	8.837.619
FUNDS BORROWED AND OTHERS	**3.999.246**	**5.185.352**	**8.976.730**	**11.740.561**	**15.334.964**	**19.665.102**	**25.146.912**	**31.999.017**	**40.539.707**	**51.142.166**	**64.256.412**	**80.421.221**	**100.280.540**
Funds Borrowed & Others TC	36.840	61.991	83.253	124.423	162.515	208.404	266.499	339.115	429.627	541.988	680.968	852.278	1.062.740
Funds Borrowed & Others FC	3.962.406	5.123.361	8.893.477	11.616.139	15.172.449	19.456.698	24.880.414	31.659.901	40.110.080	50.600.179	63.575.443	79.568.944	99.217.800
ACCRUED INTEREST EXPENSES	**271.182**	**278.765**	**532.212**	**514.604**	**672.152**	**861.948**	**1.102.223**	**1.402.559**	**1.776.909**	**2.241.629**	**2.816.444**	**3.524.969**	**4.395.429**
Accrued Interest & Expense Accruals TC	190.715	184.970	343.435	277.752	362.787	465.227	594.913	757.017	959.068	1.209.896	1.520.146	1.902.565	2.372.387
Accrued Interest & Expense Accruals FC	80.467	93.795	188.777	236.852	309.365	396.720	507.310	645.543	817.841	1.031.733	1.296.298	1.622.404	2.023.043
GENERAL PROVISIONS	**56.897**	**76.592**	**130.735**	**164.247**	**164.247**	**164.247**	**164.247**	**164.247**	**164.247**	**164.247**	**164.247**	**164.247**	**164.247**
General Provisions TC	56.897	76.592	124.809	157.048	157.048	157.048	157.048	157.048	157.048	157.048	157.048	157.048	157.048
General Provisions FC	0	0	5.926	7.199	7.199	7.199	7.199	7.199	7.199	7.199	7.199	7.199	7.199
OTHER PROVISIONS	**480.196**	**247.840**	**423.948**	**159.490**	**159.490**	**159.490**	**159.490**	**159.490**	**159.490**	**159.490**	**159.490**	**159.490**	**159.490**
Employees Termination Reserves TC	13.082	13.984	16.451	17.436	17.436	17.436	17.436	17.436	17.436	17.436	17.436	17.436	17.436
Employees Termination Reserves FC	0	0	496	4	4	4	4	4	4	4	4	4	4
Other Provisions TC	460.075	229.469	356.169	129.917	129.917	129.917	129.917	129.917	129.917	129.917	129.917	129.917	129.917
Other Provisions FC	7.039	4.387	50.832	12.133	12.133	12.133	12.133	12.133	12.133	12.133	12.133	12.133	12.133
OTHER LIABILITIES	**376.487**	**1.055.949**	**1.311.396**	**1.700.075**	**2.220.557**	**2.847.577**	**3.641.362**	**4.633.571**	**5.870.294**	**7.405.568**	**9.304.557**	**11.645.279**	**14.520.979**
Other Liabilities TC	143.273	914.221	1.209.255	1.503.512	1.963.816	2.518.340	3.220.348	4.097.838	5.191.570	6.549.336	8.228.764	10.298.852	12.842.063
Other Liabilities FC	233.214	141.728	102.141	196.563	256.741	329.237	421.014	535.734	678.723	856.232	1.075.793	1.346.427	1.678.916
SHAREHOLDERS EQUITY	**5.547.733**	**6.245.605**	**6.389.556**	**6.843.575**	**9.093.678**	**12.039.154**	**15.837.049**	**20.715.009**	**26.947.685**	**34.874.078**	**44.909.552**	**57.561.749**	**73.449.165**
Paid in Capital	1.200.000	1.500.000	1.800.005	2.200.000	2.200.000	2.200.000	2.200.000	2.200.000	2.200.000	2.200.000	2.200.000	2.200.000	2.200.000
Other Reserves	2.725.804	3.663.683	2.881.060	3.525.128	3.525.128	3.525.128	3.525.128	3.525.128	3.525.128	3.525.128	3.525.128	3.525.128	3.525.128
Securities Revaluation Fund	158.321	74.519	247.321	-439.136	-439.136	-439.136	-439.136	-439.136	-439.136	-439.136	-439.136	-439.136	-439.136
Retained Earnings	1.463.608	1.007.403	1.461.170	1.557.583	3.807.686	6.753.162	10.551.057	15.429.017	21.661.693	29.588.086	39.623.560	52.275.757	68.163.173
TOTAL LIABILITIES	**32.355.848**	**35.676.960**	**55.198.829**	**61.075.839**	**79.774.361**	**102.300.273**	**130.817.321**	**166.462.807**	**210.892.526**	**266.047.820**	**334.269.731**	**418.361.053**	**521.671.664**

AKBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**2.555.597**	**2.668.465**	**2.778.747**	**3.371.286**	**4.394.843**	**5.673.832**	**7.289.037**	**9.315.447**	**11.848.393**	**15.002.255**	**18.915.062**	**23.752.739**
Interest Income	4.466.184	5.449.675	6.479.283	7.931.680	10.277.594	13.182.240	16.833.468	21.390.222	27.057.198	34.078.092	42.745.616	53.409.895
Interest Expense	1.910.587	2.781.210	3.700.537	4.560.394	5.882.750	7.508.408	9.544.431	12.074.774	15.208.806	19.075.836	23.830.554	29.657.156
Net Fees & Commissions Income	**450.570**	**664.425**	**903.948**	**1.161.868**	**1.503.441**	**1.927.791**	**2.462.126**	**3.130.278**	**3.962.786**	**4.996.118**	**6.274.155**	**7.849.484**
Fees & Commissions Received	681.249	897.176	1.124.871	1.435.084	1.855.109	2.375.172	3.028.906	3.844.771	4.859.415	6.116.472	7.668.350	9.577.737
Fees & Commissions Paid	230.679	232.751	220.923	273.216	351.668	447.380	566.780	714.493	896.629	1.120.353	1.394.195	1.728.253
Net Trading Income	**325.201**	**239.108**	**115.681**	**43.470**	**56.193**	**71.946**	**91.748**	**116.462**	**147.196**	**185.273**	**232.281**	**290.118**
Net Trading Gain on Securities	275.629	197.704	130.596	50.832	65.709	84.130	107.286	136.185	172.124	216.650	271.619	339.251
Net Trading Gain on FC Positions	49.572	41.404	-14.915	-7.362	-9.516	-12.184	-15.538	-19.723	-24.928	-31.377	-39.337	-49.132
Other Operating Income	**175.724**	**296.918**	**350.999**	**435.067**	**562.404**	**720.069**	**918.259**	**1.165.600**	**1.473.205**	**1.854.301**	**2.324.776**	**2.903.635**
TOTAL OPERATING PROFIT	**3.507.092**	**3.868.916**	**4.149.374**	**5.011.691**	**6.516.882**	**8.393.639**	**10.761.170**	**13.727.787**	**17.431.580**	**22.037.948**	**27.746.274**	**34.795.977**
Provision for Losses	**192.538**	**348.703**	**637.060**	**272.236**	**327.960**	**415.186**	**518.971**	**646.862**	**803.018**	**993.258**	**1.224.304**	**1.504.122**
Other Operating Expense	**1.174.308**	**1.405.195**	**1.565.336**	**1.926.825**	**2.507.077**	**3.231.084**	**4.144.750**	**5.290.079**	**6.720.571**	**8.500.346**	**10.706.724**	**13.432.584**
NET OPERATING INCOME	**2.140.246**	**2.115.018**	**1.946.978**	**2.812.630**	**3.681.845**	**4.747.368**	**6.097.449**	**7.790.846**	**9.907.990**	**12.544.344**	**15.815.246**	**19.859.270**
Monetary Gain & Losses	**-652.040**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**1.488.206**	**2.115.018**	**1.946.978**	**2.812.630**	**3.681.845**	**4.747.368**	**6.097.449**	**7.790.846**	**9.907.990**	**12.544.344**	**15.815.246**	**19.859.270**
Provision for Taxes	**-480.803**	**-653.848**	**-389.396**	**-562.526**	**-736.369**	**-949.474**	**-1.219.490**	**-1.558.169**	**-1.981.598**	**-2.508.869**	**-3.163.049**	**-3.971.854**
NET PROFIT/LOSSES	**1.007.403**	**1.461.170**	**1.557.583**	**2.250.104**	**2.945.476**	**3.797.895**	**4.877.959**	**6.232.677**	**7.926.392**	**10.035.475**	**12.652.197**	**15.887.416**

AKBANK	ACTUAL			FORECASTED										
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**2.139.658**	**2.946.270**	**3.532.480**	**4.590.597**	**5.996.019**	**7.689.117**	**9.832.522**	**12.511.717**	**15.851.154**	**19.996.749**	**25.124.460**	**31.444.952**	**39.210.008**
Letters of Guarantees	1.544.475	2.083.577	2.576.916	2.627.652	3.432.114	4.401.241	5.628.124	7.161.692	9.073.181	11.446.115	14.381.211	17.999.053	22.443.762
Bank Acceptances	9.113	46.893	49.403	65.984	86.186	110.522	141.331	179.841	227.841	287.429	361.134	451.983	563.597
Letters of Credits	580.220	783.185	856.911	975.331	1.273.931	1.633.652	2.089.045	2.658.275	3.367.781	4.248.566	5.338.014	6.680.883	8.330.669
Other Guarantees	5.850	32.615	49.250	921.629	1.203.788	1.543.703	1.974.022	2.511.910	3.182.350	4.014.639	5.044.102	6.313.033	7.871.981
COMMITMENTS	**8.150.359**	**8.037.719**	**6.319.423**	**7.000.149**	**9.143.262**	**11.725.048**	**14.993.502**	**19.078.976**	**24.171.245**	**30.492.817**	**38.312.006**	**47.950.052**	**59.790.899**
Irrevocable Commitments	8.150.359	8.037.719	6.319.423	7.000.149	9.143.262	11.725.048	14.993.502	19.078.976	24.171.245	30.492.817	38.312.006	47.950.052	59.790.899
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**5.806.457**	**5.401.671**	**9.728.087**	**6.993.029**	**9.133.962**	**11.713.122**	**14.978.251**	**19.059.569**	**24.146.659**	**30.461.800**	**38.273.036**	**47.901.279**	**59.730.081**
Foreign Currency Buys	2.886.171	2.666.350	3.582.537	3.487.161	4.554.765	5.840.895	7.469.093	9.504.293	12.041.035	15.190.159	19.085.330	23.886.574	29.785.155
Foreign Currency Sells	2.721.096	2.496.618	3.605.329	3.505.867	4.579.197	5.872.226	7.509.158	9.555.276	12.105.624	15.271.641	19.187.706	24.014.705	29.944.927
NET BALANCE SHEET POSITION	**-1.577.523**	**66.307**	**45.032**	**-81.676**	**-106.681**	**-136.804**	**-174.939**	**-222.607**	**-282.022**	**-355.780**	**-447.012**	**-559.466**	**-697.621**
NET OFF BALANCE SHEET POSITION	**165.075**	**169.732**	**-22.792**	**-18.706**	**-24.432**	**-31.331**	**-40.065**	**-50.982**	**-64.590**	**-81.482**	**-102.376**	**-128.131**	**-159.772**
TOTAL POSITION	**-1.412.448**	**236.039**	**22.240**	**-100.381**	**-131.113**	**-168.136**	**-215.005**	**-273.590**	**-346.612**	**-437.263**	**-549.389**	**-687.597**	**-857.393**

Valuation Day	**30.06.2006**				**AKBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	679.108	2.250.104	2.945.476	3.797.895	4.877.959	6.232.677	7.926.392	10.035.475	12.652.197	15.887.416
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	604.907	1.593.206	1.656.804	1.698.157	1.733.774	1.760.955	1.779.080	1.790.512	1.794.422	1.791.147
Total Discounted Cash Flows	**16.202.966**									
Last Year Profit	15.887.416									
Discount Rate	**25,8%**									
Terminal Value	61.579.133									
Days To Maturity	3.471									
Discounted Terminal Value	**6.942.432**									
Discounted CFs + Terminal Value	**23.145.398**									
Book Value+General Provision	**6.328.714**									
DCF Value / Book Value	**3,66**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	39.034.039	50.984.409	65.380.893	83.606.358	106.387.663	134.783.039	170.033.213	213.634.361	267.377.774	333.404.381
Balance Sheet Weighted	77,20%	77,20%	77,20%	77,20%	77,20%	77,20%	77,20%	77,20%	77,20%	77,20%
Net Balance Sheet	30.134.981	39.360.881	50.475.225	64.545.612	82.133.190	104.054.931	131.268.699	164.929.570	206.420.451	257.394.180
Effective Rate Balance Sheet	**2,90%**	**2,90%**	**2,90%**	**2,90%**	**2,90%**	**2,90%**	**2,90%**	**2,90%**	**2,90%**	**2,90%**
Total Off Balance Sheet	11.590.745	15.139.281	19.414.165	24.826.025	31.590.692	40.022.399	50.489.566	63.436.466	79.395.004	99.000.907
Off-Balance Sheet Weighted	36,26%	36,26%	36,26%	36,26%	36,26%	36,26%	36,26%	36,26%	36,26%	36,26%
Net Off Balance Sheet	4.202.981	5.489.735	7.039.873	9.002.296	11.455.268	14.512.733	18.308.288	23.003.032	28.789.842	35.899.242
Effective Rate Off Balance Sheet	**0,37%**	**0,37%**	**0,37%**	**0,37%**	**0,37%**	**0,37%**	**0,37%**	**0,37%**	**0,37%**	**0,37%**
Total Loss Weight	**3,27%**	**3,27%**	**3,27%**	**3,27%**	**3,27%**	**3,27%**	**3,27%**	**3,27%**	**3,27%**	**3,27%**
Lost Amount	889.217	1.161.453	1.489.412	1.904.598	2.423.569	3.070.431	3.873.449	4.866.707	6.091.012	7.595.134
Provision Left	359.113									
Total Provision	889.217	1.161.453	1.489.412	1.904.598	2.423.569	3.070.431	3.873.449	4.866.707	6.091.012	7.595.134
Additional Provision	530.104	272.236	327.960	415.186	518.971	646.862	803.018	993.258	1.224.304	1.504.122

	ACTUAL			FORECAST									
P / L DRIVERS AKBANK	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	28.879.273	42.536.804	52.898.705	56.919.236	67.060.180	86.894.243	111.452.235	142.322.368	180.848.469	228.761.206	288.120.937	361.402.484	451.566.047
Interest Income	4.466.184	5.449.675	6.170.994	3.393.786	7.931.680	10.277.594	13.182.240	16.833.468	21.390.222	27.057.198	34.078.092	42.745.616	53.409.895
Interest Rate	15,5%	12,8%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%
Interest Bearing Liabilities	25.142.735	37.564.490	47.431.563	51.395.797	60.755.385	78.372.345	100.030.006	127.154.719	160.864.954	202.617.772	254.135.892	317.480.137	395.104.450
Interest Expense	1.910.587	2.781.210	3.511.516	1.944.779	4.560.394	5.882.750	7.508.408	9.544.431	12.074.774	15.208.806	19.075.836	23.830.554	29.657.156
Interest Rate	7,6%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%	7,4%
Net Interest Margin	7,9%	5,4%	4,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	10.863.615	17.754.905	25.639.875	29.318.495	34.477.971	44.569.081	57.063.616	72.769.622	92.370.805	116.747.691	146.948.541	184.232.487	230.105.609
Cash Loans Commissions	99.616	84.377	85.080	49.724	115.996	149.946	191.982	244.823	310.768	392.781	494.387	619.824	774.157
Cash Loans Commissions Rate (%)	0,9%	0,5%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Non-Cash Loans	2.542.413	3.560.166	3.582.181	4.085.335	5.293.308	6.842.568	8.760.820	11.172.120	14.181.435	17.923.951	22.560.605	28.284.706	35.327.480
Non-Cash Loans Commissions	26.654	35.702	40.930	23.858	61.321	79.269	101.491	129.426	164.288	207.643	261.358	327.670	409.258
Non-Cash Loans Commissions Rate (%)	1,0%	1,0%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Cash & Non-Cash Loans	13.406.028	21.315.072	29.222.056	33.403.830	39.771.279	51.411.649	65.824.436	83.941.741	106.552.240	134.671.642	169.509.145	212.517.193	265.433.089
Other Commissions	554.979	777.097	911.488	532.539	1.257.767	1.625.893	2.081.698	2.654.658	3.369.715	4.258.991	5.360.727	6.720.856	8.394.322
Other Commissions Rate (%)	4,1%	3,6%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%	3,1%
Funds Borrowed	4.316.417	7.046.499	9.914.284	11.511.896	13.537.762	17.500.033	22.406.007	28.572.964	36.269.362	45.840.937	57.699.289	72.338.816	90.350.881
Cash Loans Commissions Expense	33.841	24.627	36.470	21.644	50.491	65.269	83.566	106.566	135.271	170.969	215.197	269.796	336.975
Cash Loans Commissions Expense (%)	0,8%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Non-Cash Loans	2.542.413	3.560.166	3.582.181	4.085.335	5.293.308	6.842.568	8.760.820	11.172.120	14.181.435	17.923.951	22.560.605	28.284.706	35.327.480
Non-Cash Loans Commissions Expense	470	1.241	1.108	646	1.660	2.146	2.747	3.504	4.447	5.621	7.075	8.870	11.079
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	9.106.275	16.303.123	19.504.868	19.807.823	24.097.586	30.985.438	39.358.612	49.784.327	62.654.117	78.488.850	97.896.709	121.599.775	150.450.693
Other Commissions Expense	196.368	206.883	176.482	91.603	221.066	284.253	361.067	456.710	574.774	720.039	898.082	1.115.528	1.380.200
Other Commissions Expense rate (%)	2,2%	1,3%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Securities Portfolio	14.791.354	18.987.791	20.265.367	21.612.502	25.415.876	32.854.666	42.065.171	53.643.053	68.092.316	86.062.047	108.324.988	135.809.324	169.625.281
Trading Gain on Securities Portfolio	275.629	197.704	217.966	21.613	50.832	65.709	84.130	107.286	136.185	172.124	216.650	271.619	339.251
Trading Gain Rate	1,9%	1,0%	1,1%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	13.406.028	21.315.072	29.222.056	33.403.830	39.771.279	51.411.649	65.824.436	83.941.741	106.552.240	134.671.642	169.509.145	212.517.193	265.433.089
Other Operating Income	155.517	292.646	315.288	184.208	435.067	562.404	720.069	918.259	1.165.600	1.473.205	1.854.301	2.324.776	2.903.635
Other Operating Income Rate (%)	1,2%	1,4%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Cost to Income Ratio	39,1%	42,2%	42,5%	42,5%	42,5%	42,5%	42,5%	42,5%	42,5%	42,5%	42,5%	42,5%	42,5%
ROE	18,4%	29,0%	8,1%	30,6%	28,2%	27,9%	27,2%	26,7%	26,2%	25,6%	25,2%	24,7%	24,3%

BALANCE SHEET DRIVERS AKBANK	2004	2005	2006 1-2	2006 3-4	2007	2008	2009	2010	2011	2012	2013	2014	2015
Cash TC / Total Assets	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Cash FC / Total Assets	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	19,7%	19,2%	17,2%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%
Securities Portfolio FC / Total Assets	26,5%	22,2%	19,0%	18,8%	18,8%	18,8%	18,8%	18,8%	18,8%	18,8%	18,8%	18,8%	18,8%
Loans TC / Total Assets	17,7%	23,4%	28,5%	29,7%	29,7%	29,7%	29,7%	29,7%	29,7%	29,7%	29,7%	29,7%	29,7%
Loans FC / Total Assets	16,2%	15,3%	17,2%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%
Accrued Interest Income TC / Total Assets	3,3%	2,9%	2,0%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
Accrued Interest Income FC / Total Assets	2,3%	1,5%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Other Assets TC / Total Assets	0,3%	0,4%	0,6%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Other Assets FC / Total Assets	0,0%	0,0%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Customer Deposits TC / Total Assets	21,0%	26,2%	31,1%	32,4%	32,4%	32,4%	32,4%	32,4%	32,4%	32,4%	32,4%	32,4%	32,4%
Customer Deposits FC / Total Assets	37,0%	27,9%	25,1%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%
Funds Borrowed TC / Total Assets	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Funds Borrowed FC / Total Assets	13,3%	15,2%	17,5%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%
Accrued Interest Expense TC / Total Assets	0,6%	0,6%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Accrued Interest Expense FC / Total Assets	0,3%	0,4%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Other Liabilities TC / Total Assets	1,2%	2,5%	2,3%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%	2,5%
Other Liabilities FC / Total Assets	0,6%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Letters of Guarantees / Total Assets	5,8%	5,3%	4,6%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%
Bank Acceptances / Total Assets	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Letters of Credits / Total Assets	25,5%	28,4%	24,7%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%
Other Guarantees / Total Assets	0,8%	2,1%	1,4%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Irrevocable Commitments / Total Assets	28,5%	14,7%	11,7%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%
Total FC Assets / Total Assets	54,1%	48,0%	45,8%	48,5%	48,5%	48,5%	48,5%	48,5%	48,5%	48,5%	48,5%	48,5%	48,5%
Total FC Liabilities / Total Assets	55,0%	47,6%	45,8%	48,6%	48,6%	48,6%	48,6%	48,6%	48,6%	48,6%	48,6%	48,6%	48,6%
Foreign Currency Buys / Total Assets	8,3%	8,2%	6,4%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%
Foreign Currency Sells / Total Assets	8,0%	8,3%	6,4%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%

AKBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Risk Weighted Assets									
I - Balance Sheet items (Net)	**25.743.680**	**3.073.714**	**417.451**	**28.137.664**	**28.961.132**	**37.513.546**	**77,20%**	**88,57%**	**2,90%**
Cash	442.792	4.217	-	-					
Due from banks	607.634	3.069.497	-	149.333					
Interbank money market placements	-	-	-	-					
Receivables from reverse repo transactions	146.220	-	-	-					
Reserve deposits	1.872.688	-	-	-					
Special finance houses	-	-	-	-					
Loans	1.530.308	-	-	26.788.372					
Loans under follow-up (Net)	-	-	-	-					
Subsidiaries, associates and HTM securities	13.690.534	-	-	37.309					
Miscellaneous receivables	-	-	-	35.956					
Marketable securities held to maturity (Net)	205.588	-	-	88.562					
Advances for assets acquired by financial leasing	-	-	-	-					
Financial lease receivables	-	-	417.451	-					
Leased assets (Net)	-	-	-	-					
Fixed assets (Net)	-	-	-	688.587	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Other assets	7.247.916	-	-	349.545					
II -Off balance sheet items	**742.277**	**1.749.319**	**5.636.465**	**569.577**	**3.737.673**	**10.307.545**	**36,26%**	**11,43%**	**0,37%**
Guarantees and pledges	36	1.505.173	189.331	132.276					
Commitments	-	-	5.444.829	-					
Other off balance sheet items	-	-	-	-					
Transactions related with derivative financial instruments	-	142.969	-	6.047					
Interest and income accruals	742.241	101.177	2.305	431.254	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	-	-	-	-					
III -Total risk weighted assets	**26.485.957**	**4.823.033**	**6.053.916**	**28.707.241**	**32.698.806**	**47.821.091**	**68,38%**	**100,00%**	**3,27%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	68,38%
Bank' Loans Under Follow Up	3,27%

2.2 Alternatifbank

ALTERNATIFBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**132.451**	**223.723**	**114.275**	**207.827**	**247.654**	**313.878**	**392.280**	**488.758**	**606.425**	**749.623**	**923.380**	**1.133.650**	**1.387.445**
Cash TC	2.922	2.517	5.121	5.794	6.888	8.705	10.857	13.505	16.735	20.665	25.434	31.206	38.172
Cash FC	5.823	6.139	7.127	7.526	8.946	11.307	14.103	17.542	21.737	26.843	33.037	40.534	49.582
TCMB & Deposit Reserves TC	8.552	12.144	4.404	28.810	34.245	43.282	53.982	67.148	83.206	102.747	126.460	155.155	189.790
TCMB & Deposit Reserves FC	51.346	45.557	83.513	103.155	122.616	154.975	193.284	240.427	297.923	367.894	452.797	555.541	679.554
Banks & Interbank Placements TC	41.462	108.405	5.529	23.709	28.801	37.268	47.292	59.627	74.672	92.980	115.196	142.080	174.529
Banks & Interbank Placements FC	22.346	48.961	8.581	38.833	46.159	58.340	72.762	90.509	112.153	138.494	170.456	209.134	255.819
SECURITIES PORTFOLIO	**518.118**	**243.735**	**369.456**	**120.453**	**143.177**	**180.962**	**225.695**	**280.743**	**347.880**	**429.584**	**528.724**	**648.698**	**793.505**
Securities Portfolio TC	102.691	8.262	131.294	119.957	142.587	180.217	224.766	279.587	346.448	427.815	526.547	646.026	790.237
Securities Portfolio FC	415.427	235.473	238.162	496	590	745	929	1.156	1.433	1.769	2.177	2.672	3.268
LOANS PORTFOLIO	**429.810**	**583.797**	**878.261**	**1.372.897**	**1.631.903**	**2.062.569**	**2.572.434**	**3.199.857**	**3.965.074**	**4.896.321**	**6.026.300**	**7.393.733**	**9.044.225**
Loans TC	226.396	333.480	484.140	751.051	892.742	1.128.341	1.407.265	1.750.500	2.169.117	2.678.561	3.296.723	4.044.785	4.947.696
Loans FC	182.798	234.490	374.980	621.845	739.161	934.228	1.165.169	1.449.356	1.795.957	2.217.760	2.729.577	3.348.948	4.096.528
Non Performing Loans	50.883	29.730	42.943	21.929	26.066	32.945	41.089	51.111	63.333	78.208	96.257	118.098	144.461
Non Performing Loans Provision	-30.267	-13.903	-23.802	-21.929	-26.066	-32.945	-41.089	-51.111	-63.333	-78.208	-96.257	-118.098	-144.461
ACCRUED INTEREST GAIN	**107.484**	**68.330**	**71.998**	**82.410**	**97.957**	**123.809**	**154.414**	**192.076**	**238.009**	**293.909**	**361.737**	**443.819**	**542.893**
Accrued Interest & Income Accruals TC	113.573	65.134	67.382	22.272	26.474	33.461	41.732	51.911	64.325	79.432	97.764	119.948	146.723
Accrued Interest & Income Accruals FC	-6.089	3.196	4.616	60.138	71.483	90.348	112.682	140.165	173.684	214.476	263.973	323.872	396.169
SUBSIDIARIES & ASSOCIATES	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Subsidiaries & Associates TC	0	0	0	0	0	0	0	0	0	0	0	0	0
Subsidiaries & Associates FC	0	0	0	0	0	0	0	0	0	0	0	0	0
FIXED ASSETS	**10.141**	**6.239**	**3.525**	**3.283**	**3.283**	**3.283**	**3.283**	**3.283**	**3.283**	**3.283**	**3.283**	**3.283**	**3.283**
Fixed Assets TC	10.141	6.239	3.525	3.283	3.283	3.283	3.283	3.283	3.283	3.283	3.283	3.283	3.283
Fixed Assets FC	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER ASSETS	**79.829**	**56.368**	**48.907**	**52.775**	**62.731**	**79.286**	**98.886**	**123.004**	**152.420**	**188.217**	**231.654**	**284.219**	**347.665**
Other Assets TC	69.218	56.361	48.251	52.440	62.334	78.784	98.259	122.225	151.453	187.024	230.186	282.418	345.461
Other Assets FC	10.611	7	656	335	398	503	627	780	966	1.193	1.468	1.802	2.204
TOTAL ASSETS	**1.277.833**	**1.182.192**	**1.486.422**	**1.839.644**	**2.186.706**	**2.763.787**	**3.446.992**	**4.287.721**	**5.313.091**	**6.560.937**	**8.075.079**	**9.907.402**	**12.119.016**

ALTERNATIFBANK	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**685.138**	**617.470**	**687.478**	**1.008.806**	**1.199.125**	**1.515.578**	**1.890.228**	**2.351.258**	**2.913.541**	**3.597.822**	**4.428.133**	**5.432.924**	**6.645.707**
Customer Deposits TC	223.834	230.847	261.101	480.162	570.748	721.371	899.693	1.119.130	1.386.760	1.712.457	2.107.660	2.585.911	3.163.161
Customer Deposits FC	461.304	386.623	426.377	528.644	628.377	794.208	990.535	1.232.129	1.526.781	1.885.365	2.320.472	2.847.013	3.482.547
BANKS & INTERBANK BORROWINGS	**232.342**	**139.712**	**213.171**	**102.846**	**103.655**	**130.100**	**156.133**	**186.570**	**220.918**	**259.520**	**302.495**	**349.874**	**401.528**
Banks & Interbank Borrowings TC	127.758	136.600	190.677	82.087	78.979	98.911	117.232	138.180	160.954	185.472	211.357	238.054	264.746
Banks & Interbank Borrowings FC	104.584	3.112	22.494	20.759	24.676	31.190	38.901	48.390	59.964	74.048	91.138	111.819	136.782
FUNDS BORROWED AND OTHERS	**183.274**	**216.611**	**352.921**	**429.405**	**510.415**	**645.115**	**804.587**	**1.000.828**	**1.240.167**	**1.531.436**	**1.884.862**	**2.312.558**	**2.828.787**
Funds Borrowed & Others TC	21.490	29.097	22.492	20.276	24.101	30.462	37.992	47.258	58.560	72.313	89.002	109.198	133.574
Funds Borrowed & Others FC	161.784	187.514	330.429	409.128	486.313	614.653	766.595	953.569	1.181.607	1.459.122	1.795.860	2.203.361	2.695.213
ACCRUED INTEREST EXPENSES	**5.698**	**6.214**	**7.455**	**15.721**	**18.687**	**23.619**	**29.457**	**36.642**	**45.405**	**56.069**	**69.008**	**84.667**	**103.567**
Accrued Interest & Expense Accruals TC	4.225	3.636	3.455	5.942	7.063	8.927	11.133	13.849	17.160	21.191	26.081	31.999	39.142
Accrued Interest & Expense Accruals FC	1.473	2.578	4.000	9.780	11.625	14.692	18.324	22.794	28.245	34.878	42.927	52.668	64.425
GENERAL PROVISIONS	**2.717**	**3.403**	**4.941**	**7.308**	**7.308**	**7.308**	**7.308**	**7.308**	**7.308**	**7.308**	**7.308**	**7.308**	**7.308**
General Provisions TC	2.717	3.403	4.941	7.308	7.308	7.308	7.308	7.308	7.308	7.308	7.308	7.308	7.308
General Provisions FC	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER PROVISIONS	**13.707**	**14.695**	**4.720**	**5.597**	**5.597**	**5.597**	**5.597**	**5.597**	**5.597**	**5.597**	**5.597**	**5.597**	**5.597**
Employees Termination Reserves TC	1.115	1.311	1.616	1.894	1.894	1.894	1.894	1.894	1.894	1.894	1.894	1.894	1.894
Employees Termination Reserves FC	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Provisions TC	12.592	13.367	3.081	3.698	3.698	3.698	3.698	3.698	3.698	3.698	3.698	3.698	3.698
Other Provisions FC	0	17	23	5	5	5	5	5	5	5	5	5	5
OTHER LIABILITIES	**49.554**	**72.914**	**77.206**	**108.427**	**128.883**	**162.895**	**203.163**	**252.715**	**313.149**	**386.696**	**475.939**	**583.934**	**714.285**
Other Liabilities TC	35.697	57.325	66.665	70.775	84.127	106.329	132.613	164.958	204.406	252.413	310.666	381.159	466.244
Other Liabilities FC	13.857	15.589	10.541	37.652	44.755	56.567	70.550	87.757	108.743	134.283	165.273	202.776	248.041
SHAREHOLDERS EQUITY	**105.403**	**111.172**	**138.530**	**182.293**	**237.713**	**304.763**	**389.419**	**495.193**	**626.970**	**790.537**	**992.875**	**1.242.358**	**1.549.018**
Paid in Capital	220.000	220.000	224.265	224.265	224.265	224.265	224.265	224.265	224.265	224.265	224.265	224.265	224.265
Other Reserves	-121.611	-117.872	-108.337	-77.389	-77.389	-77.389	-77.389	-77.389	-77.389	-77.389	-77.389	-77.389	-77.389
Securities Revaluation Fund	4	0	531	-234	-234	-234	-234	-234	-234	-234	-234	-234	-234
Retained Earnings	7.010	9.044	22.071	35.651	91.071	158.121	242.777	348.551	480.328	643.895	846.233	1.095.716	1.402.376
TOTAL LIABILITIES	**1.277.833**	**1.182.191**	**1.486.422**	**1.839.644**	**2.186.706**	**2.763.787**	**3.446.992**	**4.287.721**	**5.313.091**	**6.560.937**	**8.075.079**	**9.907.402**	**12.119.016**

ALTERNATIFBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**36.041**	**63.151**	**101.520**	**122.253**	**151.221**	**190.115**	**237.424**	**295.529**	**366.549**	**453.120**	**558.349**	**685.916**
Interest Income	153.481	140.887	216.512	256.037	314.908	395.193	492.273	611.150	755.961	931.909	1.145.091	1.402.703
Interest Expense	117.440	77.736	114.992	133.784	163.687	205.078	254.849	315.621	389.413	478.790	586.741	716.787
Net Fees & Commissions Income	**19.186**	**18.786**	**26.755**	**34.156**	**42.038**	**52.755**	**65.729**	**81.625**	**101.001**	**124.559**	**153.119**	**187.653**
Fees & Commissions Received	24.234	26.440	34.517	43.375	53.330	66.907	83.324	103.426	127.915	157.669	193.719	237.283
Fees & Commissions Paid	5.048	7.654	7.762	9.218	11.292	14.151	17.595	21.802	26.914	33.110	40.600	49.630
Net Trading Income	**3.147**	**4.096**	**-34.265**	**-31.340**	**-38.533**	**-48.343**	**-60.205**	**-74.730**	**-92.424**	**-113.923**	**-139.971**	**-171.448**
Net Trading Gain on Securities	980	13.867	-7.701	264	324	407	506	629	777	958	1.177	1.442
Net Trading Gain on FC Positions	2.167	-9.771	-26.564	-31.604	-38.858	-48.750	-60.712	-75.359	-93.202	-114.881	-141.149	-172.890
Other Operating Income	**67.754**	**30.460**	**27.751**	**34.252**	**42.114**	**52.835**	**65.799**	**81.674**	**101.012**	**124.508**	**152.976**	**187.378**
TOTAL OPERATING PROFIT	**126.128**	**116.493**	**121.761**	**159.321**	**196.840**	**247.362**	**308.746**	**384.097**	**476.137**	**588.263**	**724.473**	**889.499**
Provision for Losses	**21.690**	**16.263**	**6.742**	**4.137**	**6.879**	**8.144**	**10.022**	**12.223**	**14.875**	**18.049**	**21.842**	**26.363**
Other Operating Expense	**68.230**	**61.970**	**70.455**	**85.909**	**106.149**	**133.397**	**166.508**	**207.153**	**256.804**	**317.292**	**390.777**	**479.812**
NET OPERATING INCOME	**36.208**	**38.260**	**44.563**	**69.276**	**83.812**	**105.820**	**132.217**	**164.721**	**204.459**	**252.922**	**311.855**	**383.325**
Monetary Gain & Losses	**-13.951**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**22.257**	**38.260**	**44.563**	**69.276**	**83.812**	**105.820**	**132.217**	**164.721**	**204.459**	**252.922**	**311.855**	**383.325**
Provision for Taxes	**-13.213**	**-16.189**	**-8.913**	**-13.855**	**-16.762**	**-21.164**	**-26.443**	**-32.944**	**-40.892**	**-50.584**	**-62.371**	**-76.665**
NET PROFIT/LOSSES	**9.044**	**22.071**	**35.651**	**55.421**	**67.050**	**84.656**	**105.774**	**131.777**	**163.567**	**202.338**	**249.484**	**306.660**

ALTERNATIFBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**2.139.658**	**500.002**	**645.890**	**998.578**	**1.186.966**	**1.500.211**	**1.871.062**	**2.327.418**	**2.884.000**	**3.561.343**	**4.383.235**	**5.377.838**	**6.578.325**
Letters of Guarantees	1.544.475	369.941	474.757	716.045	851.132	1.075.749	1.341.673	1.668.910	2.068.016	2.553.715	3.143.065	3.856.260	4.717.087
Bank Acceptances	9.113	4.855	14.925	32.417	38.533	48.702	60.741	75.556	93.625	115.614	142.295	174.584	213.556
Letters of Credits	580.220	125.206	156.208	226.667	269.430	340.533	424.713	528.301	654.640	808.390	994.951	1.220.717	1.493.215
Other Guarantees	5.850	0	0	23.448	27.871	35.227	43.935	54.650	67.720	83.624	102.923	126.278	154.467
COMMITMENTS	**8.150.359**	**102.095**	**137.023**	**125.655**	**149.361**	**188.778**	**235.443**	**292.869**	**362.906**	**448.138**	**551.560**	**676.715**	**827.778**
Irrevocable Commitments	8.150.359	102.095	137.023	125.655	149.361	188.778	235.443	292.869	362.906	448.138	551.560	676.715	827.778
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**5.806.457**	**367.223**	**479.772**	**1.074.812**	**1.277.583**	**1.614.742**	**2.013.905**	**2.505.101**	**3.104.174**	**3.833.228**	**4.717.865**	**5.788.400**	**7.080.536**
Foreign Currency Buys	2.886.171	179.489	200.326	593.006	704.881	890.901	1.111.131	1.382.139	1.712.665	2.114.905	2.602.986	3.193.632	3.906.541
Foreign Currency Sells	2.721.096	152.372	131.138	481.806	572.703	723.841	902.774	1.122.963	1.391.509	1.718.322	2.114.879	2.594.768	3.173.994
NET BALANCE SHEET POSITION	**-60.740**	**-21.610**	**-76.229**	**-173.640**	**-206.399**	**-260.868**	**-325.354**	**-404.709**	**-501.492**	**-619.273**	**-762.190**	**-935.139**	**-1.143.889**
NET OFF BALANCE SHEET POSITION	**165.075**	**27.117**	**69.188**	**111.199**	**132.178**	**167.060**	**208.357**	**259.176**	**321.156**	**396.583**	**488.107**	**598.864**	**732.547**
TOTAL POSITION	**104.335**	**5.507**	**-7.041**	**-62.441**	**-74.221**	**-93.808**	**-116.997**	**-145.533**	**-180.336**	**-222.690**	**-274.083**	**-336.275**	**-411.342**

Valuation Day	**30.06.2006**				**ALTERNATIFBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	31.467	55.421	67.050	84.656	105.774	131.777	163.567	202.338	249.484	306.660
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	28.029	39.241	37.715	37.852	37.595	37.232	36.713	36.101	35.384	34.573
Total Discounted Cash Flows	**360.434**									
Last Year Profit	306.660									
Discount Rate	**25,8%**									
Terminal Value	1.188.603									
Days To Maturity	3.471									
Discounted Terminal Value	**134.003**									
Discounted CFs + Terminal Value	**494.437**									
Book Value+General Provision	**158.134**									
DCF Value / Book Value	**3,13**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	1.719.192	2.043.530	2.582.825	3.221.296	4.006.978	4.965.211	6.131.353	7.546.355	9.258.704	11.325.511
Balance Sheet Weighted	64,82%	64,82%	64,82%	64,82%	64,82%	64,82%	64,82%	64,82%	64,82%	64,82%
Net Balance Sheet	1.114.406	1.324.646	1.674.225	2.088.092	2.597.383	3.218.524	3.974.434	4.891.659	6.001.630	7.341.365
Effective Rate Balance Sheet	**1,88%**	**1,88%**	**1,88%**	**1,88%**	**1,88%**	**1,88%**	**1,88%**	**1,88%**	**1,88%**	**1,88%**
Total Off Balance Sheet	1.124.233	1.336.327	1.688.989	2.106.505	2.620.287	3.246.905	4.009.481	4.934.795	6.054.553	7.406.102
Off-Balance Sheet Weighted	21,13%	21,13%	21,13%	21,13%	21,13%	21,13%	21,13%	21,13%	21,13%	21,13%
Net Off Balance Sheet	237.568	282.387	356.910	445.138	553.708	686.122	847.267	1.042.800	1.279.422	1.565.026
Effective Rate Off Balance Sheet	**0,40%**	**0,40%**	**0,40%**	**0,40%**	**0,40%**	**0,40%**	**0,40%**	**0,40%**	**0,40%**	**0,40%**
Total Loss Weight	**2,28%**	**2,28%**	**2,28%**	**2,28%**	**2,28%**	**2,28%**	**2,28%**	**2,28%**	**2,28%**	**2,28%**
Lost Amount	21.929	26.066	32.945	41.089	51.111	63.333	78.208	96.257	118.098	144.461
Provision Left	23.802									
Total Provision	21.929	26.066	32.945	41.089	51.111	63.333	78.208	96.257	118.098	144.461
Additional Provision	-1.873	4.137	6.879	8.144	10.022	12.223	14.875	18.049	21.842	26.363

ALTERNATIFBANK	ACTUAL			FORECAST									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	1.080.177	1.159.904	1.480.331	1.650.762	1.847.378	2.272.148	2.851.423	3.551.880	4.409.609	5.454.464	6.723.976	8.262.137	10.120.881
Interest Income	153.481	140.887	202.356	115.334	256.037	314.908	395.193	492.273	611.150	755.961	931.909	1.145.091	1.402.703
Interest Rate	14,2%	12,1%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%
Interest Bearing Liabilities	1.081.396	1.095.438	1.377.833	1.511.713	1.677.126	2.051.994	2.570.871	3.194.802	3.956.641	4.881.702	6.002.134	7.355.423	8.985.689
Interest Expense	117.440	77.736	108.404	60.790	133.784	163.687	205.078	254.849	315.621	389.413	478.790	586.741	716.787
Interest Rate	10,9%	7,1%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%
Net Interest Margin	3,3%	5,1%	5,8%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	522.263	697.975	1.055.044	1.345.128	1.502.400	1.847.236	2.317.501	2.886.145	3.582.465	4.430.697	5.461.310	6.710.017	8.218.979
Cash Loans Commissions	2.587	3.282	4.988	3.250	7.202	8.855	11.109	13.835	17.172	21.238	26.178	32.164	39.397
Cash Loans Commissions Rate (%)	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Non-Cash Loans	831.705	564.063	764.990	973.170	1.092.772	1.343.589	1.685.637	2.099.240	2.605.709	3.222.671	3.972.289	4.880.536	5.978.081
Non-Cash Loans Commissions	7.377	7.297	9.420	6.125	13.643	16.775	21.045	26.209	32.532	40.235	49.594	60.933	74.636
Non-Cash Loans Commissions Rate (%)	0,9%	1,3%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
Cash & Non-Cash Loans	1.353.968	1.262.038	1.820.034	2.318.298	2.595.172	3.190.825	4.003.138	4.985.385	6.188.174	7.653.369	9.433.599	11.590.553	14.197.060
Other Commissions	14.270	15.861	15.584	10.146	22.530	27.701	34.753	43.280	53.722	66.442	81.897	100.622	123.250
Other Commissions Rate (%)	1,1%	1,3%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Funds Borrowed	190.584	257.912	379.407	420.719	469.910	577.765	724.851	902.708	1.120.497	1.385.801	1.708.149	2.098.710	2.570.673
Cash Loans Commissions Expense	200	1.327	1.718	974	2.157	2.653	3.328	4.144	5.144	6.362	7.842	9.635	11.802
Cash Loans Commissions Expense (%)	0,1%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Non-Cash Loans	831.705	564.063	764.990	973.170	1.092.772	1.343.589	1.685.637	2.099.240	2.605.709	3.222.671	3.972.289	4.880.536	5.978.081
Non-Cash Loans Commissions Expense	49	33	12	8	17	21	27	33	41	51	63	78	95
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	1.237.516	1.006.828	1.307.400	1.496.481	1.665.932	2.038.232	2.553.605	3.173.299	3.929.950	4.848.691	5.961.445	7.305.431	8.924.455
Other Commissions Expense	4.799	6.294	5.452	3.190	7.044	8.618	10.797	13.417	16.616	20.500	25.205	30.888	37.733
Other Commissions Expense rate (%)	0,4%	0,6%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Securities Portfolio	377.556	303.896	269.608	118.016	131.815	162.069	203.329	253.219	314.312	388.732	479.154	588.711	721.102
Trading Gain on Securities Portfolio	980	13.867	-15.637	118	264	324	407	506	629	777	958	1.177	1.442
Trading Gain Rate	0,3%	4,6%	-5,8%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	1.370.509	1.280.981	1.835.830	2.318.298	2.595.172	3.190.825	4.003.138	4.985.385	6.188.174	7.653.369	9.433.599	11.590.553	14.197.060
Other Operating Income	66.945	29.935	23.898	15.425	34.252	42.114	52.835	65.799	81.674	101.012	124.508	152.976	187.378
Other Operating Income Rate (%)	4,9%	2,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
Cost to Income Ratio	123,5%	75,6%	54,9%	54,9%	54,9%	54,9%	54,9%	54,9%	54,9%	54,9%	54,9%	54,9%	54,9%
ROE	17,3%	17,4%	8,4%	18,9%	26,4%	24,7%	24,4%	23,9%	23,5%	23,1%	22,7%	22,3%	22,0%

ALTERNATIFBANK	ACTUAL			FORECAST									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Cash FC / Total Assets	0,5%	0,5%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	6,7%	5,1%	7,2%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%
Securities Portfolio FC / Total Assets	23,0%	18,0%	9,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Loans TC / Total Assets	23,4%	30,5%	35,6%	40,8%	40,8%	40,8%	40,8%	40,8%	40,8%	40,8%	40,8%	40,8%	40,8%
Loans FC / Total Assets	17,6%	22,3%	29,0%	33,8%	33,8%	33,8%	33,8%	33,8%	33,8%	33,8%	33,8%	33,8%	33,8%
Accrued Interest Income TC / Total Assets	6,7%	5,0%	3,0%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
Accrued Interest Income FC / Total Assets	0,1%	0,3%	1,4%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%
Other Assets TC / Total Assets	5,0%	4,1%	3,1%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%
Other Assets FC / Total Assets	0,6%	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Customer Deposits TC / Total Assets	19,4%	18,8%	22,3%	26,1%	26,1%	26,1%	26,1%	26,1%	26,1%	26,1%	26,1%	26,1%	26,1%
Customer Deposits FC / Total Assets	33,7%	30,6%	28,8%	28,7%	28,7%	28,7%	28,7%	28,7%	28,7%	28,7%	28,7%	28,7%	28,7%
Funds Borrowed TC / Total Assets	1,9%	2,3%	1,9%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Funds Borrowed FC / Total Assets	13,1%	17,2%	21,2%	22,2%	22,2%	22,2%	22,2%	22,2%	22,2%	22,2%	22,2%	22,2%	22,2%
Accrued Interest Expense TC / Total Assets	0,4%	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Accrued Interest Expense FC / Total Assets	0,2%	0,3%	0,4%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Other Liabilities TC / Total Assets	3,8%	4,9%	3,9%	3,8%	3,8%	3,8%	3,8%	3,8%	3,8%	3,8%	3,8%	3,8%	3,8%
Other Liabilities FC / Total Assets	1,3%	1,3%	1,4%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Letters of Guarantees / Total Assets	47,5%	31,5%	34,3%	38,9%	38,9%	38,9%	38,9%	38,9%	38,9%	38,9%	38,9%	38,9%	38,9%
Bank Acceptances / Total Assets	0,7%	0,9%	1,1%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%
Letters of Credits / Total Assets	26,2%	24,4%	23,7%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%
Other Guarantees / Total Assets	0,1%	0,0%	0,5%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
Irrevocable Commitments / Total Assets	133,4%	11,1%	8,6%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%	6,8%
Total FC Assets / Total Assets	49,6%	47,5%	46,8%	45,2%	45,2%	45,2%	45,2%	45,2%	45,2%	45,2%	45,2%	45,2%	45,2%
Total FC Liabilities / Total Assets	51,2%	51,3%	52,9%	54,7%	54,7%	54,7%	54,7%	54,7%	54,7%	54,7%	54,7%	54,7%	54,7%
Foreign Currency Buys / Total Assets	55,0%	15,9%	20,7%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%
Foreign Currency Sells / Total Assets	50,8%	12,7%	16,5%	26,2%	26,2%	26,2%	26,2%	26,2%	26,2%	26,2%	26,2%	26,2%	26,2%

ALTERNATIFBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**256.698**	**39.801**	**418.497**	**852.116**	**1.069.325**	**1.649.645**	**64,82%**	**82,57%**	**1,88%**
Cash	12.782	0	0	0					
Due from banks	62.619	39.801	0	0					
Interbank money market placements	3.791	0	0	0					
Receivables from reverse repo transactions	3.000	0	0	0					
Reserve deposits	71.518	0	0	0					
Special finance houses	0	0	0	0					
Loans	102.988	0	417.467	796.904					
Loans under follow-up (Net)	0	0	0	5.776					
Subsidiaries, associates and HTM Securities	0	0	0	0					
Miscellaneous receivables	0	0	0	13.142					
Marketable securities held to maturity (Net)	0	0	0	0					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	0	0					
Leased assets (Net)	0	0	1.030	0					
Fixed assets (Net)	0	0	0	15.860					
Other assets	0	0	0	20.434	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
II -Off balance sheet items	**35.641**	**281.545**	**229.842**	**54.526**	**225.756**	**1.068.335**	**21,13%**	**17,43%**	**0,40%**
Guarantees and pledges	26.229	281.525	192.269	18.108					
Commitments	0	0	14.814	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	0	0	6.036					
Interest and income accruals	9.412	20	22.759	30.382					
Not risk weighted accounts	0	0	0	0	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
III -Total risk weighted assets	**292.339**	**321.346**	**648.339**	**906.642**	**1.295.081**	**2.717.980**	**47,65%**	**100,00%**	**2,28%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	47,65%
Bank' Loans Under Follow Up	2,28%

2.3 Denizbank

DENIZBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**1.638.451**	**2.535.615**	**3.430.908**	**3.335.585**	**4.138.660**	**5.207.748**	**6.498.721**	**8.073.660**	**9.985.727**	**12.301.202**	**15.097.561**	**18.466.003**	**22.513.544**
Cash TC	16.908	45.066	40.328	52.032	63.739	79.324	98.143	121.101	148.975	182.728	223.492	272.596	331.599
Cash FC	137.739	188.887	145.779	133.981	164.126	204.256	252.715	311.833	383.605	470.520	575.486	701.926	853.856
TCMB & Deposit Reserves TC	59.661	106.385	130.652	205.424	251.643	313.171	387.469	478.110	588.154	721.414	882.351	1.076.212	1.309.156
TCMB & Deposit Reserves FC	245.343	354.775	446.967	943.274	1.155.503	1.438.031	1.779.196	2.195.405	2.700.707	3.312.618	4.051.612	4.941.790	6.011.434
Banks & Interbank Placements TC	434.761	363.061	485.925	684.722	889.699	1.162.573	1.492.081	1.894.068	2.382.105	2.973.106	3.686.849	4.546.611	5.579.705
Banks & Interbank Placements FC	744.039	1.477.441	2.181.257	1.316.152	1.613.951	2.010.394	2.489.118	3.073.142	3.782.182	4.640.815	5.677.771	6.926.869	8.427.793
SECURITIES PORTFOLIO	**2.090.725**	**1.808.755**	**1.768.731**	**1.489.124**	**1.824.164**	**2.270.184**	**2.808.773**	**3.465.833**	**4.263.541**	**5.229.549**	**6.396.181**	**7.801.484**	**9.490.104**
Securities Portfolio TC	1.138.236	968.784	987.591	652.044	798.748	994.047	1.229.880	1.517.587	1.866.880	2.289.867	2.800.701	3.416.042	4.155.439
Securities Portfolio FC	952.489	839.971	781.140	837.080	1.025.416	1.276.137	1.578.894	1.948.246	2.396.661	2.939.683	3.595.480	4.385.442	5.334.665
LOANS PORTFOLIO	**2.148.264**	**3.214.275**	**6.173.457**	**9.212.994**	**11.285.840**	**14.045.302**	**17.377.480**	**21.442.613**	**26.377.918**	**32.354.473**	**39.572.257**	**48.266.666**	**58.713.919**
Loans TC	976.614	1.469.460	2.684.537	3.947.747	4.835.957	6.018.380	7.446.211	9.188.111	11.302.878	13.863.818	16.956.622	20.682.157	25.158.781
Loans FC	1.152.680	1.731.459	3.476.243	5.265.247	6.449.883	8.026.922	9.931.269	12.254.502	15.075.040	18.490.655	22.615.635	27.584.509	33.555.138
Non Performing Loans	107.300	116.199	135.089	164.800	201.879	251.239	310.844	383.561	471.842	578.750	707.860	863.383	1.050.261
Non Performing Loans Provision	-88.330	-102.843	-122.412	-164.800	-201.879	-251.239	-310.844	-383.561	-471.842	-578.750	-707.860	-863.383	-1.050.261
ACCRUED INTEREST GAIN	**172.795**	**128.321**	**143.713**	**409.402**	**501.515**	**624.138**	**772.212**	**952.856**	**1.172.169**	**1.437.752**	**1.758.492**	**2.144.850**	**2.609.100**
Accrued Interest & Income Accruals TC	93.518	79.889	85.214	291.077	356.566	443.749	549.027	677.461	833.388	1.022.212	1.250.252	1.524.944	1.855.016
Accrued Interest & Income Accruals FC	79.277	48.432	58.499	118.326	144.948	180.389	223.185	275.395	338.781	415.540	508.241	619.906	754.084
SUBSIDIARIES & ASSOCIATES	**174.298**	**132.332**	**129.529**	**87.803**	**87.803**	**87.803**	**87.803**	**87.803**	**87.803**	**87.803**	**87.803**	**87.803**	**87.803**
Subsidiaries & Associates TC	174.298	132.332	129.529	87.803	87.803	87.803	87.803	87.803	87.803	87.803	87.803	87.803	87.803
Subsidiaries & Associates FC	0	0	0	0	0	0	0	0	0	0	0	0	0
FIXED ASSETS	**103.230**	**136.307**	**144.996**	**145.968**	**145.968**	**145.968**	**145.968**	**145.968**	**145.968**	**145.968**	**145.968**	**145.968**	**145.968**
Fixed Assets TC	98.438	130.301	139.217	138.518	138.518	138.518	138.518	138.518	138.518	138.518	138.518	138.518	138.518
Fixed Assets FC	4.792	6.006	5.779	7.450	7.450	7.450	7.450	7.450	7.450	7.450	7.450	7.450	7.450
OTHER ASSETS	**25.049**	**116.725**	**184.216**	**216.238**	**264.890**	**329.657**	**407.866**	**503.279**	**619.115**	**759.391**	**928.799**	**1.132.866**	**1.378.073**
Other Assets TC	17.139	96.949	167.555	148.982	182.502	227.124	281.009	346.745	426.553	523.199	639.917	780.513	949.454
Other Assets FC	7.910	19.776	16.661	67.256	82.388	102.533	126.858	156.534	192.562	236.192	288.883	352.353	428.619
TOTAL ASSETS	**6.352.812**	**8.072.330**	**11.975.550**	**14.897.115**	**18.248.838**	**22.710.800**	**28.098.824**	**34.672.012**	**42.652.242**	**52.316.138**	**63.987.062**	**78.045.640**	**94.938.511**

DENIZBANK	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**4.015.883**	**5.109.398**	**6.980.130**	**8.363.397**	**10.245.090**	**12.750.083**	**15.774.976**	**19.465.233**	**23.945.419**	**29.370.832**	**35.923.012**	**43.815.646**	**53.299.482**
Customer Deposits TC	1.416.642	1.597.490	2.643.469	3.423.734	4.194.045	5.219.516	6.457.820	7.968.505	9.802.564	12.023.572	14.705.845	17.936.862	21.819.271
Customer Deposits FC	2.599.241	3.511.908	4.336.661	4.939.664	6.051.046	7.530.567	9.317.156	11.496.728	14.142.855	17.347.260	21.217.166	25.878.784	31.480.211
BANKS & INTERBANK BORROWINGS	**1.065.816**	**628.489**	**789.988**	**760.551**	**886.805**	**1.090.120**	**1.316.741**	**1.580.755**	**1.884.444**	**2.232.321**	**2.628.592**	**3.077.465**	**3.582.926**
Banks & Interbank Borrowings TC	278.116	390.581	541.774	514.060	581.084	705.549	836.954	984.810	1.147.476	1.324.576	1.514.604	1.715.039	1.921.976
Banks & Interbank Borrowings FC	787.700	237.908	248.214	246.491	305.721	384.571	479.786	595.945	736.968	907.745	1.113.989	1.362.426	1.660.950
FUNDS BORROWED AND OTHERS	**414.179**	**1.044.651**	**2.606.406**	**3.914.838**	**4.795.643**	**5.968.209**	**7.384.137**	**9.111.516**	**11.208.654**	**13.748.245**	**16.815.267**	**20.509.744**	**24.949.050**
Funds Borrowed & Others TC	38.955	48.261	205.420	279.284	342.120	425.771	526.783	650.014	799.623	980.797	1.199.597	1.463.161	1.779.860
Funds Borrowed & Others FC	375.224	996.390	2.400.986	3.635.554	4.453.523	5.542.438	6.857.354	8.461.502	10.409.031	12.767.448	15.615.669	19.046.583	23.169.190
ACCRUED INTEREST EXPENSES	**64.809**	**75.930**	**99.451**	**208.116**	**254.940**	**317.275**	**392.547**	**484.376**	**595.862**	**730.868**	**893.914**	**1.090.315**	**1.326.313**
Accrued Interest & Expense Accruals TC	31.046	20.174	28.471	43.236	52.964	65.914	81.552	100.629	123.790	151.838	185.711	226.513	275.541
Accrued Interest & Expense Accruals FC	33.763	55.756	70.980	164.880	201.977	251.361	310.995	383.747	472.071	579.031	708.203	863.802	1.050.771
GENERAL PROVISIONS	**13.036**	**23.758**	**34.786**	**42.472**	**42.472**	**42.472**	**42.472**	**42.472**	**42.472**	**42.472**	**42.472**	**42.472**	**42.472**
General Provisions TC	13.036	23.569	34.786	42.317	42.317	42.317	42.317	42.317	42.317	42.317	42.317	42.317	42.317
General Provisions FC	0	189	0	155	155	155	155	155	155	155	155	155	155
OTHER PROVISIONS	**47.614**	**63.460**	**96.926**	**55.886**	**55.886**	**55.886**	**55.886**	**55.886**	**55.886**	**55.886**	**55.886**	**55.886**	**55.886**
Employees Termination Reserves TC	8.999	13.620	19.434	19.477	19.477	19.477	19.477	19.477	19.477	19.477	19.477	19.477	19.477
Employees Termination Reserves FC	409	395	436	597	597	597	597	597	597	597	597	597	597
Other Provisions TC	24.652	36.119	64.861	19.799	19.799	19.799	19.799	19.799	19.799	19.799	19.799	19.799	19.799
Other Provisions FC	13.554	13.326	12.195	16.013	16.013	16.013	16.013	16.013	16.013	16.013	16.013	16.013	16.013
OTHER LIABILITIES	**134.934**	**253.674**	**276.393**	**477.380**	**584.786**	**727.770**	**900.430**	**1.111.068**	**1.366.795**	**1.676.476**	**2.050.472**	**2.500.981**	**3.042.314**
Other Liabilities TC	115.166	212.892	260.424	388.868	476.359	592.833	733.479	905.063	1.113.375	1.365.637	1.670.289	2.037.268	2.478.232
Other Liabilities FC	19.768	40.782	15.969	88.512	108.426	134.937	166.951	206.006	253.421	310.839	380.182	463.712	564.082
SHAREHOLDERS EQUITY	**596.541**	**872.970**	**1.091.470**	**1.320.966**	**1.688.937**	**2.143.556**	**2.711.422**	**3.416.651**	**4.289.678**	**5.366.782**	**6.691.436**	**8.315.557**	**10.301.019**
Paid in Capital	202.000	316.100	316.100	316.100	316.100	316.100	316.100	316.100	316.100	316.100	316.100	316.100	316.100
Other Reserves	152.214	305.085	440.126	686.813	686.813	686.813	686.813	686.813	686.813	686.813	686.813	686.813	686.813
Securities Revaluation Fund	119.261	115.078	108.792	44.991	44.991	44.991	44.991	44.991	44.991	44.991	44.991	44.991	44.991
Retained Earnings	123.066	136.707	226.452	273.062	641.033	1.095.652	1.663.518	2.368.747	3.241.774	4.318.878	5.643.532	7.267.653	9.253.115
TOTAL LIABILITIES	**6.352.812**	**8.072.330**	**11.975.550**	**14.897.115**	**18.248.838**	**22.710.800**	**28.098.824**	**34.672.012**	**42.652.242**	**52.316.138**	**63.987.062**	**78.045.640**	**94.938.511**

DENIZBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**400.866**	**527.224**	**641.730**	**778.523**	**970.080**	**1.211.088**	**1.504.773**	**1.863.052**	**2.298.607**	**2.826.684**	**3.465.230**	**4.235.392**
Interest Income	859.088	1.028.176	1.403.218	1.716.479	2.127.242	2.645.053	3.273.850	4.038.920	4.966.466	6.088.032	7.440.624	9.067.733
Interest Expense	458.222	500.952	761.488	937.956	1.157.162	1.433.964	1.769.077	2.175.868	2.667.860	3.261.348	3.975.394	4.832.341
Net Fees & Commissions Income	**92.765**	**146.721**	**223.546**	**284.835**	**352.241**	**437.149**	**540.395**	**666.146**	**818.765**	**1.003.501**	**1.226.522**	**1.495.081**
Fees & Commissions Received	155.988	206.085	295.579	378.318	467.501	579.926	716.448	882.556	1.083.941	1.327.450	1.621.119	1.974.390
Fees & Commissions Paid	63.223	59.364	72.033	93.483	115.260	142.777	176.052	216.410	265.176	323.949	394.598	479.309
Net Trading Income	**54.264**	**11.027**	**-35.767**	**-84.709**	**-104.678**	**-129.851**	**-160.420**	**-197.613**	**-242.705**	**-297.229**	**-362.985**	**-442.086**
Net Trading Gain on Securities	25.152	28.750	9.960	3.313	4.094	5.079	6.275	7.729	9.493	11.626	14.198	17.292
Net Trading Gain on FC Positions	29.112	-17.723	-45.726	-88.022	-108.773	-134.930	-166.694	-205.343	-252.198	-308.855	-377.183	-459.377
Other Operating Income	**78.884**	**114.903**	**112.842**	**142.708**	**176.349**	**218.757**	**270.255**	**332.914**	**408.880**	**500.735**	**611.512**	**744.771**
TOTAL OPERATING PROFIT	**626.779**	**799.875**	**942.351**	**1.121.357**	**1.393.991**	**1.737.144**	**2.155.004**	**2.664.499**	**3.283.546**	**4.033.690**	**4.940.279**	**6.033.158**
Provision for Losses	**84.436**	**68.611**	**93.006**	**37.079**	**49.361**	**59.605**	**72.716**	**88.282**	**106.907**	**129.110**	**155.524**	**186.878**
Other Operating Expense	**334.025**	**432.280**	**508.018**	**624.315**	**776.356**	**967.707**	**1.200.751**	**1.484.933**	**1.830.259**	**2.248.763**	**2.754.603**	**3.364.453**
NET OPERATING INCOME	**208.318**	**298.984**	**341.328**	**459.963**	**568.275**	**709.831**	**881.536**	**1.091.284**	**1.346.380**	**1.655.817**	**2.030.152**	**2.481.827**
Monetary Gain & Losses	**-51.825**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**156.493**	**298.984**	**341.328**	**459.963**	**568.275**	**709.831**	**881.536**	**1.091.284**	**1.346.380**	**1.655.817**	**2.030.152**	**2.481.827**
Provision for Taxes	**-19.681**	**-72.532**	**-68.266**	**-91.993**	**-113.655**	**-141.966**	**-176.307**	**-218.257**	**-269.276**	**-331.163**	**-406.030**	**-496.365**
NET PROFIT/LOSSES	**136.812**	**226.452**	**273.062**	**367.971**	**454.620**	**567.865**	**705.229**	**873.028**	**1.077.104**	**1.324.654**	**1.624.121**	**1.985.462**

DENIZBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**2.249.415**	**2.495.929**	**3.211.010**	**4.619.526**	**5.658.880**	**7.042.513**	**8.713.314**	**10.751.629**	**13.226.262**	**16.222.991**	**19.842.090**	**24.201.589**	**29.439.990**
Letters of Guarantees	1.108.869	1.412.564	2.168.524	2.836.672	3.474.899	4.324.535	5.350.510	6.602.160	8.121.736	9.961.912	12.184.261	14.861.261	18.077.961
Bank Acceptances	208.997	252.119	197.318	249.664	305.837	380.616	470.915	581.077	714.820	876.779	1.072.375	1.307.986	1.591.098
Letters of Credits	749.364	706.614	758.533	1.053.903	1.291.022	1.606.685	1.987.863	2.452.886	3.017.451	3.701.128	4.526.792	5.521.372	6.716.466
Other Guarantees	182.185	124.632	86.635	479.286	587.122	730.677	904.026	1.115.506	1.372.254	1.683.172	2.058.662	2.510.969	3.054.465
COMMITMENTS	**386.084**	**1.718.958**	**2.068.412**	**2.644.236**	**3.239.167**	**4.031.165**	**4.987.538**	**6.154.279**	**7.570.769**	**9.286.109**	**11.357.697**	**13.853.093**	**16.851.576**
Irrevocable Commitments	385.309	1.714.952	2.060.609	2.644.236	3.239.167	4.031.165	4.987.538	6.154.279	7.570.769	9.286.109	11.357.697	13.853.093	16.851.576
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**2.571.988**	**3.250.218**	**4.682.254**	**7.319.109**	**8.965.847**	**11.158.056**	**13.805.248**	**17.034.725**	**20.955.496**	**25.703.470**	**31.437.518**	**38.344.646**	**46.644.292**
Foreign Currency Buys	1.217.182	1.410.351	1.807.098	3.848.194	4.714.005	5.866.610	7.258.434	8.956.408	11.017.846	13.514.205	16.529.015	20.160.600	24.524.335
Foreign Currency Sells	1.097.556	1.295.805	1.820.699	3.470.915	4.251.842	5.291.445	6.546.814	8.078.317	9.937.651	12.189.266	14.908.503	18.184.046	22.119.957
NET BALANCE SHEET POSITION	**-505.390**	**-189.907**	**26.884**	**-403.099**	**-493.793**	**-614.529**	**-760.323**	**-938.186**	**-1.154.122**	**-1.415.616**	**-1.731.418**	**-2.111.827**	**-2.568.929**
NET OFF BALANCE SHEET POSITION	**119.626**	**114.546**	**-13.601**	**377.279**	**462.163**	**575.165**	**711.620**	**878.090**	**1.080.195**	**1.324.939**	**1.620.512**	**1.976.555**	**2.404.377**
TOTAL POSITION	**-385.764**	**-75.361**	**13.283**	**-25.820**	**-31.630**	**-39.363**	**-48.702**	**-60.095**	**-73.927**	**-90.677**	**-110.906**	**-135.273**	**-164.552**

Valuation Day	**30.06.2006**				**DENIZBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	163.367	367.971	454.620	567.865	705.229	873.028	1.077.104	1.324.654	1.624.121	1.985.462
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	145.517	260.545	255.720	253.910	250.660	246.662	241.756	236.342	230.344	223.841
Total Discounted Cash Flows	**2.345.297**									
Last Year Profit	1.985.462									
Discount Rate	**25,8%**									
Terminal Value	7.695.588									
Days To Maturity	3.471									
Discounted Terminal Value	**867.601**									
Discounted CFs + Terminal Value	**3.212.898**									
Book Value+General Provision	**1.200.071**									
DCF Value / Book Value	**2,68**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	13.407.991	16.424.675	20.440.616	25.290.050	31.206.179	38.388.701	47.086.589	57.590.881	70.244.156	85.448.407
Balance Sheet Weighted	60,71%	60,71%	60,71%	60,71%	60,71%	60,71%	60,71%	60,71%	60,71%	60,71%
Net Balance Sheet	8.140.631	9.972.203	12.410.473	15.354.795	18.946.759	23.307.611	28.588.513	34.966.170	42.648.577	51.879.802
Effective Rate Balance Sheet	**1,92%**	**1,92%**	**1,92%**	**1,92%**	**1,92%**	**1,92%**	**1,92%**	**1,92%**	**1,92%**	**1,92%**
Total Off Balance Sheet	7.263.762	8.898.047	11.073.678	13.700.853	16.905.908	20.797.030	25.509.100	31.199.787	38.054.683	46.291.567
Off-Balance Sheet Weighted	27,25%	27,25%	27,25%	27,25%	27,25%	27,25%	27,25%	27,25%	27,25%	27,25%
Net Off Balance Sheet	1.979.248	2.424.561	3.017.383	3.733.242	4.606.563	5.666.825	6.950.782	8.501.394	10.369.233	12.613.639
Effective Rate Off Balance Sheet	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**
Total Loss Weight	**2,36%**	**2,36%**	**2,36%**	**2,36%**	**2,36%**	**2,36%**	**2,36%**	**2,36%**	**2,36%**	**2,36%**
Lost Amount	164.800	201.879	251.239	310.844	383.561	471.842	578.750	707.860	863.383	1.050.261
Provision Left	122.412									
Total Provision	164.800	201.879	251.239	310.844	383.561	471.842	578.750	707.860	863.383	1.050.261
Additional Provision	42.388	37.079	49.361	59.605	72.716	88.282	106.907	129.110	155.524	186.878

DENIZBANK	ACTUAL			FORECASTED										
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	6.300.243	9.154.274	11.865.801	13.424.612	15.436.244	19.130.226	23.786.886	29.441.644	36.321.890	44.663.291	54.749.498	66.913.326	81.545.872
Interest Income	859.088	1.028.176	1.301.378	752.529	1.716.479	2.127.242	2.645.053	3.273.850	4.038.920	4.966.466	6.088.032	7.440.624	9.067.733
Interest Rate	13,6%	11,2%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Interest Bearing Liabilities	5.896.562	8.411.318	10.990.776	12.573.022	14.483.162	17.867.975	22.142.133	27.316.679	33.598.011	41.194.958	50.359.135	61.384.863	74.617.156
Interest Expense	458.222	500.952	702.032	410.472	937.956	1.157.162	1.433.964	1.769.077	2.175.868	2.667.860	3.261.348	3.975.394	4.832.341
Interest Rate	7,8%	6,0%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%
Net Interest Margin	5,9%	5,3%	4,6%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	2.587.524	4.933.625	7.345.870	8.937.996	10.249.417	12.665.571	15.711.391	19.410.046	23.910.265	29.366.196	35.963.365	43.919.461	53.490.292
Cash Loans Commissions	10.595	13.213	15.854	9.859	22.428	27.715	34.380	42.473	52.320	64.259	78.695	96.104	117.047
Cash Loans Commissions Rate (%)	0,4%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Non-Cash Loans	2.341.132	2.822.885	3.553.352	4.321.009	5.139.203	6.350.697	7.877.914	9.732.472	11.988.946	14.724.626	18.032.540	22.021.840	26.820.790
Non-Cash Loans Commissions	29.893	34.445	39.642	24.639	58.130	71.834	89.108	110.086	135.609	166.553	203.969	249.093	303.375
Non-Cash Loans Commissions Rate (%)	1,3%	1,2%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Cash & Non-Cash Loans	4.928.656	7.756.510	10.899.222	13.259.005	15.388.620	19.016.268	23.589.305	29.142.518	35.899.211	44.090.822	53.995.905	65.941.301	80.311.082
Other Commissions	115.500	158.427	208.004	129.331	297.760	367.953	456.438	563.889	694.627	853.129	1.044.786	1.275.922	1.553.968
Other Commissions Rate (%)	2,3%	2,0%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
Funds Borrowed	680.550	1.759.155	2.954.252	3.797.984	4.355.240	5.381.926	6.676.173	8.247.826	10.160.085	12.478.450	15.281.756	18.662.505	22.729.397
Cash Loans Commissions Expense	3.488	4.572	1.126	740	1.683	2.080	2.580	3.187	3.926	4.822	5.905	7.212	8.784
Cash Loans Commissions Expense (%)	0,5%	0,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Non-Cash Loans	2.341.132	2.822.885	3.553.352	4.321.009	5.139.203	6.350.697	7.877.914	9.732.472	11.988.946	14.724.626	18.032.540	22.021.840	26.820.790
Non-Cash Loans Commissions Expense	127	833	376	234	551	681	845	1.044	1.286	1.580	1.935	2.363	2.877
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	3.817.947	5.360.804	7.146.001	8.780.272	10.318.121	12.721.085	15.757.517	19.429.046	23.881.630	29.261.459	35.744.753	43.537.374	52.880.382
Other Commissions Expense	59.608	53.959	62.330	39.143	91.248	112.499	139.352	171.821	211.197	258.774	316.109	385.023	467.648
Other Commissions Expense rate (%)	1,6%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Securities Portfolio	1.887.047	1.939.951	1.532.841	1.444.675	1.656.644	2.047.174	2.539.479	3.137.303	3.864.687	4.746.545	5.812.865	7.098.832	8.645.794
Trading Gain on Securities Portfolio	25.152	28.750	17.030	1.445	3.313	4.094	5.079	6.275	7.729	9.493	11.626	14.198	17.292
Trading Gain Rate	1,3%	1,5%	1,1%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	4.944.815	7.769.954	10.912.322	13.259.005	15.388.620	19.016.268	23.589.305	29.142.518	35.899.211	44.090.822	53.995.905	65.941.301	80.311.082
Other Operating Income	78.020	113.017	99.810	61.985	142.708	176.349	218.757	270.255	332.914	408.880	500.735	611.512	744.771
Other Operating Income Rate (%)	1,6%	1,5%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Cost to Income Ratio	67,7%	64,1%	58,7%	58,7%	58,7%	58,7%	58,7%	58,7%	58,7%	58,7%	58,7%	58,7%	58,7%
ROE	20,7%	25,9%	12,7%	22,5%	24,5%	23,7%	23,4%	23,0%	22,7%	22,3%	22,0%	21,6%	21,3%

DENIZBANK	ACTUAL			FORECASTED									
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,3%	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Cash FC / Total Assets	1,7%	1,3%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	15,0%	11,3%	5,9%	4,4%	4,4%	4,4%	4,4%	4,4%	4,4%	4,4%	4,4%	4,4%	4,4%
Securities Portfolio FC / Total Assets	12,2%	8,4%	6,1%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%	5,6%
Loans TC / Total Assets	16,3%	21,6%	25,4%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%	26,5%
Loans FC / Total Assets	21,0%	28,3%	32,3%	35,3%	35,3%	35,3%	35,3%	35,3%	35,3%	35,3%	35,3%	35,3%	35,3%
Accrued Interest Income TC / Total Assets	1,1%	0,9%	1,2%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Accrued Interest Income FC / Total Assets	0,8%	0,5%	0,6%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Other Assets TC / Total Assets	0,8%	1,4%	1,3%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%
Other Assets FC / Total Assets	0,2%	0,2%	0,3%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Customer Deposits TC / Total Assets	20,9%	20,6%	23,4%	23,0%	23,0%	23,0%	23,0%	23,0%	23,0%	23,0%	23,0%	23,0%	23,0%
Customer Deposits FC / Total Assets	42,9%	38,8%	34,7%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%
Funds Borrowed TC / Total Assets	0,6%	1,4%	1,8%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
Funds Borrowed FC / Total Assets	9,2%	16,4%	21,4%	24,4%	24,4%	24,4%	24,4%	24,4%	24,4%	24,4%	24,4%	24,4%	24,4%
Accrued Interest Expense TC / Total Assets	0,3%	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Accrued Interest Expense FC / Total Assets	0,6%	0,8%	0,8%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Other Liabilities TC / Total Assets	2,4%	2,5%	2,5%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%
Other Liabilities FC / Total Assets	0,4%	0,4%	0,3%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Letters of Guarantees / Total Assets	17,6%	17,6%	18,6%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%	19,0%
Bank Acceptances / Total Assets	3,3%	2,0%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%
Letters of Credits / Total Assets	31,3%	27,6%	24,4%	7,1%	7,1%	7,1%	7,1%	7,1%	7,1%	7,1%	7,1%	7,1%	7,1%
Other Guarantees / Total Assets	6,9%	3,8%	3,0%	3,2%	3,2%	3,2%	3,2%	3,2%	3,2%	3,2%	3,2%	3,2%	3,2%
Irrevocable Commitments / Total Assets	16,5%	19,2%	18,0%	17,7%	17,7%	17,7%	17,7%	17,7%	17,7%	17,7%	17,7%	17,7%	17,7%
Total FC Assets / Total Assets	55,4%	56,8%	57,3%	58,3%	58,3%	58,3%	58,3%	58,3%	58,3%	58,3%	58,3%	58,3%	58,3%
Total FC Liabilities / Total Assets	58,4%	58,8%	59,1%	61,0%	61,0%	61,0%	61,0%	61,0%	61,0%	61,0%	61,0%	61,0%	61,0%
Foreign Currency Buys / Total Assets	19,7%	19,2%	22,1%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Foreign Currency Sells / Total Assets	17,9%	17,9%	20,3%	23,3%	23,3%	23,3%	23,3%	23,3%	23,3%	23,3%	23,3%	23,3%	23,3%

DENIZBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**2.635.315**	**1.521.478**	**1.381.781**	**6.659.466**	**7.654.652**	**12.607.562**	**60,71%**	**81,19%**	**1,92%**
Cash	180.861	303	0	0					
Due from banks	399.013	1.495.974	0	151.249					
Interbank money market placements	320.600	0	0	0					
Receivables from reverse repo transactions	140.474	0	0	0					
Reserve deposits	417.839	0	0	0					
Special finance houses	0	2.905	0	0					
Loans	1.146.929	8.555	944.592	5.913.323					
Loans under follow-up (Net)	0	0	0	13.283					
Subsidiaries, associates and HTM Securities	0	0	0	91.661					
Miscellaneous receivables	0	0	0	338.913					
Marketable securities held to maturity (Net)	0	13.339	0	0					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	405.277	0					
Leased assets (Net)	0	0	31.912	0					
Fixed assets (Net)	0	0	0	83.076					
Other assets	29.599	402	0	67.961	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
II -Off balance sheet items	**240.982**	**1.306.918**	**2.139.549**	**442.581**	**1.773.739**	**6.509.554**	**27,25%**	**18,81%**	**0,44%**
Guarantees and pledges	223.406	1.271.202	358.673	224.345					
Commitments	681	0	1.744.353	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	28.701	0	34.039					
Interest and income accruals	16.895	7.015	36.523	184.197	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	0	0	0					
III -Total risk weighted assets	**2.876.297**	**2.828.396**	**3.521.330**	**7.102.047**	**9.428.391**	**19.117.116**	**49,32%**	**100,00%**	**2,36%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	49,32%
Bank' Loans Under Follow Up	2,36%

2.4 Finansbank

FINANSBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**1.770.536**	**2.241.765**	**2.442.261**	**5.191.118**	**6.556.678**	**7.977.668**	**9.723.978**	**11.804.998**	**14.290.882**	**17.252.298**	**20.773.720**	**24.953.084**	**29.904.295**
Cash TC	17.156	29.882	38.336	48.241	60.113	72.468	87.651	105.744	127.357	153.105	183.722	220.059	263.106
Cash FC	45.119	59.917	74.786	104.185	129.826	156.508	189.298	228.374	275.051	330.658	396.780	475.256	568.225
TCMB & Deposit Reserves TC	74.342	149.199	100.819	312.490	389.398	469.427	567.779	684.981	824.985	991.770	1.190.095	1.425.475	1.704.325
TCMB & Deposit Reserves FC	561.353	608.620	846.119	1.730.675	2.156.615	2.599.846	3.144.549	3.793.655	4.569.044	5.492.759	6.591.149	7.894.763	9.439.129
Banks & Interbank Placements TC	38.379	325.981	116.182	1.663.482	2.135.913	2.627.521	3.231.677	3.951.631	4.811.651	5.836.188	7.054.465	8.500.365	10.213.294
Banks & Interbank Placements FC	1.034.187	1.068.166	1.266.019	1.332.047	1.684.813	2.051.898	2.503.023	3.040.614	3.682.794	4.447.818	5.357.509	6.437.167	7.716.216
SECURITIES PORTFOLIO	**2.630.012**	**1.888.055**	**3.088.459**	**3.039.615**	**3.787.702**	**4.566.156**	**5.522.828**	**6.662.863**	**8.024.692**	**9.647.029**	**11.576.152**	**13.865.712**	**16.578.109**
Securities Portfolio TC	869.657	925.278	2.006.067	2.328.272	2.901.289	3.497.566	4.230.353	5.103.593	6.146.721	7.389.393	8.867.054	10.620.802	12.698.433
Securities Portfolio FC	1.760.355	962.777	1.082.392	711.343	886.413	1.068.590	1.292.474	1.559.270	1.877.971	2.257.637	2.709.098	3.244.910	3.879.676
LOANS PORTFOLIO	**5.542.227**	**8.371.778**	**11.343.706**	**17.150.647**	**21.371.637**	**25.763.968**	**31.161.870**	**37.594.376**	**45.278.327**	**54.432.164**	**65.316.998**	**78.235.556**	**93.539.918**
Loans TC	1.679.707	2.804.038	4.669.453	6.852.769	8.539.321	10.294.335	12.451.139	15.021.332	18.091.557	21.749.094	26.098.274	31.260.055	37.375.116
Loans FC	3.861.056	5.567.740	6.674.253	10.297.878	12.832.316	15.469.632	18.710.731	22.573.044	27.186.770	32.683.070	39.218.724	46.975.501	56.164.802
Non Performing Loans	138.486	153.048	276.436	306.434	381.852	460.331	556.776	671.707	808.998	972.552	1.167.034	1.397.852	1.671.299
Non Performing Loans Provision	-137.022	-153.048	-276.436	-306.434	-381.852	-460.331	-556.776	-671.707	-808.998	-972.552	-1.167.034	-1.397.852	-1.671.299
ACCRUED INTEREST GAIN	**411.661**	**400.465**	**386.356**	**812.797**	**1.012.836**	**1.220.996**	**1.476.811**	**1.781.657**	**2.145.812**	**2.579.627**	**3.095.477**	**3.707.708**	**4.433.006**
Accrued Interest & Income Accruals TC	374.840	275.214	236.534	602.828	751.191	905.577	1.095.308	1.321.404	1.591.487	1.913.235	2.295.826	2.749.900	3.287.832
Accrued Interest & Income Accruals FC	36.821	125.251	149.822	209.969	261.645	315.419	381.503	460.254	554.325	666.392	799.651	957.808	1.145.174
SUBSIDIARIES & ASSOCIATES	**27.895**	**16.774**	**7.676**	**2.400**	**2.400**	**2.400**	**2.400**	**2.400**	**2.400**	**2.400**	**2.400**	**2.400**	**2.400**
Subsidiaries & Associates TC	20.180	9.353	595	720	720	720	720	720	720	720	720	720	720
Subsidiaries & Associates FC	7.715	7.421	7.081	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680
FIXED ASSETS	**246.861**	**297.805**	**318.011**	**354.996**	**354.996**	**354.996**	**354.996**	**354.996**	**354.996**	**354.996**	**354.996**	**354.996**	**354.996**
Fixed Assets TC	174.961	230.622	239.854	255.372	255.372	255.372	255.372	255.372	255.372	255.372	255.372	255.372	255.372
Fixed Assets FC	71.900	67.183	78.157	99.624	99.624	99.624	99.624	99.624	99.624	99.624	99.624	99.624	99.624
OTHER ASSETS	**154.737**	**226.290**	**332.833**	**464.790**	**579.181**	**698.215**	**844.500**	**1.018.824**	**1.227.062**	**1.475.135**	**1.770.119**	**2.120.217**	**2.534.972**
Other Assets TC	106.729	173.602	218.356	210.297	262.054	315.912	382.100	460.973	555.192	667.434	800.902	959.306	1.146.964
Other Assets FC	48.008	52.688	114.477	254.493	317.127	382.303	462.401	557.850	671.870	807.701	969.217	1.160.911	1.388.008
TOTAL ASSETS	**10.783.929**	**13.442.932**	**17.919.302**	**27.016.363**	**33.665.429**	**40.584.398**	**49.087.382**	**59.220.114**	**71.324.171**	**85.743.650**	**102.889.861**	**123.239.673**	**147.347.696**

FINANSBANK	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**7.758.901**	**8.892.923**	**9.708.794**	**14.114.105**	**17.587.763**	**21.202.427**	**25.644.624**	**30.938.247**	**37.261.746**	**44.794.885**	**53.752.546**	**64.383.858**	**76.978.565**
Customer Deposits TC	1.130.313	2.143.723	3.243.759	5.208.166	6.489.961	7.823.787	9.462.977	11.416.347	13.749.745	16.529.506	19.834.922	23.757.922	28.405.423
Customer Deposits FC	6.628.588	6.749.200	6.465.035	8.905.939	11.097.803	13.378.640	16.181.647	19.521.900	23.512.000	28.265.379	33.917.625	40.625.936	48.573.142
BANKS & INTERBANK BORROWINGS	**178.684**	**398.557**	**492.401**	**2.304.697**	**2.943.034**	**3.509.405**	**4.214.130**	**5.036.574**	**6.003.625**	**7.136.414**	**8.460.825**	**10.005.987**	**11.805.053**
Banks & Interbank Borrowings TC	96.954	238.510	276.542	1.624.596	2.090.489	2.477.417	2.961.618	3.521.270	4.174.403	4.933.224	5.812.948	6.830.339	8.004.166
Banks & Interbank Borrowings FC	81.730	160.047	215.859	680.102	852.545	1.031.988	1.252.512	1.515.304	1.829.222	2.203.190	2.647.876	3.175.648	3.800.888
FUNDS BORROWED AND OTHERS	**1.252.565**	**1.682.623**	**4.532.250**	**7.235.414**	**9.016.141**	**10.869.151**	**13.146.386**	**15.860.094**	**19.101.754**	**22.963.522**	**27.555.551**	**33.005.557**	**39.462.071**
Funds Borrowed & Others TC	59.649	38.942	38.186	407.947	508.348	612.825	741.220	894.224	1.076.996	1.294.730	1.553.638	1.860.920	2.224.951
Funds Borrowed & Others FC	1.192.916	1.643.681	4.494.064	6.827.467	8.507.792	10.256.327	12.405.167	14.965.870	18.024.759	21.668.792	26.001.914	31.144.637	37.237.120
ACCRUED INTEREST EXPENSES	**92.372**	**187.403**	**342.872**	**287.232**	**357.923**	**431.484**	**521.886**	**629.614**	**758.302**	**911.607**	**1.093.901**	**1.310.256**	**1.566.566**
Accrued Interest & Expense Accruals TC	31.613	105.966	184.001	81.109	101.071	121.843	147.371	177.792	214.131	257.421	308.897	369.992	442.369
Accrued Interest & Expense Accruals FC	60.759	81.437	158.871	206.123	256.852	309.641	374.515	451.823	544.172	654.186	785.004	940.264	1.124.197
GENERAL PROVISIONS	**29.189**	**40.755**	**52.828**	**63.991**	**63.991**	**63.991**	**63.991**	**63.991**	**63.991**	**63.991**	**63.991**	**63.991**	**63.991**
General Provisions TC	24.735	39.282	51.613	63.981	63.981	63.981	63.981	63.981	63.981	63.981	63.981	63.981	63.981
General Provisions FC	4.454	1.473	1.215	10	10	10	10	10	10	10	10	10	10
OTHER PROVISIONS	**125.814**	**215.389**	**204.708**	**66.802**	**66.802**	**66.802**	**66.802**	**66.802**	**66.802**	**66.802**	**66.802**	**66.802**	**66.802**
Employees Termination Reserves TC	2.751	2.419	2.480	3.162	3.162	3.162	3.162	3.162	3.162	3.162	3.162	3.162	3.162
Employees Termination Reserves FC	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Provisions TC	108.978	188.123	175.771	43.084	43.084	43.084	43.084	43.084	43.084	43.084	43.084	43.084	43.084
Other Provisions FC	14.085	24.847	26.457	20.556	20.556	20.556	20.556	20.556	20.556	20.556	20.556	20.556	20.556
OTHER LIABILITIES	**474.456**	**862.570**	**999.551**	**1.638.036**	**2.041.177**	**2.460.683**	**2.976.229**	**3.590.589**	**4.324.473**	**5.198.744**	**6.238.340**	**7.472.175**	**8.933.874**
Other Liabilities TC	303.477	317.851	411.723	505.597	630.031	759.515	918.644	1.108.273	1.334.794	1.604.647	1.925.529	2.306.365	2.757.534
Other Liabilities FC	170.979	544.719	587.828	1.132.439	1.411.146	1.701.167	2.057.585	2.482.316	2.989.679	3.594.098	4.312.811	5.165.810	6.176.341
SHAREHOLDERS EQUITY	**871.948**	**1.162.712**	**1.585.898**	**1.986.187**	**2.441.143**	**3.012.444**	**3.705.846**	**4.549.506**	**5.572.700**	**6.810.876**	**8.305.780**	**10.106.696**	**12.271.660**
Paid in Capital	425.220	590.000	950.000	1.250.000	1.250.000	1.250.000	1.250.000	1.250.000	1.250.000	1.250.000	1.250.000	1.250.000	1.250.000
Other Reserves	162.074	246.178	106.366	342.290	342.290	342.290	342.290	342.290	342.290	342.290	342.290	342.290	342.290
Securities Revaluation Fund	14.990	46.290	59.371	-123.594	-123.594	-123.594	-123.594	-123.594	-123.594	-123.594	-123.594	-123.594	-123.594
Retained Earnings	269.664	280.244	470.161	517.491	972.447	1.543.748	2.237.150	3.080.810	4.104.004	5.342.180	6.837.084	8.638.000	10.802.964
TOTAL LIABILITIES	**10.783.929**	**13.442.932**	**17.919.302**	**27.016.363**	**33.665.429**	**40.584.398**	**49.087.382**	**59.220.114**	**71.324.171**	**85.743.650**	**102.889.861**	**123.239.673**	**147.347.696**

FINANSBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**705.322**	**1.101.394**	**1.426.702**	**1.797.433**	**2.208.570**	**2.679.351**	**3.248.550**	**3.928.894**	**4.741.615**	**5.710.312**	**6.862.740**	**8.231.189**
Interest Income	1.358.150	1.949.503	2.839.450	3.675.430	4.507.581	5.453.436	6.596.397	7.960.218	9.586.952	11.522.931	13.822.627	16.549.303
Interest Expense	652.828	848.109	1.412.748	1.877.997	2.299.011	2.774.085	3.347.848	4.031.324	4.845.337	5.812.619	6.959.887	8.318.114
Net Fees & Commissions Income	**283.624**	**410.276**	**560.265**	**733.839**	**897.842**	**1.084.500**	**1.310.078**	**1.579.328**	**1.900.571**	**2.282.986**	**2.737.372**	**3.276.267**
Fees & Commissions Received	483.664	638.857	643.116	847.934	1.037.526	1.253.024	1.513.429	1.824.153	2.194.779	2.635.860	3.159.809	3.781.038
Fees & Commissions Paid	200.040	228.581	82.852	114.095	139.684	168.524	203.351	244.825	294.208	352.874	422.437	504.770
Net Trading Income	**15.394**	**-7.827**	**-375.733**	**-693.369**	**-848.402**	**-1.024.618**	**-1.237.555**	**-1.491.639**	**-1.794.706**	**-2.155.385**	**-2.583.826**	**-3.091.815**
Net Trading Gain on Securities	-4.705	54.130	35.820	6.827	8.354	10.089	12.186	14.688	17.672	21.223	25.442	30.444
Net Trading Gain on FC Positions	20.099	-61.957	-411.552	-700.196	-856.755	-1.034.706	-1.249.741	-1.506.327	-1.812.377	-2.176.608	-2.609.268	-3.122.259
Other Operating Income	**64.097**	**84.296**	**77.845**	**102.038**	**124.853**	**150.786**	**182.122**	**219.514**	**264.114**	**317.193**	**380.244**	**455.001**
TOTAL OPERATING PROFIT	**1.068.437**	**1.588.139**	**1.689.079**	**1.939.941**	**2.382.863**	**2.890.020**	**3.503.195**	**4.236.097**	**5.111.594**	**6.155.107**	**7.396.529**	**8.870.642**
Provision for Losses	**88.321**	**197.392**	**25.030**	**75.417**	**78.479**	**96.446**	**114.931**	**137.291**	**163.554**	**194.482**	**230.819**	**273.446**
Other Operating Expense	**547.299**	**743.192**	**1.017.184**	**1.295.829**	**1.590.259**	**1.926.821**	**2.333.689**	**2.819.813**	**3.400.321**	**4.091.994**	**4.914.566**	**5.890.990**
NET OPERATING INCOME	**432.817**	**647.555**	**646.864**	**568.695**	**714.125**	**866.753**	**1.054.575**	**1.278.993**	**1.547.720**	**1.868.631**	**2.251.144**	**2.706.206**
Monetary Gain & Losses	**-61.758**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**371.059**	**647.555**	**646.864**	**568.695**	**714.125**	**866.753**	**1.054.575**	**1.278.993**	**1.547.720**	**1.868.631**	**2.251.144**	**2.706.206**
Provision for Taxes	**-90.815**	**-177.394**	**-129.373**	**-113.739**	**-142.825**	**-173.351**	**-210.915**	**-255.799**	**-309.544**	**-373.726**	**-450.229**	**-541.241**
NET PROFIT/LOSSES	**280.244**	**470.161**	**517.491**	**454.956**	**571.300**	**693.403**	**843.660**	**1.023.194**	**1.238.176**	**1.494.905**	**1.800.915**	**2.164.965**

FINANSBANK	ACTUAL			FORECASTED										
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**3.070.613**	**4.383.942**	**5.500.206**	**8.358.808**	**10.416.015**	**12.556.730**	**15.187.536**	**18.322.583**	**22.067.554**	**26.528.911**	**31.833.914**	**38.130.105**	**45.589.078**
Letters of Guarantees	1.934.169	2.547.854	3.251.481	4.290.956	5.347.015	6.445.941	7.796.453	9.405.815	11.328.279	13.618.497	16.341.796	19.573.917	23.402.947
Bank Acceptances	612.221	962.564	1.278.199	1.806.678	2.251.324	2.714.019	3.282.643	3.960.254	4.769.695	5.733.975	6.880.602	8.241.464	9.853.651
Letters of Credits	517.258	873.524	970.526	1.170.917	1.459.095	1.758.970	2.127.499	2.566.662	3.091.264	3.716.219	4.459.354	5.341.336	6.386.203
Other Guarantees	6.965	0	0	1.090.256	1.358.582	1.637.800	1.980.941	2.389.852	2.878.316	3.460.220	4.152.162	4.973.387	5.946.276
COMMITMENTS	**1.463.109**	**2.419.602**	**2.588.256**	**3.102.900**	**3.866.562**	**4.661.224**	**5.637.814**	**6.801.585**	**8.191.767**	**9.847.882**	**11.817.169**	**14.154.398**	**16.923.267**
Irrevocable Commitments	1.442.801	2.419.602	2.588.256	3.102.900	3.866.562	4.661.224	5.637.814	6.801.585	8.191.767	9.847.882	11.817.169	14.154.398	16.923.267
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**8.058.848**	**8.778.066**	**13.801.067**	**16.533.696**	**20.602.846**	**24.837.173**	**30.040.899**	**36.242.012**	**43.649.552**	**52.474.103**	**62.967.382**	**75.421.227**	**90.175.053**
Foreign Currency Buys	2.793.167	4.280.801	5.326.606	9.826.142	12.244.479	14.760.983	17.853.610	21.538.994	25.941.370	31.185.889	37.422.151	44.823.597	53.591.945
Foreign Currency Sells	2.751.730	3.696.618	3.744.687	6.707.553	8.358.367	10.076.190	12.187.290	14.703.018	17.708.183	21.288.214	25.545.231	30.597.630	36.583.109
NET BALANCE SHEET POSITION	**-726.997**	**-685.641**	**-1.656.223**	**-3.030.742**	**-3.776.646**	**-4.552.828**	**-5.506.708**	**-6.643.415**	**-8.001.269**	**-9.618.871**	**-11.542.363**	**-13.825.240**	**-16.529.720**
NET OFF BALANCE SHEET POSITION	**41.437**	**584.183**	**1.581.919**	**3.118.589**	**3.886.113**	**4.684.792**	**5.666.320**	**6.835.975**	**8.233.187**	**9.897.675**	**11.876.920**	**14.225.967**	**17.008.836**
TOTAL POSITION	**-685.560**	**-101.458**	**-74.304**	**87.846**	**109.466**	**131.964**	**159.613**	**192.560**	**231.918**	**278.804**	**334.557**	**400.726**	**479.116**

Valuation Day	**30.06.2006**			**FINANSBANK**						
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	255.929	454.956	571.300	693.403	843.660	1.023.194	1.238.176	1.494.905	1.800.915	2.164.965
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	227.966	322.136	321.351	310.042	299.862	289.089	277.909	266.718	255.418	244.078
Total Discounted Cash Flows	**2.814.570**									
Last Year Profit	2.164.965									
Discount Rate	**25,8%**									
Terminal Value	8.391.336									
Days To Maturity	3.471									
Discounted Terminal Value	**946.039**									
Discounted CFs + Terminal Value	**3.760.609**									
Book Value+General Provision	**1.794.249**									
DCF Value / Book Value	**2,10**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	23.976.748	29.877.727	36.018.242	43.564.554	52.557.251	63.299.479	76.096.620	91.313.709	109.373.961	130.769.587
Balance Sheet Weighted	59,63%	59,63%	59,63%	59,63%	59,63%	59,63%	59,63%	59,63%	59,63%	59,63%
Net Balance Sheet	14.297.572	17.816.384	21.478.034	25.977.974	31.340.408	37.746.105	45.377.166	54.451.267	65.220.773	77.979.196
Effective Rate Balance Sheet	**1,97%**	**1,97%**	**1,97%**	**1,97%**	**1,97%**	**1,97%**	**1,97%**	**1,97%**	**1,97%**	**1,97%**
Total Off Balance Sheet	11.461.707	14.282.578	17.217.954	20.825.350	25.124.168	30.259.321	36.376.793	43.651.083	52.284.503	62.512.345
Off-Balance Sheet Weighted	37,76%	37,76%	37,76%	37,76%	37,76%	37,76%	37,76%	37,76%	37,76%	37,76%
Net Off Balance Sheet	4.327.874	5.393.018	6.501.399	7.863.531	9.486.739	11.425.743	13.735.665	16.482.394	19.742.323	23.604.297
Effective Rate Off Balance Sheet	**0,56%**	**0,56%**	**0,56%**	**0,56%**	**0,56%**	**0,56%**	**0,56%**	**0,56%**	**0,56%**	**0,56%**
Total Loss Weight	**2,53%**	**2,53%**	**2,53%**	**2,53%**	**2,53%**	**2,53%**	**2,53%**	**2,53%**	**2,53%**	**2,53%**
Lost Amount	306.434	381.852	460.331	556.776	671.707	808.998	972.552	1.167.034	1.397.852	1.671.299
Provision Left	276.436									
Total Provision	306.434	381.852	460.331	556.776	671.707	808.998	972.552	1.167.034	1.397.852	1.671.299
Additional Provision	29.998	75.417	78.479	96.446	114.931	137.291	163.554	194.482	230.819	273.446

FINANSBANK	ACTUAL			FORECAST									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	10.756.596	14.409.622	19.594.120	24.320.450	28.377.516	34.802.447	42.105.271	50.929.922	61.459.805	74.019.610	88.967.048	106.722.703	127.775.014
Interest Income	1.358.150	1.949.503	2.503.048	1.587.926	3.675.430	4.507.581	5.453.436	6.596.397	7.960.218	9.586.952	11.522.931	13.822.627	16.549.303
Interest Rate	12,6%	13,5%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%	12,8%
Interest Bearing Liabilities	9.772.283	12.581.273	17.524.773	22.551.211	26.600.577	32.563.960	39.293.062	47.420.028	57.101.020	68.630.973	82.331.872	98.582.162	117.820.545
Interest Expense	652.828	848.109	1.220.298	802.599	1.877.997	2.299.011	2.774.085	3.347.848	4.031.324	4.845.337	5.812.619	6.959.887	8.318.114
Interest Rate	6,7%	6,7%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%
Net Interest Margin	5,9%	6,8%	5,8%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	6.772.045	9.779.196	13.388.984	16.541.673	19.261.142	23.567.802	28.462.919	34.378.123	41.436.351	49.855.245	59.874.581	71.776.277	85.887.737
Cash Loans Commissions	54.888	75.001	61.728	38.979	90.034	110.165	133.047	160.697	193.690	233.043	279.877	335.510	401.473
Cash Loans Commissions Rate (%)	0,8%	0,8%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Non-Cash Loans	3.753.982	4.820.431	6.043.769	7.697.569	9.387.412	11.486.373	13.872.133	16.755.060	20.195.068	24.298.233	29.181.413	34.982.009	41.859.591
Non-Cash Loans Commissions	54.268	65.105	73.948	48.138	116.454	142.492	172.089	207.852	250.527	301.428	362.006	433.964	519.283
Non-Cash Loans Commissions Rate (%)	1,4%	1,4%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
Cash & Non-Cash Loans	10.526.027	14.599.626	19.432.752	24.239.242	28.648.554	35.054.175	42.335.052	51.133.182	61.631.420	74.153.478	89.055.994	106.758.286	127.747.328
Other Commissions	374.508	498.751	429.142	273.591	641.446	784.868	947.888	1.144.880	1.379.937	1.660.308	1.993.977	2.390.334	2.860.282
Other Commissions Rate (%)	3,6%	3,4%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%
Funds Borrowed	1.287.326	2.971.090	5.536.236	6.978.504	8.125.777	9.942.646	12.007.769	14.503.240	17.480.924	21.032.638	25.259.536	30.280.554	36.233.814
Cash Loans Commissions Expense	2.040	5.913	7.236	4.662	10.768	13.176	15.912	19.219	23.165	27.872	33.473	40.127	48.016
Cash Loans Commissions Expense (%)	0,2%	0,2%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Non-Cash Loans	3.753.982	4.820.431	6.043.769	7.697.569	9.387.412	11.486.373	13.872.133	16.755.060	20.195.068	24.298.233	29.181.413	34.982.009	41.859.591
Non-Cash Loans Commissions Expense	191	554	1.378	897	2.170	2.655	3.207	3.873	4.668	5.617	6.746	8.087	9.677
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	5.397.151	8.169.839	12.456.330	16.635.831	20.137.055	24.655.238	29.741.670	35.883.652	43.196.093	51.900.890	62.239.569	74.495.969	88.998.925
Other Commissions Expense	197.809	222.114	61.716	42.128	101.157	123.853	149.404	180.258	216.991	260.719	312.654	374.223	447.077
Other Commissions Expense rate (%)	3,7%	2,7%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Securities Portfolio	2.144.407	2.364.111	3.048.614	2.931.686	3.413.658	4.176.929	5.044.492	6.092.845	7.343.777	8.835.861	10.611.591	12.720.932	15.221.910
Trading Gain on Securities Portfolio	-4.705	54.130	65.776	2.932	6.827	8.354	10.089	12.186	14.688	17.672	21.223	25.442	30.444
Trading Gain Rate	-0,2%	2,3%	2,2%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	10.529.461	14.599.626	19.432.752	24.239.242	28.648.554	35.054.175	42.335.052	51.133.182	61.631.420	74.153.478	89.055.994	106.758.286	127.747.328
Other Operating Income	63.623	83.931	68.266	43.522	102.038	124.853	150.786	182.122	219.514	264.114	317.193	380.244	455.001
Other Operating Income Rate (%)	0,6%	0,6%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Cost to Income Ratio	55,3%	49,2%	51,2%	51,2%	51,2%	51,2%	51,2%	51,2%	51,2%	51,2%	51,2%	51,2%	51,2%
ROE	37,4%	38,7%	15,3%	24,6%	20,6%	21,0%	20,6%	20,4%	20,2%	20,0%	19,8%	19,6%	19,3%

FINANSBANK	ACTUAL			FORECAST									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Cash FC / Total Assets	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	6,5%	8,7%	9,9%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%
Securities Portfolio FC / Total Assets	11,9%	6,7%	4,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%	2,6%
Loans TC / Total Assets	17,9%	23,3%	26,4%	25,4%	25,4%	25,4%	25,4%	25,4%	25,4%	25,4%	25,4%	25,4%	25,4%
Loans FC / Total Assets	40,1%	40,0%	37,5%	38,1%	38,1%	38,1%	38,1%	38,1%	38,1%	38,1%	38,1%	38,1%	38,1%
Accrued Interest Income TC / Total Assets	1,6%	1,2%	1,6%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%	2,2%
Accrued Interest Income FC / Total Assets	1,2%	0,9%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Other Assets TC / Total Assets	1,1%	1,4%	1,1%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Other Assets FC / Total Assets	0,7%	0,5%	0,8%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Customer Deposits TC / Total Assets	14,2%	17,3%	19,6%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%
Customer Deposits FC / Total Assets	55,5%	42,5%	33,5%	33,0%	33,0%	33,0%	33,0%	33,0%	33,0%	33,0%	33,0%	33,0%	33,0%
Funds Borrowed TC / Total Assets	0,4%	0,3%	1,4%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Funds Borrowed FC / Total Assets	10,6%	19,0%	25,0%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%
Accrued Interest Expense TC / Total Assets	0,5%	1,0%	0,8%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Accrued Interest Expense FC / Total Assets	0,7%	1,0%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Other Liabilities TC / Total Assets	2,4%	2,4%	2,1%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
Other Liabilities FC / Total Assets	2,7%	3,5%	3,6%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%
Letters of Guarantees / Total Assets	18,9%	18,5%	16,7%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%
Bank Acceptances / Total Assets	6,9%	7,0%	7,0%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%
Letters of Credits / Total Assets	19,6%	18,2%	16,2%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%
Other Guarantees / Total Assets	0,3%	0,0%	1,6%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%	4,0%
Irrevocable Commitments / Total Assets	17,1%	15,9%	13,1%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%	11,5%
Total FC Assets / Total Assets	69,0%	61,4%	54,7%	54,6%	54,6%	54,6%	54,6%	54,6%	54,6%	54,6%	54,6%	54,6%	54,6%
Total FC Liabilities / Total Assets	71,6%	67,5%	64,8%	65,8%	65,8%	65,8%	65,8%	65,8%	65,8%	65,8%	65,8%	65,8%	65,8%
Foreign Currency Buys / Total Assets	33,4%	28,8%	34,5%	36,4%	36,4%	36,4%	36,4%	36,4%	36,4%	36,4%	36,4%	36,4%	36,4%
Foreign Currency Sells / Total Assets	32,2%	23,5%	24,3%	24,8%	24,8%	24,8%	24,8%	24,8%	24,8%	24,8%	24,8%	24,8%	24,8%

FINANSBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**3.607.551**	**2.671.905**	**4.727.170**	**10.384.267**	**13.282.233**	**22.274.045**	**59,63%**	**78,00%**	**1,97%**
Cash	142.230	0	0	0					
Due from banks	68	1.552.520	0	148.531					
Interbank money market placements	1.189.050	0	0	0					
Receivables from reverse repo transactions	5.379	0	0	0					
Reserve deposits	1.759.314	0	0	0					
Special finance houses	0	0	0	0					
Loans	445.379	1.114.952	4.007.125	9.714.489					
Loans under follow-up (Net)	0	0	0	0					
Subsidiaries, associates and HTM Securities	0	0	0	1.455					
Miscellaneous receivables	0	0	0	103.489					
Marketable securities held to maturity (Net)	0	0	0	0					
Advances for assets acquired by financial leasing	0	0	69.292	0					
Financial lease receivables	0	0	650.753	0					
Leased assets (Net)	0	0	0	135.113					
Fixed assets (Net)	0	0	0	162.030					
Other assets	66.131	4.433	0	119.160	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
II -Off balance sheet items	**174.883**	**2.267.889**	**2.886.648**	**1.848.409**	**3.745.311**	**9.918.879**	**37,76%**	**22,00%**	**0,56%**
Guarantees and pledges	95.875	1.967.434	445.110	1.372.028					
Commitments	0	0	2.390.545	0					
Other off balance sheet items	64.116	0	0	219.838					
Transactions related with derivative financial instruments	0	295.026	0	75.913					
Interest and income accruals	14.892	5.429	50.993	180.630	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	0	0	0					
III -Total risk weighted assets	**3.782.434**	**4.939.794**	**7.613.818**	**12.232.676**	**17.027.544**	**32.192.924**	**52,89%**	**100,00%**	**2,53%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	52,89%
Bank' Loans Under Follow Up	2,53%

2.5 Fortisbank

FORTISBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**1.152.534**	**1.270.942**	**1.023.607**	**1.224.409**	**1.257.773**	**1.240.691**	**1.227.649**	**1.214.439**	**1.201.384**	**1.188.458**	**1.175.661**	**1.162.992**	**1.150.449**
Cash TC	16.739	16.926	25.078	24.545	25.147	24.839	24.603	24.365	24.129	23.896	23.665	23.437	23.210
Cash FC	41.753	43.802	36.793	41.390	42.405	41.885	41.488	41.086	40.689	40.296	39.906	39.521	39.139
TCMB & Deposit Reserves TC	51.042	213.651	98.784	137.338	140.707	138.982	137.665	136.331	135.013	133.708	132.416	131.137	129.871
TCMB & Deposit Reserves FC	206.005	335.993	275.426	449.171	460.187	454.547	450.240	445.878	441.568	437.299	433.074	428.890	424.749
Banks & Interbank Placements TC	559.935	89.561	157.912	496.505	512.013	504.073	498.011	491.871	485.802	479.794	473.845	467.957	462.126
Banks & Interbank Placements FC	277.060	571.009	429.614	75.461	77.314	76.365	75.641	74.908	74.183	73.465	72.754	72.051	71.354
SECURITIES PORTFOLIO	**1.933.047**	**2.250.598**	**1.770.359**	**2.013.972**	**2.063.369**	**2.038.079**	**2.018.769**	**1.999.211**	**1.979.882**	**1.960.744**	**1.941.798**	**1.923.040**	**1.904.470**
Securities Portfolio TC	1.232.069	1.391.867	988.656	1.077.747	1.104.182	1.090.648	1.080.314	1.069.848	1.059.505	1.049.263	1.039.124	1.029.087	1.019.149
Securities Portfolio FC	700.978	858.731	781.703	936.225	959.188	947.431	938.455	929.363	920.377	911.481	902.673	893.954	885.321
LOANS PORTFOLIO	**2.768.427**	**3.558.340**	**4.291.569**	**6.203.635**	**6.355.792**	**6.277.890**	**6.218.411**	**6.158.166**	**6.098.628**	**6.039.677**	**5.981.316**	**5.923.538**	**5.866.337**
Loans TC	1.235.176	1.631.680	2.083.895	2.851.405	2.921.341	2.885.535	2.858.196	2.830.506	2.803.140	2.776.044	2.749.219	2.722.662	2.696.371
Loans FC	1.505.886	1.881.058	2.196.131	3.352.230	3.434.451	3.392.355	3.360.215	3.327.660	3.295.488	3.263.633	3.232.097	3.200.876	3.169.966
Non Performing Loans	86.666	155.680	176.979	109.157	111.834	110.463	109.417	108.356	107.309	106.272	105.245	104.228	103.222
Non Performing Loans Provision	-59.301	-110.078	-165.436	-109.157	-111.834	-110.463	-109.417	-108.356	-107.309	-106.272	-105.245	-104.228	-103.222
ACCRUED INTEREST GAIN	**323.344**	**271.710**	**262.145**	**331.583**	**339.715**	**335.551**	**332.372**	**329.152**	**325.970**	**322.819**	**319.700**	**316.611**	**313.554**
Accrued Interest & Income Accruals TC	283.716	207.868	190.709	231.944	237.633	234.721	232.497	230.244	228.018	225.814	223.632	221.472	219.333
Accrued Interest & Income Accruals FC	39.628	63.842	71.436	99.638	102.082	100.831	99.876	98.908	97.952	97.005	96.067	95.140	94.221
SUBSIDIARIES & ASSOCIATES	**93**	**93**	**93**	**93**	**93**	**93**	**93**	**93**	**93**	**93**	**93**	**93**	**93**
Subsidiaries & Associates TC	93	93	93	93	93	93	93	93	93	93	93	93	93
Subsidiaries & Associates FC	0	0	0	0	0	0	0	0	0	0	0	0	0
FIXED ASSETS	**211.111**	**204.141**	**139.742**	**135.779**	**135.779**	**135.779**	**135.779**	**135.779**	**135.779**	**135.779**	**135.779**	**135.779**	**135.779**
Fixed Assets TC	210.996	204.103	139.708	135.699	135.699	135.699	135.699	135.699	135.699	135.699	135.699	135.699	135.699
Fixed Assets FC	115	38	34	80	80	80	80	80	80	80	80	80	80
OTHER ASSETS	**164.536**	**182.557**	**169.843**	**182.666**	**187.146**	**184.853**	**183.101**	**181.327**	**179.574**	**177.838**	**176.120**	**174.419**	**172.734**
Other Assets TC	152.931	168.092	156.856	146.048	149.631	147.797	146.396	144.978	143.576	142.188	140.815	139.454	138.108
Other Assets FC	11.605	14.465	12.987	36.618	37.516	37.056	36.705	36.349	35.998	35.650	35.305	34.964	34.627
TOTAL ASSETS	**6.553.092**	**7.738.381**	**7.657.358**	**10.092.137**	**10.339.668**	**10.212.936**	**10.116.175**	**10.018.168**	**9.921.311**	**9.825.409**	**9.730.466**	**9.636.472**	**9.543.417**

FORTISBANK	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**3.269.642**	**3.679.720**	**3.443.897**	**3.943.186**	**4.039.901**	**3.990.384**	**3.952.578**	**3.914.285**	**3.876.441**	**3.838.970**	**3.801.874**	**3.765.149**	**3.728.791**
Customer Deposits TC	1.423.340	1.883.796	1.959.134	2.288.967	2.345.108	2.316.365	2.294.419	2.272.190	2.250.222	2.228.471	2.206.937	2.185.619	2.164.513
Customer Deposits FC	1.846.302	1.795.924	1.484.763	1.654.219	1.694.793	1.674.020	1.658.159	1.642.095	1.626.219	1.610.499	1.594.937	1.579.531	1.564.278
BANKS & INTERBANK BORROWINGS	**491.713**	**542.803**	**852.143**	**3.091.613**	**3.212.561**	**3.167.271**	**3.135.175**	**3.102.419**	**3.070.066**	**3.038.031**	**3.006.317**	**2.974.920**	**2.943.838**
Banks & Interbank Borrowings TC	432.045	417.397	286.584	1.689.434	1.774.995	1.747.822	1.729.560	1.710.814	1.692.307	1.673.982	1.655.841	1.637.881	1.620.102
Banks & Interbank Borrowings FC	59.668	125.406	565.559	1.402.179	1.437.566	1.419.448	1.405.616	1.391.605	1.377.758	1.364.049	1.350.476	1.337.039	1.323.736
FUNDS BORROWED AND OTHERS	**1.324.958**	**1.841.204**	**1.588.098**	**2.728.890**	**2.795.822**	**2.761.554**	**2.735.390**	**2.708.889**	**2.682.699**	**2.656.768**	**2.631.095**	**2.605.680**	**2.580.518**
Funds Borrowed & Others TC	119.547	113.869	264.697	299.741	307.093	303.329	300.455	297.544	294.667	291.819	288.999	286.207	283.444
Funds Borrowed & Others FC	1.205.411	1.727.335	1.323.401	2.429.149	2.488.729	2.458.225	2.434.935	2.411.345	2.388.032	2.364.949	2.342.096	2.319.472	2.297.074
ACCRUED INTEREST EXPENSES	**62.902**	**86.167**	**89.446**	**109.263**	**111.943**	**110.571**	**109.523**	**108.462**	**107.414**	**106.375**	**105.347**	**104.330**	**103.322**
Accrued Interest & Expense Accruals TC	42.352	51.189	50.460	77.736	79.643	78.666	77.921	77.166	76.420	75.681	74.950	74.226	73.509
Accrued Interest & Expense Accruals FC	20.550	34.978	38.986	31.527	32.301	31.905	31.602	31.296	30.994	30.694	30.397	30.104	29.813
GENERAL PROVISIONS	**19.399**	**26.665**	**30.618**	**40.121**	**40.121**	**40.121**	**40.121**	**40.121**	**40.121**	**40.121**	**40.121**	**40.121**	**40.121**
General Provisions TC	17.695	24.961	28.341	35.740	35.740	35.740	35.740	35.740	35.740	35.740	35.740	35.740	35.740
General Provisions FC	1.704	1.704	2.277	4.381	4.381	4.381	4.381	4.381	4.381	4.381	4.381	4.381	4.381
OTHER PROVISIONS	**144.714**	**177.728**	**139.528**	**158.119**	**158.119**	**158.119**	**158.119**	**158.119**	**158.119**	**158.119**	**158.119**	**158.119**	**158.119**
Employees Termination Reserves TC	3.661	4.872	11.253	14.147	14.147	14.147	14.147	14.147	14.147	14.147	14.147	14.147	14.147
Employees Termination Reserves FC	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Provisions TC	113.943	142.012	98.286	107.789	107.789	107.789	107.789	107.789	107.789	107.789	107.789	107.789	107.789
Other Provisions FC	27.110	30.844	29.989	36.183	36.183	36.183	36.183	36.183	36.183	36.183	36.183	36.183	36.183
OTHER LIABILITIES	**254.247**	**456.153**	**490.421**	**353.596**	**362.268**	**357.828**	**354.438**	**351.004**	**347.610**	**344.250**	**340.924**	**337.631**	**334.370**
Other Liabilities TC	164.981	207.553	257.947	294.197	301.413	297.719	294.898	292.041	289.218	286.422	283.654	280.914	278.202
Other Liabilities FC	89.266	248.600	232.474	59.398	60.855	60.109	59.540	58.963	58.393	57.828	57.269	56.716	56.169
SHAREHOLDERS EQUITY	**985.519**	**927.941**	**1.023.207**	**1.069.528**	**1.056.499**	**1.046.536**	**1.036.446**	**1.026.474**	**1.016.599**	**1.006.823**	**997.144**	**987.562**	**978.074**
Paid in Capital	271.600	363.944	385.781	385.781	385.781	385.781	385.781	385.781	385.781	385.781	385.781	385.781	385.781
Other Reserves	399.985	468.781	503.427	624.515	624.515	624.515	624.515	624.515	624.515	624.515	624.515	624.515	624.515
Securities Revaluation Fund	75.957	37.426	23.994	-25.959	-25.959	-25.959	-25.959	-25.959	-25.959	-25.959	-25.959	-25.959	-25.959
Retained Earnings	237.977	57.790	110.005	85.191	72.162	62.199	52.109	42.137	32.262	22.486	12.807	3.225	-6.263
TOTAL LIABILITIES	**6.553.094**	**7.738.381**	**7.657.358**	**10.092.137**	**10.339.668**	**10.212.936**	**10.116.175**	**10.018.168**	**9.921.311**	**9.825.409**	**9.730.466**	**9.636.472**	**9.543.417**

FORTISBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**378.993**	**460.476**	**443.675**	**392.122**	**393.039**	**388.897**	**385.185**	**381.481**	**377.816**	**374.188**	**370.596**	**367.039**
Interest Income	942.488	954.518	1.070.338	1.166.276	1.173.270	1.160.330	1.149.053	1.137.771	1.126.611	1.115.561	1.104.622	1.093.792
Interest Expense	563.495	494.042	626.663	774.154	780.231	771.433	763.868	756.290	748.794	741.373	734.026	726.753
Net Fees & Commissions Income	**134.957**	**116.821**	**161.615**	**171.141**	**171.980**	**170.146**	**168.536**	**166.926**	**165.333**	**163.757**	**162.196**	**160.651**
Fees & Commissions Received	211.018	196.097	224.409	253.409	254.907	252.135	249.719	247.303	244.912	242.545	240.201	237.882
Fees & Commissions Paid	76.061	79.276	62.794	82.268	82.927	81.989	81.184	80.377	79.578	78.788	78.006	77.231
Net Trading Income	**125.894**	**83.006**	**-50.246**	**-129.492**	**-130.257**	**-128.841**	**-127.607**	**-126.372**	**-125.150**	**-123.940**	**-122.743**	**-121.557**
Net Trading Gain on Securities	130.358	50.003	-1.113	4.077	4.101	4.057	4.018	3.979	3.941	3.903	3.865	3.828
Net Trading Gain on FC Positions	-4.464	33.003	-49.133	-133.569	-134.359	-132.898	-131.625	-130.351	-129.091	-127.843	-126.608	-125.385
Other Operating Income	**27.683**	**49.436**	**60.798**	**67.882**	**68.283**	**67.541**	**66.894**	**66.246**	**65.606**	**64.972**	**64.344**	**63.723**
TOTAL OPERATING PROFIT	**667.527**	**709.739**	**615.842**	**501.653**	**503.045**	**497.742**	**493.008**	**488.282**	**483.606**	**478.976**	**474.393**	**469.855**
Provision for Losses	**105.695**	**113.468**	**-44.354**	**2.677**	**-1.371**	**-1.047**	**-1.060**	**-1.048**	**-1.037**	**-1.027**	**-1.017**	**-1.006**
Other Operating Expense	**443.441**	**477.332**	**553.708**	**515.262**	**516.869**	**511.401**	**506.534**	**501.673**	**496.863**	**492.102**	**487.388**	**482.721**
NET OPERATING INCOME	**118.391**	**118.939**	**106.489**	**-16.287**	**-12.453**	**-12.613**	**-12.465**	**-12.343**	**-12.220**	**-12.099**	**-11.978**	**-11.859**
Monetary Gain & Losses	**-69.836**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**48.555**	**118.939**	**106.489**	**-16.287**	**-12.453**	**-12.613**	**-12.465**	**-12.343**	**-12.220**	**-12.099**	**-11.978**	**-11.859**
Provision for Taxes	**-7.364**	**-8.934**	**-21.298**	**3.257**	**2.491**	**2.523**	**2.493**	**2.469**	**2.444**	**2.420**	**2.396**	**2.372**
NET PROFIT/LOSSES	**41.191**	**110.005**	**85.191**	**-13.029**	**-9.962**	**-10.090**	**-9.972**	**-9.874**	**-9.776**	**-9.679**	**-9.583**	**-9.487**

FORTISBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**2.135.139**	**2.231.102**	**2.272.041**	**3.160.200**	**3.237.711**	**3.198.026**	**3.167.727**	**3.137.038**	**3.106.708**	**3.076.678**	**3.046.948**	**3.017.516**	**2.988.377**
Letters of Guarantees	1.235.961	1.224.172	1.670.935	1.849.389	1.894.750	1.871.526	1.853.794	1.835.834	1.818.085	1.800.511	1.783.113	1.765.889	1.748.836
Bank Acceptances	75.022	70.311	35.500	46.570	47.712	47.127	46.681	46.229	45.782	45.339	44.901	44.467	44.038
Letters of Credits	598.739	517.495	467.033	835.332	855.820	845.331	837.322	829.210	821.193	813.255	805.396	797.616	789.914
Other Guarantees	225.417	419.124	98.573	428.909	439.429	434.043	429.930	425.765	421.649	417.573	413.538	409.543	405.589
COMMITMENTS	**2.403.833**	**2.603.917**	**1.977.419**	**2.549.282**	**2.611.808**	**2.579.796**	**2.555.354**	**2.530.597**	**2.506.131**	**2.481.906**	**2.457.923**	**2.434.180**	**2.410.675**
Irrevocable Commitments	2.403.833	2.603.917	1.977.419	2.549.282	2.611.808	2.579.796	2.555.354	2.530.597	2.506.131	2.481.906	2.457.923	2.434.180	2.410.675
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**1.134.726**	**1.108.880**	**1.845.830**	**1.828.546**	**1.873.395**	**1.850.433**	**1.832.901**	**1.815.144**	**1.797.595**	**1.780.219**	**1.763.016**	**1.745.986**	**1.729.126**
Foreign Currency Buys	242.030	324.284	340.655	1.251.877	1.282.582	1.266.862	1.254.859	1.242.702	1.230.687	1.218.791	1.207.014	1.195.354	1.183.812
Foreign Currency Sells	222.129	254.088	533.592	576.668	590.812	583.571	578.042	572.442	566.907	561.427	556.002	550.632	545.314
NET BALANCE SHEET POSITION	**-466.981**	**-195.853**	**126.675**	**-626.225**	**-641.585**	**-633.721**	**-627.717**	**-621.635**	**-615.625**	**-609.674**	**-603.783**	**-597.951**	**-592.177**
NET OFF BALANCE SHEET POSITION	**19.901**	**70.196**	**-192.937**	**675.209**	**691.770**	**683.291**	**676.817**	**670.260**	**663.780**	**657.364**	**651.012**	**644.723**	**638.497**
TOTAL POSITION	**-447.080**	**-125.657**	**-66.262**	**48.984**	**50.185**	**49.570**	**49.101**	**48.625**	**48.155**	**47.689**	**47.228**	**46.772**	**46.321**

Valuation Day	**30.06.2006**				**FORTISBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	68.500	-13.029	-9.962	-10.090	-9.972	-9.874	-9.776	-9.679	-9.583	-9.487
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	61.015	-9.225	-5.604	-4.512	-3.544	-2.790	-2.194	-1.727	-1.359	-1.070
Total Discounted Cash Flows	**28.990**									
Last Year Profit	-9.487									
Discount Rate	**25,8%**									
Terminal Value	-36.773									
Days To Maturity	3.471									
Discounted Terminal Value	**-4.146**									
Discounted CFs + Terminal Value	**24.845**									
Book Value+General Provision	**1.041.149**									
DCF Value / Book Value	**0,02**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	8.078.165	8.276.299	8.174.857	8.097.406	8.018.957	7.941.429	7.864.665	7.788.669	7.713.432	7.638.947
Balance Sheet Weighted	64,54%	64,54%	64,54%	64,54%	64,54%	64,54%	64,54%	64,54%	64,54%	64,54%
Net Balance Sheet	5.213.817	5.341.697	5.276.225	5.226.236	5.175.603	5.125.565	5.076.020	5.026.970	4.978.411	4.930.337
Effective Rate Balance Sheet	**1,85%**	**1,85%**	**1,85%**	**1,85%**	**1,85%**	**1,85%**	**1,85%**	**1,85%**	**1,85%**	**1,85%**
Total Off Balance Sheet	5.709.482	5.849.519	5.777.822	5.723.081	5.667.635	5.612.839	5.558.584	5.504.872	5.451.696	5.399.052
Off-Balance Sheet Weighted	34,02%	34,02%	34,02%	34,02%	34,02%	34,02%	34,02%	34,02%	34,02%	34,02%
Net Off Balance Sheet	1.942.316	1.989.956	1.965.565	1.946.942	1.928.080	1.909.439	1.890.982	1.872.710	1.854.620	1.836.710
Effective Rate Off Balance Sheet	**0,65%**	**0,65%**	**0,65%**	**0,65%**	**0,65%**	**0,65%**	**0,65%**	**0,65%**	**0,65%**	**0,65%**
Total Loss Weight	**2,50%**	**2,50%**	**2,50%**	**2,50%**	**2,50%**	**2,50%**	**2,50%**	**2,50%**	**2,50%**	**2,50%**
Lost Amount	109.157	111.834	110.463	109.417	108.356	107.309	106.272	105.245	104.228	103.222
Provision Left	165.436									
Total Provision	109.157	111.834	110.463	109.417	108.356	107.309	106.272	105.245	104.228	103.222
Additional Provision	-56.279	2.677	-1.371	-1.047	-1.060	-1.048	-1.037	-1.027	-1.017	-1.006

FORTISBANK	ACTUAL			FORECASTED										
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	6.138.405	6.845.014	8.076.706	9.380.555	9.492.732	9.549.660	9.444.337	9.352.551	9.260.721	9.169.882	9.079.945	8.990.908	8.902.760
Interest Income	942.488	954.518	978.710	580.983	1.166.276	1.173.270	1.160.330	1.149.053	1.137.771	1.126.611	1.115.561	1.104.622	1.093.792
Interest Rate	15,4%	13,9%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%	12,1%
Interest Bearing Liabilities	5.357.013	5.816.145	6.950.896	9.106.890	9.905.986	9.983.746	9.871.176	9.774.368	9.677.399	9.581.487	9.486.527	9.392.518	9.299.448
Interest Expense	563.495	494.042	535.772	358.777	774.154	780.231	771.433	763.868	756.290	748.794	741.373	734.026	726.753
Interest Rate	10,5%	8,5%	7,7%	7,7%	7,7%	7,7%	7,7%	7,7%	7,7%	7,7%	7,7%	7,7%	7,7%
Net Interest Margin	4,8%	5,5%	4,4%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	3.158.615	3.899.404	5.113.169	6.210.103	6.279.714	6.316.841	6.248.151	6.188.289	6.128.397	6.069.153	6.010.497	5.952.427	5.894.938
Cash Loans Commissions	9.966	24.955	29.112	18.072	36.250	36.465	36.068	35.723	35.377	35.035	34.696	34.361	34.029
Cash Loans Commissions Rate (%)	0,3%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Non-Cash Loans	2.129.250	2.236.882	2.491.272	3.009.335	3.198.955	3.217.869	3.182.877	3.152.382	3.121.873	3.091.693	3.061.813	3.032.232	3.002.946
Non-Cash Loans Commissions	18.132	15.868	17.000	10.496	22.132	22.263	22.021	21.810	21.599	21.390	21.183	20.979	20.776
Non-Cash Loans Commissions Rate (%)	0,9%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Cash & Non-Cash Loans	5.287.866	6.136.286	7.604.442	9.219.438	9.478.669	9.534.710	9.431.027	9.340.671	9.250.270	9.160.846	9.072.310	8.984.659	8.897.884
Other Commissions	182.920	155.274	154.320	95.626	195.026	196.179	194.046	192.187	190.327	188.487	186.665	184.862	183.076
Other Commissions Rate (%)	3,5%	2,5%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Funds Borrowed	1.562.338	1.548.932	2.074.685	2.731.736	2.762.356	2.778.688	2.748.472	2.722.140	2.695.794	2.669.733	2.643.931	2.618.387	2.593.099
Cash Loans Commissions Expense	11	146	50	34	67	68	67	67	66	65	65	64	63
Cash Loans Commissions Expense (%)	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%
Non-Cash Loans	2.129.250	2.236.882	2.491.272	3.009.335	3.198.955	3.217.869	3.182.877	3.152.382	3.121.873	3.091.693	3.061.813	3.032.232	3.002.946
Non-Cash Loans Commissions Expense	918	186	176	109	229	230	228	226	224	221	219	217	215
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	4.142.441	4.509.066	5.748.598	8.168.928	9.113.398	9.186.472	9.082.572	8.993.319	8.903.909	8.815.475	8.727.918	8.641.238	8.555.424
Other Commissions Expense	75.132	78.944	50.998	37.040	81.971	82.629	81.694	80.891	80.087	79.292	78.504	77.724	76.953
Other Commissions Expense rate (%)	1,8%	1,8%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Securities Portfolio	2.030.445	2.029.251	1.892.774	2.016.072	2.038.671	2.050.724	2.028.424	2.008.990	1.989.547	1.970.313	1.951.271	1.932.419	1.913.755
Trading Gain on Securities Portfolio	130.358	50.003	-6.258	2.016	4.077	4.101	4.057	4.018	3.979	3.941	3.903	3.865	3.828
Trading Gain Rate	6,4%	2,5%	-0,3%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	5.313.536	6.156.055	7.616.113	9.219.438	9.478.669	9.534.710	9.431.027	9.340.671	9.250.270	9.160.846	9.072.310	8.984.659	8.897.884
Other Operating Income	26.529	48.825	53.796	33.284	67.882	68.283	67.541	66.894	66.246	65.606	64.972	64.344	63.723
Other Operating Income Rate (%)	0,5%	0,8%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Cost to Income Ratio	86,3%	82,7%	91,5%	91,5%	91,5%	91,5%	91,5%	91,5%	91,5%	91,5%	91,5%	91,5%	91,5%
ROE	6,8%	10,8%	-0,4%	2,5%	-1,2%	-0,9%	-1,0%	-1,0%	-1,0%	-1,0%	-1,0%	-1,0%	-1,0%

FORTISBANK	ACTUAL			FORECASTED									
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,2%	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Cash FC / Total Assets	0,6%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	18,4%	15,9%	12,1%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%
Securities Portfolio FC / Total Assets	11,2%	10,9%	9,6%	9,3%	9,3%	9,3%	9,3%	9,3%	9,3%	9,3%	9,3%	9,3%	9,3%
Loans TC / Total Assets	21,1%	24,9%	28,0%	28,3%	28,3%	28,3%	28,3%	28,3%	28,3%	28,3%	28,3%	28,3%	28,3%
Loans FC / Total Assets	24,9%	26,7%	30,6%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%	33,2%
Accrued Interest Income TC / Total Assets	2,9%	2,9%	2,2%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%
Accrued Interest Income FC / Total Assets	0,9%	0,9%	0,9%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%
Other Assets TC / Total Assets	2,5%	2,1%	1,7%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%
Other Assets FC / Total Assets	0,2%	0,2%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Customer Deposits TC / Total Assets	23,8%	25,7%	24,6%	22,7%	22,7%	22,7%	22,7%	22,7%	22,7%	22,7%	22,7%	22,7%	22,7%
Customer Deposits FC / Total Assets	24,9%	21,2%	17,7%	16,4%	16,4%	16,4%	16,4%	16,4%	16,4%	16,4%	16,4%	16,4%	16,4%
Funds Borrowed TC / Total Assets	1,7%	2,1%	3,2%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%
Funds Borrowed FC / Total Assets	21,1%	18,4%	20,6%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%
Accrued Interest Expense TC / Total Assets	0,8%	0,9%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Accrued Interest Expense FC / Total Assets	0,4%	0,5%	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Other Liabilities TC / Total Assets	2,7%	3,1%	3,0%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%
Other Liabilities FC / Total Assets	2,8%	3,4%	2,4%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Letters of Guarantees / Total Assets	17,4%	17,4%	19,5%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%
Bank Acceptances / Total Assets	1,0%	0,7%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Letters of Credits / Total Assets	27,0%	24,1%	26,1%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%
Other Guarantees / Total Assets	13,7%	14,7%	3,8%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%	4,2%
Irrevocable Commitments / Total Assets	33,7%	28,4%	27,5%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%	25,3%
Total FC Assets / Total Assets	47,1%	48,4%	48,7%	49,5%	49,5%	49,5%	49,5%	49,5%	49,5%	49,5%	49,5%	49,5%	49,5%
Total FC Liabilities / Total Assets	51,2%	48,9%	52,3%	55,7%	55,7%	55,7%	55,7%	55,7%	55,7%	55,7%	55,7%	55,7%	55,7%
Foreign Currency Buys / Total Assets	5,3%	7,8%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%
Foreign Currency Sells / Total Assets	4,5%	9,0%	9,2%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%	5,7%

FORTISBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**1.608.424**	**166.969**	**1.737.637**	**4.322.478**	**5.224.690**	**8.095.011**	**64,54%**	**73,92%**	**1,85%**
Cash	184.868	615	0	0					
Due from banks	0	149.777	0	233					
Interbank money market placements	199.890	0	0	0					
Receivables from reverse repo transactions	34.193	0	0	0					
Reserve deposits	646.781	0	0	0					
Special finance houses	0	0	0	0					
Loans	350.339	777	1.244.267	4.130.945					
Loans under follow-up (Net)	0	0	0	10.889					
Subsidiaries, associates and HTM Securities	0	0	0	788					
Miscellaneous receivables	66.945	0	0	61.518					
Marketable securities held to maturity (Net)	85.604	15.800	0	7.862					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	358.599	0					
Leased assets (Net)	0	0	8.882	0					
Fixed assets (Net)	0	0	0	87.204					
Other assets	39.804	0	125.889	23.039	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
II -Off balance sheet items	**181.741**	**1.003.426**	**2.870.357**	**207.765**	**1.843.629**	**5.419.388**	**34,02%**	**26,08%**	**0,65%**
Guarantees and pledges	65.603	815.716	570.190	90.152					
Commitments	6.320	0	2.297.749	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	70.664	0	14.621					
Interest and income accruals	109.818	117.046	2.418	102.992	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	0	0	0					
III -Total risk weighted assets	**1.790.165**	**1.170.395**	**4.607.994**	**4.530.243**	**7.068.319**	**13.514.399**	**52,30%**	**100,00%**	**2,50%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	52,30%
Bank' Loans Under Follow Up	2,50%

2.6 Garanti Bankasi

GARANTİ BANKASI A.S.	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**2.927.426**	**4.364.568**	**6.423.306**	**7.664.276**	**10.392.315**	**13.885.135**	**18.313.938**	**23.905.229**	**30.930.135**	**39.717.289**	**50.662.828**	**64.243.105**	**81.029.361**
Cash TC	36.635	62.051	107.429	131.609	171.424	222.401	287.039	368.643	471.171	599.418	759.167	957.369	1.202.362
Cash FC	127.554	143.414	96.326	127.758	166.408	215.893	278.639	357.856	457.383	581.877	736.951	929.353	1.167.177
TCMB & Deposit Reserves TC	291.697	333.284	983.926	861.803	1.122.523	1.456.333	1.879.595	2.413.956	3.085.329	3.925.120	4.971.189	6.269.061	7.873.329
TCMB & Deposit Reserves FC	1.157.648	2.098.150	2.885.357	2.915.692	3.797.770	4.927.131	6.359.132	8.167.008	10.438.427	13.279.648	16.818.756	21.209.775	26.637.409
Banks & Interbank Placements TC	171.337	94.280	471.411	691.379	1.288.050	2.051.991	3.020.649	4.243.563	5.780.035	7.701.941	10.095.924	13.066.172	16.737.623
Banks & Interbank Placements FC	1.142.555	1.633.389	1.878.857	2.936.036	3.846.141	5.011.385	6.488.884	8.354.202	10.697.790	13.629.285	17.280.841	21.811.376	27.411.461
SECURITIES PORTFOLIO	**10.260.610**	**10.219.179**	**12.398.731**	**15.450.147**	**20.124.250**	**26.108.694**	**33.696.813**	**43.276.685**	**55.312.853**	**70.368.380**	**89.121.988**	**112.389.843**	**141.150.681**
Securities Portfolio TC	2.804.106	4.006.935	5.917.429	8.224.690	10.712.889	13.898.632	17.938.070	23.037.794	29.445.095	37.459.713	47.442.959	59.829.305	75.139.772
Securities Portfolio FC	7.456.504	6.212.244	6.481.302	7.225.458	9.411.361	12.210.062	15.758.743	20.238.892	25.867.758	32.908.667	41.679.030	52.560.537	66.010.909
LOANS PORTFOLIO	**8.132.451**	**12.001.472**	**19.120.186**	**30.280.947**	**39.441.783**	**51.170.774**	**66.042.829**	**84.818.547**	**108.408.392**	**137.915.917**	**174.671.362**	**220.274.337**	**276.643.084**
Loans TC	2.555.863	5.266.285	9.765.224	14.760.197	19.225.570	24.942.770	32.192.029	41.344.098	52.842.772	67.225.971	85.142.108	107.370.900	134.847.378
Loans FC	5.418.359	6.546.898	9.117.539	15.520.751	20.216.213	26.228.004	33.850.799	43.474.450	55.565.620	70.689.947	89.529.255	112.903.437	141.795.706
Non Performing Loans	311.173	444.770	722.715	662.433	862.837	1.119.423	1.444.768	1.855.509	2.371.566	3.017.079	3.821.150	4.818.770	6.051.906
Non Performing Loans Provision	-152.944	-256.481	-485.292	-662.433	-862.837	-1.119.423	-1.444.768	-1.855.509	-2.371.566	-3.017.079	-3.821.150	-4.818.770	-6.051.906
ACCRUED INTEREST GAIN	**860.660**	**733.341**	**789.353**	**1.062.726**	**1.384.230**	**1.795.865**	**2.317.807**	**2.976.751**	**3.804.649**	**4.840.231**	**6.130.182**	**7.730.642**	**9.708.933**
Accrued Interest & Income Accruals TC	227.376	413.255	556.451	426.511	555.542	720.747	930.222	1.194.680	1.526.946	1.942.563	2.460.268	3.102.592	3.896.552
Accrued Interest & Income Accruals FC	633.284	320.086	232.902	636.215	828.687	1.075.118	1.387.586	1.782.071	2.277.703	2.897.668	3.669.914	4.628.051	5.812.380
SUBSIDIARIES & ASSOCIATES	**1.082.173**	**989.244**	**45.371**	**16.679**	**16.679**	**16.679**	**16.679**	**16.679**	**16.679**	**16.679**	**16.679**	**16.679**	**16.679**
Subsidiaries & Associates TC	1.076.686	981.883	34.807	9.750	9.750	9.750	9.750	9.750	9.750	9.750	9.750	9.750	9.750
Subsidiaries & Associates FC	5.487	7.361	10.564	6.929	6.929	6.929	6.929	6.929	6.929	6.929	6.929	6.929	6.929
FIXED ASSETS	**1.483.160**	**1.478.497**	**1.607.504**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**	**1.336.519**
Fixed Assets TC	1.410.739	1.408.602	1.552.191	1.271.152	1.271.152	1.271.152	1.271.152	1.271.152	1.271.152	1.271.152	1.271.152	1.271.152	1.271.152
Fixed Assets FC	72.421	69.895	55.313	65.367	65.367	65.367	65.367	65.367	65.367	65.367	65.367	65.367	65.367
OTHER ASSETS	**749.339**	**398.582**	**905.884**	**1.329.563**	**1.731.793**	**2.246.785**	**2.899.780**	**3.724.177**	**4.759.949**	**6.055.553**	**7.669.396**	**9.671.712**	**12.146.727**
Other Assets TC	628.088	356.560	782.580	1.179.161	1.535.890	1.992.625	2.571.753	3.302.892	4.221.497	5.370.540	6.801.822	8.577.633	10.772.670
Other Assets FC	121.251	42.022	123.304	150.402	195.903	254.160	328.028	421.285	538.453	685.014	867.574	1.094.079	1.374.057
TOTAL ASSETS	**25.495.819**	**30.184.883**	**41.290.335**	**57.140.858**	**74.427.568**	**96.560.450**	**124.624.366**	**160.054.587**	**204.569.176**	**260.250.568**	**329.608.955**	**415.662.837**	**522.031.983**

GARANTİ BANKASI A.S.	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**16.112.498**	**19.610.928**	**24.291.098**	**31.056.690**	**40.452.209**	**52.481.675**	**67.734.725**	**86.991.443**	**111.185.616**	**141.449.070**	**179.146.123**	**225.917.362**	**283.730.173**
Customer Deposits TC	5.449.086	7.418.157	11.190.611	14.363.385	18.708.711	24.272.210	31.326.581	40.232.606	51.422.151	65.418.673	82.853.154	104.484.349	131.222.152
Customer Deposits FC	10.663.412	12.192.771	13.100.487	16.693.305	21.743.498	28.209.465	36.408.144	46.758.837	59.763.465	76.030.397	96.292.969	121.433.013	152.508.021
BANKS & INTERBANK BORROWINGS	**2.513.557**	**2.037.440**	**3.372.104**	**10.285.157**	**13.332.301**	**17.178.657**	**21.972.988**	**27.925.278**	**35.278.365**	**44.321.089**	**55.394.143**	**68.898.513**	**85.304.731**
Banks & Interbank Borrowings TC	570.549	1.041.237	1.931.396	7.203.397	9.312.372	11.957.552	15.228.824	19.258.276	24.195.507	30.216.341	37.525.238	46.359.368	56.992.816
Banks & Interbank Borrowings FC	1.943.008	996.203	1.440.708	3.081.760	4.019.929	5.221.105	6.744.164	8.667.002	11.082.858	14.104.748	17.868.905	22.539.144	28.311.916
FUNDS BORROWED AND OTHERS	**3.199.630**	**4.070.144**	**6.684.482**	**10.274.180**	**13.382.408**	**17.361.998**	**22.408.015**	**28.778.527**	**36.782.448**	**46.794.210**	**59.265.156**	**74.738.027**	**93.863.673**
Funds Borrowed & Others TC	137.803	160.443	422.254	461.196	600.721	779.360	1.005.870	1.291.835	1.651.121	2.100.538	2.660.344	3.354.903	4.213.431
Funds Borrowed & Others FC	3.061.827	3.909.701	6.262.228	9.812.984	12.781.687	16.582.639	21.402.146	27.486.692	35.131.327	44.693.672	56.604.813	71.383.124	89.650.242
ACCRUED INTEREST EXPENSES	**269.227**	**196.436**	**328.249**	**560.642**	**730.252**	**947.411**	**1.222.762**	**1.570.389**	**2.007.147**	**2.553.470**	**3.233.985**	**4.078.310**	**5.121.960**
Accrued Interest & Expense Accruals TC	123.724	96.409	162.505	292.496	380.985	494.280	637.936	819.298	1.047.162	1.332.188	1.687.224	2.127.723	2.672.212
Accrued Interest & Expense Accruals FC	145.503	100.027	165.744	268.146	349.267	453.131	584.827	751.091	959.985	1.221.282	1.546.761	1.950.587	2.449.747
GENERAL PROVISIONS	**70.276**	**72.640**	**100.706**	**147.272**	**147.272**	**147.272**	**147.272**	**147.272**	**147.272**	**147.272**	**147.272**	**147.272**	**147.272**
General Provisions TC	53.644	68.396	95.043	136.830	136.830	136.830	136.830	136.830	136.830	136.830	136.830	136.830	136.830
General Provisions FC	16.632	4.244	5.663	10.442	10.442	10.442	10.442	10.442	10.442	10.442	10.442	10.442	10.442
OTHER PROVISIONS	**154.446**	**245.826**	**387.924**	**354.373**	**354.373**	**354.373**	**354.373**	**354.373**	**354.373**	**354.373**	**354.373**	**354.373**	**354.373**
Employees Termination Reserves TC	13.597	15.219	11.186	11.893	11.893	11.893	11.893	11.893	11.893	11.893	11.893	11.893	11.893
Employees Termination Reserves FC	1.140	155	0	74	74	74	74	74	74	74	74	74	74
Other Provisions TC	112.413	199.840	356.603	333.584	333.584	333.584	333.584	333.584	333.584	333.584	333.584	333.584	333.584
Other Provisions FC	27.296	30.612	20.135	8.822	8.822	8.822	8.822	8.822	8.822	8.822	8.822	8.822	8.822
OTHER LIABILITIES	**695.278**	**833.082**	**2.217.002**	**2.798.864**	**3.645.598**	**4.729.707**	**6.104.329**	**7.839.766**	**10.020.172**	**12.747.549**	**16.144.849**	**20.359.926**	**25.570.081**
Other Liabilities TC	263.173	272.931	1.401.093	1.886.470	2.457.180	3.187.883	4.114.395	5.284.102	6.753.723	8.592.009	10.881.833	13.722.848	17.234.559
Other Liabilities FC	432.105	560.151	815.909	912.394	1.188.419	1.541.825	1.989.934	2.555.664	3.266.449	4.155.539	5.263.016	6.637.078	8.335.522
SHAREHOLDERS EQUITY	**2.480.907**	**3.118.387**	**3.908.770**	**4.745.439**	**6.403.084**	**8.580.461**	**11.424.065**	**15.114.541**	**19.876.641**	**25.988.284**	**33.791.958**	**43.708.198**	**56.251.636**
Paid in Capital	822.038	1.200.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000	2.100.000
Other Reserves	1.095.514	1.378.228	876.289	1.489.987	1.489.987	1.489.987	1.489.987	1.489.987	1.489.987	1.489.987	1.489.987	1.489.987	1.489.987
Securities Revaluation Fund	231.211	139.592	162.522	-167.182	-167.182	-167.182	-167.182	-167.182	-167.182	-167.182	-167.182	-167.182	-167.182
Retained Earnings	332.144	400.567	769.959	1.322.634	2.980.279	5.157.656	8.001.260	11.691.736	16.453.836	22.565.479	30.369.153	40.285.393	52.828.831
TOTAL LIABILITIES	**25.495.819**	**30.184.883**	**41.290.335**	**57.140.858**	**74.427.568**	**96.560.450**	**124.624.366**	**160.054.587**	**204.569.176**	**260.250.568**	**329.608.955**	**415.662.837**	**522.031.983**

GARANTİ BANKASI A.S.	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**1.423.468**	**1.817.392**	**2.197.205**	**2.738.625**	**3.614.055**	**4.734.056**	**6.157.717**	**7.958.819**	**10.226.822**	**13.070.329**	**16.620.688**	**21.036.334**
Interest Income	3.317.904	3.782.251	5.525.467	7.259.482	9.482.469	12.313.214	15.893.835	20.402.158	26.052.505	33.103.866	41.868.021	52.719.322
Interest Expense	1.894.436	1.964.859	3.328.262	4.520.857	5.868.414	7.579.158	9.736.119	12.443.340	15.825.682	20.033.537	25.247.334	31.682.988
Net Fees & Commissions Income	**628.881**	**804.665**	**1.210.823**	**1.551.813**	**2.017.911**	**2.612.310**	**3.365.325**	**4.314.866**	**5.506.712**	**6.996.264**	**8.850.318**	**11.149.196**
Fees & Commissions Received	882.302	1.114.837	1.570.560	2.063.083	2.681.209	3.468.330	4.463.961	5.717.551	7.288.692	9.249.402	11.686.373	14.703.698
Fees & Commissions Paid	253.421	310.171	359.736	511.270	663.298	856.020	1.098.636	1.402.684	1.781.980	2.253.138	2.836.055	3.554.502
Net Trading Income	**173.601**	**133.929**	**-134.316**	**-354.447**	**-460.644**	**-595.874**	**-766.928**	**-982.301**	**-1.252.230**	**-1.589.088**	**-2.007.771**	**-2.526.160**
Net Trading Gain on Securities	78.433	67.819	68.416	35.574	46.233	59.806	76.973	98.590	125.681	159.490	201.512	253.541
Net Trading Gain on FC Positions	95.168	66.110	-202.732	-390.021	-506.877	-655.680	-843.902	-1.080.890	-1.377.911	-1.748.579	-2.209.282	-2.779.701
Other Operating Income	**268.191**	**352.359**	**547.288**	**714.418**	**928.467**	**1.201.036**	**1.545.810**	**1.979.911**	**2.523.977**	**3.202.944**	**4.046.835**	**5.091.694**
TOTAL OPERATING PROFIT	**2.494.142**	**3.108.346**	**3.821.000**	**4.650.409**	**6.099.789**	**7.951.528**	**10.301.924**	**13.271.296**	**17.005.281**	**21.680.448**	**27.510.069**	**34.751.064**
Provision for Losses	**431.370**	**449.525**	**278.829**	**200.404**	**256.586**	**325.344**	**410.742**	**516.057**	**645.513**	**804.070**	**997.621**	**1.233.135**
Other Operating Expense	**1.316.948**	**1.631.620**	**1.888.879**	**2.377.949**	**3.121.482**	**4.071.678**	**5.278.087**	**6.802.614**	**8.720.214**	**11.121.785**	**14.117.148**	**17.838.632**
NET OPERATING INCOME	**745.824**	**1.027.200**	**1.653.293**	**2.072.056**	**2.721.721**	**3.554.505**	**4.613.095**	**5.952.625**	**7.639.554**	**9.754.593**	**12.395.301**	**15.679.297**
Monetary Gain & Losses	**-42.943**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**702.881**	**1.027.200**	**1.653.293**	**2.072.056**	**2.721.721**	**3.554.505**	**4.613.095**	**5.952.625**	**7.639.554**	**9.754.593**	**12.395.301**	**15.679.297**
Provision for Taxes	**-302.314**	**-257.243**	**-330.659**	**-414.411**	**-544.344**	**-710.901**	**-922.619**	**-1.190.525**	**-1.527.911**	**-1.950.919**	**-2.479.060**	**-3.135.859**
NET PROFIT/LOSSES	**400.567**	**769.957**	**1.322.634**	**1.657.645**	**2.177.377**	**2.843.604**	**3.690.476**	**4.762.100**	**6.111.643**	**7.803.674**	**9.916.241**	**12.543.438**

GARANTİ BANKASI A.S.	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**5.489.132**	**7.081.355**	**8.411.916**	**11.329.499**	**14.756.990**	**19.145.347**	**24.709.669**	**31.734.531**	**40.560.580**	**51.600.706**	**65.352.614**	**82.414.790**	**103.504.938**
Letters of Guarantees	3.635.729	4.677.224	6.016.137	7.839.994	10.211.812	13.248.547	17.099.048	21.960.241	28.067.852	35.707.600	45.223.897	57.030.893	71.625.240
Bank Acceptances	521.537	599.588	286.255	372.493	485.183	629.464	812.409	1.043.374	1.333.558	1.696.538	2.148.676	2.709.649	3.403.055
Letters of Credits	1.311.984	1.804.543	2.109.524	3.117.012	4.059.995	5.267.335	6.798.211	8.730.916	11.159.170	14.196.568	17.980.041	22.674.247	28.476.643
Other Guarantees	19.882	0	0	0	0	0	0	0	0	0	0	0	0
COMMITMENTS	**6.439.788**	**6.956.914**	**6.842.358**	**8.433.874**	**10.985.357**	**14.252.125**	**18.394.301**	**23.623.729**	**30.193.991**	**38.412.451**	**48.649.607**	**61.350.984**	**77.050.852**
Irrevocable Commitments	6.439.788	6.956.914	6.842.193	8.433.874	10.985.357	14.252.125	18.394.301	23.623.729	30.193.991	38.412.451	48.649.607	61.350.984	77.050.852
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**9.282.996**	**9.571.237**	**11.472.385**	**13.473.190**	**17.549.207**	**22.767.899**	**29.385.063**	**37.739.122**	**48.235.176**	**61.364.240**	**77.718.189**	**98.008.754**	**123.089.437**
Foreign Currency Buys	4.457.498	4.146.850	4.738.944	7.805.613	10.167.030	13.190.448	17.024.064	21.863.939	27.944.766	35.551.012	45.025.576	56.780.796	71.311.142
Foreign Currency Sells	4.318.568	3.371.063	3.747.045	5.667.576	7.382.177	9.577.450	12.361.000	15.875.184	20.290.410	25.813.228	32.692.613	41.227.958	51.778.295
NET BALANCE SHEET POSITION	**-155.860**	**-720.405**	**-929.410**	**-1.203.321**	**-1.567.359**	**-2.033.452**	**-2.624.446**	**-3.370.565**	**-4.307.991**	**-5.480.577**	**-6.941.185**	**-8.753.381**	**-10.993.392**
NET OFF BALANCE SHEET POSITION	**138.930**	**775.787**	**991.899**	**2.138.037**	**2.784.853**	**3.612.998**	**4.663.064**	**5.988.755**	**7.654.356**	**9.737.784**	**12.332.963**	**15.552.838**	**19.532.847**
TOTAL POSITION	**-16.930**	**55.382**	**62.489**	**934.716**	**1.217.494**	**1.579.546**	**2.038.619**	**2.618.190**	**3.346.364**	**4.257.207**	**5.391.778**	**6.799.457**	**8.539.455**

Valuation Day	**30.06.2006**				**GARANTİ BANKASI A.S.**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	789.126	1.657.645	2.177.377	2.843.604	3.690.476	4.762.100	6.111.643	7.803.674	9.916.241	12.543.438
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	702.905	1.173.710	1.224.755	1.271.464	1.311.707	1.345.464	1.371.759	1.392.318	1.406.390	1.414.147
Total Discounted Cash Flows	**12.614.620**									
Last Year Profit	12.543.438									
Discount Rate	**25,8%**									
Terminal Value	48.617.975									
Days To Maturity	3.471									
Discounted Terminal Value	**5.481.191**									
Discounted CFs + Terminal Value	**18.095.811**									
Book Value+General Provision	**4.103.585**									
DCF Value / Book Value	**4,41**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	41.690.710	54.303.319	70.451.756	90.927.553	116.777.902	149.256.323	189.882.188	240.486.966	303.272.994	380.881.302
Balance Sheet Weighted	68,62%	68,62%	68,62%	68,62%	68,62%	68,62%	68,62%	68,62%	68,62%	68,62%
Net Balance Sheet	28.608.895	37.263.887	48.345.227	62.396.077	80.135.039	102.422.299	130.300.479	165.026.363	208.111.233	261.367.412
Effective Rate Balance Sheet	**2,23%**	**2,23%**	**2,23%**	**2,23%**	**2,23%**	**2,23%**	**2,23%**	**2,23%**	**2,23%**	**2,23%**
Total Off Balance Sheet	19.763.373	25.742.347	33.397.471	43.103.970	55.358.260	70.754.571	90.013.157	114.002.220	143.765.774	180.555.790
Off-Balance Sheet Weighted	28,66%	28,66%	28,66%	28,66%	28,66%	28,66%	28,66%	28,66%	28,66%	28,66%
Net Off Balance Sheet	5.664.237	7.377.827	9.571.807	12.353.716	15.865.829	20.278.454	25.798.017	32.673.349	41.203.665	51.747.784
Effective Rate Off Balance Sheet	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**	**0,44%**
Total Loss Weight	**2,67%**	**2,67%**	**2,67%**	**2,67%**	**2,67%**	**2,67%**	**2,67%**	**2,67%**	**2,67%**	**2,67%**
Lost Amount	662.433	862.837	1.119.423	1.444.768	1.855.509	2.371.566	3.017.079	3.821.150	4.818.770	6.051.906
Provision Left	485.292									
Total Provision	662.433	862.837	1.119.423	1.444.768	1.855.509	2.371.566	3.017.079	3.821.150	4.818.770	6.051.906
Additional Provision	177.141	200.404	256.586	325.344	410.742	516.057	645.513	804.070	997.621	1.233.135

GARANTİ BANKASI A.S.	ACTUAL			FORECASTED									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	23.874.407	30.466.429	42.364.925	51.228.998	61.378.260	80.173.412	104.107.105	134.380.932	172.498.394	220.271.559	279.890.176	353.990.312	445.737.075
Interest Income	3.317.904	3.782.251	4.942.050	3.054.442	7.259.482	9.482.469	12.313.214	15.893.835	20.402.158	26.052.505	33.103.866	41.868.021	52.719.322
Interest Rate	13,9%	12,4%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%
Interest Bearing Liabilities	23.939.295	28.858.442	38.907.762	48.673.350	59.391.472	77.094.624	99.569.030	127.905.488	163.470.838	207.905.399	263.184.896	331.679.662	416.226.240
Interest Expense	1.894.436	1.964.859	2.921.074	1.867.725	4.520.857	5.868.414	7.579.158	9.736.119	12.443.340	15.825.682	20.033.537	25.247.334	31.682.988
Interest Rate	7,9%	6,8%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%	7,5%
Net Interest Margin	6,0%	5,6%	4,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	10.269.431	14.958.521	23.498.098	29.269.528	34.861.365	45.306.278	58.606.801	75.430.688	96.613.470	123.162.154	156.293.640	197.472.850	248.458.711
Cash Loans Commissions	68.612	73.840	111.282	70.847	167.389	217.541	281.404	362.185	463.896	591.371	750.454	948.178	1.192.990
Cash Loans Commissions Rate (%)	0,7%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Non-Cash Loans	6.375.365	7.428.737	9.290.895	10.951.081	13.043.245	16.951.168	21.927.508	28.222.100	36.147.555	46.080.643	58.476.660	73.883.702	92.959.864
Non-Cash Loans Commissions	79.206	65.180	94.110	56.696	133.954	174.088	225.195	289.840	371.234	473.246	600.553	758.782	954.694
Non-Cash Loans Commissions Rate (%)	1,2%	0,9%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%
Cash & Non-Cash Loans	16.644.796	22.387.258	32.788.993	40.220.609	47.904.610	62.257.447	80.534.309	103.652.788	132.761.025	169.242.797	214.770.300	271.356.552	341.418.574
Other Commissions	734.484	975.817	1.189.330	745.656	1.761.741	2.289.581	2.961.731	3.811.936	4.882.421	6.224.075	7.898.396	9.979.412	12.556.014
Other Commissions Rate (%)	4,4%	4,4%	3,6%	3,6%	3,6%	3,6%	3,6%	3,6%	3,6%	3,6%	3,6%	3,6%	3,6%
Funds Borrowed	3.690.166	5.148.177	7.768.388	9.931.011	11.828.294	15.372.203	19.885.007	25.593.271	32.780.487	41.788.329	53.029.683	67.001.592	84.300.850
Cash Loans Commissions Expense	26.661	28.968	30.232	19.754	46.671	60.654	78.461	100.984	129.343	164.885	209.240	264.370	332.628
Cash Loans Commissions Expense (%)	0,7%	0,6%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Non-Cash Loans	6.375.365	7.428.737	9.290.895	10.951.081	13.043.245	16.951.168	21.927.508	28.222.100	36.147.555	46.080.643	58.476.660	73.883.702	92.959.864
Non-Cash Loans Commissions Expense	337	242	268	161	381	496	641	825	1.057	1.348	1.710	2.161	2.719
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	12.688.849	15.245.701	21.741.619	29.605.071	36.680.267	47.578.850	61.388.337	78.764.504	100.529.864	127.668.699	161.363.959	203.031.621	254.362.336
Other Commissions Expense	226.423	280.961	271.388	188.877	464.218	602.148	776.918	996.827	1.272.284	1.615.748	2.042.188	2.569.525	3.219.155
Other Commissions Expense rate (%)	1,8%	1,8%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
Securities Portfolio	9.892.138	10.950.290	13.267.283	14.934.094	17.787.198	23.116.472	29.902.753	38.486.749	49.294.769	62.840.617	79.745.184	100.755.916	126.770.262
Trading Gain on Securities Portfolio	78.433	67.819	106.964	14.934	35.574	46.233	59.806	76.973	98.590	125.681	159.490	201.512	253.541
Trading Gain Rate	0,8%	0,6%	0,8%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	16.812.737	22.586.932	33.011.502	40.220.609	47.904.610	62.257.447	80.534.309	103.652.788	132.761.025	169.242.797	214.770.300	271.356.552	341.418.574
Other Operating Income	255.151	351.215	485.568	302.377	714.418	928.467	1.201.036	1.545.810	1.979.911	2.523.977	3.202.944	4.046.835	5.091.694
Other Operating Income Rate (%)	1,5%	1,6%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Cost to Income Ratio	64,2%	62,2%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%
ROE	69,1%	28,2%	14,3%	30,3%	29,7%	29,1%	28,4%	27,8%	27,2%	26,7%	26,1%	25,6%	25,1%

GARANTİ BANKASI A.S.	ACTUAL			FORECASTED									
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Cash FC / Total Assets	0,4%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	12,3%	13,6%	14,3%	14,4%	14,4%	14,4%	14,4%	14,4%	14,4%	14,4%	14,4%	14,4%	14,4%
Securities Portfolio FC / Total Assets	22,9%	18,3%	14,4%	12,6%	12,6%	12,6%	12,6%	12,6%	12,6%	12,6%	12,6%	12,6%	12,6%
Loans TC / Total Assets	14,0%	21,2%	25,5%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Loans FC / Total Assets	22,6%	22,5%	25,3%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%	27,2%
Accrued Interest Income TC / Total Assets	1,0%	1,1%	1,1%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Accrued Interest Income FC / Total Assets	1,6%	0,7%	0,8%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Other Assets TC / Total Assets	1,7%	1,4%	1,9%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%
Other Assets FC / Total Assets	0,3%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Customer Deposits TC / Total Assets	23,3%	26,9%	27,2%	25,1%	25,1%	25,1%	25,1%	25,1%	25,1%	25,1%	25,1%	25,1%	25,1%
Customer Deposits FC / Total Assets	39,5%	34,5%	30,0%	29,2%	29,2%	29,2%	29,2%	29,2%	29,2%	29,2%	29,2%	29,2%	29,2%
Funds Borrowed TC / Total Assets	0,5%	0,7%	0,9%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Funds Borrowed FC / Total Assets	12,6%	14,3%	15,9%	17,2%	17,2%	17,2%	17,2%	17,2%	17,2%	17,2%	17,2%	17,2%	17,2%
Accrued Interest Expense TC / Total Assets	0,4%	0,4%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Accrued Interest Expense FC / Total Assets	0,5%	0,5%	0,4%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Other Liabilities TC / Total Assets	0,9%	1,6%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%
Other Liabilities FC / Total Assets	1,9%	2,0%	1,8%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%
Letters of Guarantees / Total Assets	14,9%	15,0%	14,0%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%
Bank Acceptances / Total Assets	2,1%	1,1%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Letters of Credits / Total Assets	25,3%	25,8%	26,9%	5,5%	5,5%	5,5%	5,5%	5,5%	5,5%	5,5%	5,5%	5,5%	5,5%
Other Guarantees / Total Assets	0,1%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Irrevocable Commitments / Total Assets	24,2%	19,1%	16,4%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%
Total FC Assets / Total Assets	59,4%	53,2%	50,6%	51,8%	51,8%	51,8%	51,8%	51,8%	51,8%	51,8%	51,8%	51,8%	51,8%
Total FC Liabilities / Total Assets	60,8%	55,0%	52,7%	53,9%	53,9%	53,9%	53,9%	53,9%	53,9%	53,9%	53,9%	53,9%	53,9%
Foreign Currency Buys / Total Assets	16,3%	13,5%	12,4%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%	13,7%
Foreign Currency Sells / Total Assets	43,1%	11,4%	9,5%	9,9%	9,9%	9,9%	9,9%	9,9%	9,9%	9,9%	9,9%	9,9%	9,9%

GARANTİ BANKASI A.S.	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**7.344.699**	**2.838.109**	**4.629.851**	**23.815.206**	**26.697.753**	**38.905.673**	**68,62%**	**83,47%**	**2,23%**
Cash	245.179	1.779	0	0					
Due from banks	1.677.182	2.337.001	0	229.579					
Interbank money market placements	0	0	0	0					
Receivables from reverse repo transactions	0	0	0	0					
Reserve deposits	2.397.162	0	0	0					
Special finance houses	0	0	0	0					
Loans	2.125.211	497.410	4.629.851	19.491.855					
Loans under follow-up (Net)	0	0	0	174.006					
Subsidiaries, associates and HTM Securities	0	0	0	9.330					
Miscellaneous receivables	68	0	0	764.457					
Marketable securities held to maturity (Net)	799.199	13	0	101.349					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	0	1.134.429					
Leased assets (Net)	0	0	0	0					
Fixed assets (Net)	0	0	0	1.271.681					
Other assets	100.698	1.906	0	638.520	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
II -Off balance sheet items	**492.962**	**3.744.100**	**7.798.351**	**637.918**	**5.285.914**	**18.443.346**	**28,66%**	**16,53%**	**0,44%**
Guarantees and pledges	211.232	3.558.530	1.317.613	450.605					
Commitments	0	107	6.351.033	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	49.929	0	17.488					
Interest and income accruals	281.730	135.534	129.705	169.825	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	0	0	0					
III -Total risk weighted assets	**7.837.661**	**6.582.209**	**12.428.202**	**24.453.124**	**31.983.667**	**57.349.019**	**55,77%**	**100,00%**	**2,67%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	55,77%
Bank' Loans Under Follow Up	2,67%

2.7 Isbank

ISBANK	ACTUAL			FORECASTED										
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**3.619.022**	**4.065.268**	**12.345.529**	**9.399.312**	**12.907.969**	**17.706.226**	**23.498.426**	**30.566.581**	**39.145.538**	**49.525.386**	**62.043.483**	**77.094.114**	**95.136.713**
Cash TC	137.712	178.598	194.092	262.913	324.789	409.407	511.553	636.200	787.491	970.541	1.191.298	1.456.718	1.774.901
Cash FC	105.271	120.598	104.693	108.343	133.841	168.711	210.804	262.169	324.514	399.946	490.918	600.293	731.412
TCMB & Deposit Reserves TC	641.493	746.612	3.366.962	1.475.164	1.822.338	2.297.114	2.870.239	3.569.616	4.418.484	5.445.546	6.684.182	8.173.407	9.958.681
TCMB & Deposit Reserves FC	1.014.118	1.659.770	2.612.063	3.182.656	3.931.680	4.956.006	6.192.518	7.701.420	9.532.845	11.748.723	14.421.072	17.634.063	21.485.776
Banks & Interbank Placements TC	371.323	107.587	1.825.553	524.113	1.927.680	3.847.126	6.164.180	8.991.653	12.423.492	16.575.742	21.583.355	27.604.057	34.821.636
Banks & Interbank Placements FC	1.349.105	1.252.103	4.242.166	3.846.123	4.767.641	6.027.862	7.549.133	9.405.522	11.658.711	14.384.888	17.672.658	21.625.575	26.364.307
SECURITIES PORTFOLIO	**14.145.837**	**16.957.254**	**24.773.077**	**27.533.981**	**34.013.981**	**42.875.694**	**53.573.082**	**66.626.980**	**82.471.119**	**101.641.255**	**124.760.438**	**152.556.860**	**185.879.029**
Securities Portfolio TC	6.579.157	7.831.532	13.779.791	15.383.776	19.004.280	23.955.494	29.932.335	37.225.804	46.078.236	56.788.968	69.706.111	85.236.518	103.854.269
Securities Portfolio FC	7.566.680	9.125.722	10.993.286	12.150.204	15.009.701	18.920.201	23.640.747	29.401.176	36.392.883	44.852.287	55.054.328	67.320.342	82.024.760
LOANS PORTFOLIO	**9.903.207**	**14.173.799**	**23.035.193**	**30.581.860**	**37.779.165**	**47.621.827**	**59.503.364**	**74.002.266**	**91.600.276**	**112.892.452**	**138.570.818**	**169.444.170**	**206.454.943**
Loans TC	3.856.971	7.591.399	15.150.409	19.548.506	24.149.160	30.440.777	38.035.682	47.303.655	58.552.637	72.163.002	88.577.101	108.311.935	131.969.924
Loans FC	6.046.236	6.582.400	7.884.784	11.033.354	13.630.004	17.181.050	21.467.683	26.698.611	33.047.638	40.729.451	49.993.717	61.132.235	74.485.019
Non Performing Loans	1.253.104	1.222.467	1.124.179	686.539	848.113	1.069.073	1.335.805	1.661.294	2.056.356	2.534.349	3.110.808	3.803.891	4.634.755
Non Performing Loans Provision	-1.253.104	-1.222.467	-1.124.179	-686.539	-848.113	-1.069.073	-1.335.805	-1.661.294	-2.056.356	-2.534.349	-3.110.808	-3.803.891	-4.634.755
ACCRUED INTEREST GAIN	**1.830.016**	**1.540.853**	**2.264.167**	**1.883.235**	**2.326.446**	**2.932.558**	**3.664.225**	**4.557.069**	**5.640.757**	**6.951.932**	**8.533.209**	**10.434.394**	**12.713.522**
Accrued Interest & Income Accruals TC	1.551.078	1.218.955	2.007.764	1.552.070	1.917.342	2.416.871	3.019.874	3.755.713	4.648.835	5.729.441	7.032.652	8.599.515	10.477.861
Accrued Interest & Income Accruals FC	278.938	321.898	256.403	331.165	409.103	515.688	644.351	801.357	991.922	1.222.491	1.500.557	1.834.879	2.235.662
SUBSIDIARIES & ASSOCIATES	**2.351.131**	**3.686.152**	**3.030.802**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**	**2.650.198**
Subsidiaries & Associates TC	2.351.131	3.685.924	3.030.599	2.649.953	2.649.953	2.649.953	2.649.953	2.649.953	2.649.953	2.649.953	2.649.953	2.649.953	2.649.953
Subsidiaries & Associates FC	0	228	203	245	245	245	245	245	245	245	245	245	245
FIXED ASSETS	**3.002.490**	**2.886.874**	**2.764.391**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**	**2.859.020**
Fixed Assets TC	2.949.003	2.842.285	2.721.135	2.789.792	2.789.792	2.789.792	2.789.792	2.789.792	2.789.792	2.789.792	2.789.792	2.789.792	2.789.792
Fixed Assets FC	53.487	44.589	43.256	69.228	69.228	69.228	69.228	69.228	69.228	69.228	69.228	69.228	69.228
OTHER ASSETS	**714.991**	**919.556**	**1.520.082**	**1.381.937**	**1.707.170**	**2.151.942**	**2.688.846**	**3.344.025**	**4.139.246**	**5.101.400**	**6.261.758**	**7.656.867**	**9.329.315**
Other Assets TC	477.581	836.493	1.243.095	1.186.944	1.466.286	1.848.299	2.309.446	2.872.177	3.555.192	4.381.584	5.378.213	6.576.470	8.012.933
Other Assets FC	237.410	83.063	276.987	194.994	240.885	303.643	379.401	471.848	584.055	719.816	883.545	1.080.397	1.316.382
TOTAL ASSETS	**35.566.694**	**44.229.756**	**69.733.241**	**76.289.543**	**94.243.948**	**118.797.465**	**148.437.162**	**184.606.139**	**228.506.154**	**281.621.643**	**345.678.924**	**422.695.624**	**515.022.740**

ISBANK	ACTUAL			FORECASTED										
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**19.075.421**	**23.830.245**	**34.687.433**	**40.356.935**	**49.854.761**	**62.843.497**	**78.522.806**	**97.656.084**	**120.879.058**	**148.976.990**	**182.863.096**	**223.604.695**	**272.445.458**
Customer Deposits TC	8.257.377	11.064.029	20.440.313	24.586.073	30.372.295	38.285.235	47.837.314	59.493.605	73.641.402	90.759.099	111.403.041	136.223.457	165.978.009
Customer Deposits FC	10.818.044	12.766.216	14.247.120	15.770.863	19.482.465	24.558.261	30.685.492	38.162.479	47.237.656	58.217.891	71.460.055	87.381.238	106.467.449
BANKS & INTERBANK BORROWINGS	**2.488.421**	**1.644.395**	**8.556.191**	**6.518.277**	**8.258.958**	**11.029.614**	**14.213.069**	**17.994.941**	**22.448.917**	**27.678.199**	**33.795.295**	**40.926.152**	**49.210.720**
Banks & Interbank Borrowings TC	1.592.110	1.122.045	5.647.474	4.157.782	5.310.214	7.276.411	9.488.767	12.085.617	15.101.277	18.590.311	22.608.667	27.216.190	32.475.801
Banks & Interbank Borrowings FC	896.311	522.350	2.908.717	2.360.495	2.948.744	3.753.203	4.724.302	5.909.323	7.347.640	9.087.888	11.186.627	13.709.962	16.734.919
FUNDS BORROWED AND OTHERS	**4.182.471**	**5.619.688**	**10.638.461**	**14.893.471**	**18.398.583**	**23.191.994**	**28.978.343**	**36.039.358**	**44.609.650**	**54.979.013**	**67.484.466**	**82.519.894**	**100.544.268**
Funds Borrowed & Others TC	158.312	124.972	1.681.728	1.731.100	2.138.507	2.695.656	3.368.215	4.188.932	5.185.076	6.390.329	7.843.865	9.591.466	11.686.478
Funds Borrowed & Others FC	4.024.159	5.494.716	8.956.733	13.162.371	16.260.076	20.496.338	25.610.128	31.850.426	39.424.574	48.588.684	59.640.600	72.928.429	88.857.791
ACCRUED INTEREST EXPENSES	**249.772**	**223.794**	**560.119**	**762.001**	**941.334**	**1.186.582**	**1.482.631**	**1.843.897**	**2.282.382**	**2.812.914**	**3.452.736**	**4.222.000**	**5.144.188**
Accrued Interest & Expense Accruals TC	193.810	148.620	381.950	517.447	639.226	805.764	1.006.801	1.252.123	1.549.882	1.910.147	2.344.627	2.867.006	3.493.230
Accrued Interest & Expense Accruals FC	55.962	75.174	178.169	244.554	302.109	380.817	475.830	591.774	732.500	902.767	1.108.109	1.354.994	1.650.958
GENERAL PROVISIONS	**75.382**	**109.028**	**165.654**	**201.672**	**201.672**	**201.672**	**201.672**	**201.672**	**201.672**	**201.672**	**201.672**	**201.672**	**201.672**
General Provisions TC	67.970	96.630	153.321	187.377	187.377	187.377	187.377	187.377	187.377	187.377	187.377	187.377	187.377
General Provisions FC	7.412	12.398	12.333	14.295	14.295	14.295	14.295	14.295	14.295	14.295	14.295	14.295	14.295
OTHER PROVISIONS	**2.223.023**	**3.188.992**	**3.831.169**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**	**3.252.612**
Employees Termination Reserves TC	38.868	31.628	32.314	31.865	31.865	31.865	31.865	31.865	31.865	31.865	31.865	31.865	31.865
Employees Termination Reserves FC	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Provisions TC	2.032.274	3.023.595	3.685.275	3.096.027	3.096.027	3.096.027	3.096.027	3.096.027	3.096.027	3.096.027	3.096.027	3.096.027	3.096.027
Other Provisions FC	151.881	133.769	113.580	124.720	124.720	124.720	124.720	124.720	124.720	124.720	124.720	124.720	124.720
OTHER LIABILITIES	**1.620.421**	**1.899.399**	**2.112.677**	**2.712.430**	**3.350.788**	**4.223.774**	**5.277.596**	**6.563.563**	**8.124.402**	**10.012.892**	**12.290.411**	**15.028.695**	**18.311.331**
Other Liabilities TC	1.123.689	1.398.931	1.673.268	2.309.016	2.852.432	3.595.581	4.492.670	5.587.377	6.916.076	8.523.695	10.462.483	12.793.507	15.587.924
Other Liabilities FC	496.732	500.468	439.409	403.414	498.356	628.193	784.926	976.185	1.208.326	1.489.197	1.827.928	2.235.188	2.723.407
SHAREHOLDERS EQUITY	**5.659.187**	**7.714.215**	**9.181.537**	**9.952.640**	**12.933.983**	**16.620.924**	**21.232.735**	**26.963.336**	**34.055.101**	**42.795.239**	**53.525.264**	**66.649.866**	**82.647.409**
Paid in Capital	1.426.724	1.640.757	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942	1.968.942
Other Reserves	3.150.293	4.012.282	4.438.246	5.241.768	5.241.768	5.241.768	5.241.768	5.241.768	5.241.768	5.241.768	5.241.768	5.241.768	5.241.768
Securities Revaluation Fund	632.295	1.201.402	1.544.726	178.813	178.813	178.813	178.813	178.813	178.813	178.813	178.813	178.813	178.813
Retained Earnings	449.875	859.774	1.229.623	2.563.117	5.544.460	9.231.401	13.843.212	19.573.813	26.665.578	35.405.716	46.135.741	59.260.343	75.257.886
TOTAL LIABILITIES	**35.574.098**	**44.229.756**	**69.733.241**	**76.289.543**	**94.243.948**	**118.797.465**	**148.437.162**	**184.606.139**	**228.506.154**	**281.621.643**	**345.678.924**	**422.695.624**	**515.022.740**

ISBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**2.496.214**	**2.950.288**	**3.435.794**	**3.963.635**	**5.090.558**	**6.519.190**	**8.264.592**	**10.397.733**	**12.994.141**	**16.143.924**	**19.952.670**	**24.544.081**
Interest Income	4.962.269	5.872.017	8.157.442	9.477.377	12.011.692	15.242.681	19.166.182	23.939.880	29.723.926	36.709.744	45.120.548	55.216.795
Interest Expense	2.466.055	2.921.729	4.721.647	5.513.743	6.921.133	8.723.491	10.901.590	13.542.147	16.729.784	20.565.821	25.167.879	30.672.714
Net Fees & Commissions Income	**752.522**	**893.818**	**1.130.018**	**1.351.038**	**1.686.604**	**2.114.121**	**2.633.653**	**3.266.112**	**4.032.859**	**4.959.421**	**6.075.584**	**7.416.123**
Fees & Commissions Received	886.887	1.011.972	1.246.142	1.491.280	1.863.003	2.336.911	2.912.394	3.612.581	4.460.961	5.485.613	6.719.275	8.200.152
Fees & Commissions Paid	134.365	118.154	116.124	140.241	176.399	222.791	278.741	346.469	428.103	526.192	643.691	784.029
Net Trading Income	**583.502**	**246.462**	**-253.612**	**-159.668**	**-199.468**	**-250.209**	**-311.824**	**-386.792**	**-477.627**	**-587.334**	**-719.420**	**-877.975**
Net Trading Gain on Securities	479.278	240.197	239.426	61.548	76.890	96.449	120.200	149.098	184.112	226.402	277.317	338.436
Net Trading Gain on FC Positions	104.224	6.265	-493.038	-221.216	-276.358	-346.657	-432.025	-535.890	-661.739	-813.736	-996.737	-1.216.410
Other Operating Income	**5.124.374**	**4.085.413**	**4.303.625**	**5.121.406**	**6.397.990**	**8.025.503**	**10.001.847**	**12.406.453**	**15.319.991**	**18.838.885**	**23.075.572**	**28.161.250**
TOTAL OPERATING PROFIT	**8.956.612**	**8.175.981**	**8.615.826**	**10.276.411**	**12.975.684**	**16.408.605**	**20.588.268**	**25.683.506**	**31.869.364**	**39.354.895**	**48.384.406**	**59.243.479**
Provision for Losses	**1.105.551**	**1.121.835**	**-76.109**	**161.574**	**220.960**	**266.731**	**325.489**	**395.062**	**477.993**	**576.460**	**693.083**	**830.863**
Other Operating Expense	**6.018.435**	**5.063.143**	**5.488.038**	**6.388.158**	**8.146.047**	**10.377.110**	**13.099.527**	**16.423.737**	**20.466.199**	**25.365.904**	**31.285.571**	**38.415.686**
NET OPERATING INCOME	**1.832.626**	**1.991.003**	**3.203.896**	**3.726.679**	**4.608.676**	**5.764.763**	**7.163.251**	**8.864.707**	**10.925.172**	**13.412.532**	**16.405.752**	**19.996.930**
Monetary Gain & Losses	**-459.804**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**1.372.822**	**1.991.003**	**3.203.896**	**3.726.679**	**4.608.676**	**5.764.763**	**7.163.251**	**8.864.707**	**10.925.172**	**13.412.532**	**16.405.752**	**19.996.930**
Provision for Taxes	**513.451**	**761.310**	**-640.779**	**-745.336**	**-921.735**	**-1.152.953**	**-1.432.650**	**-1.772.941**	**-2.185.034**	**-2.682.506**	**-3.281.150**	**-3.999.386**
NET PROFIT/LOSSES	**1.886.273**	**2.752.313**	**2.563.117**	**2.981.343**	**3.686.941**	**4.611.811**	**5.730.601**	**7.091.766**	**8.740.138**	**10.730.025**	**13.124.601**	**15.997.544**

ISBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**6.324.200**	**5.976.288**	**7.024.766**	**8.175.033**	**10.098.990**	**12.730.095**	**15.906.225**	**19.782.019**	**24.486.256**	**30.178.004**	**37.042.253**	**45.295.206**	**55.188.793**
Letters of Guarantees	4.176.849	4.183.906	4.782.472	5.114.691	6.318.411	7.964.556	9.951.694	12.376.576	15.319.771	18.880.801	23.175.402	28.338.844	34.528.744
Bank Acceptances	165.726	186.312	146.071	170.279	210.354	265.157	331.314	412.043	510.028	628.583	771.560	943.462	1.149.537
Letters of Credits	1.098.083	1.605.139	2.023.629	2.096.703	2.590.153	3.264.970	4.079.572	5.073.622	6.280.148	7.739.948	9.500.466	11.617.154	14.154.626
Other Guarantees	883.542	931	72.594	793.359	980.073	1.235.413	1.543.645	1.919.778	2.376.308	2.928.673	3.594.825	4.395.746	5.355.885
COMMITMENTS	**3.568.524**	**6.856.088**	**8.973.426**	**7.986.801**	**9.866.459**	**12.436.983**	**15.539.982**	**19.326.535**	**23.922.456**	**29.483.151**	**36.189.349**	**44.252.277**	**53.918.062**
Irrevocable Commitments	0	6.427.157	8.233.305	7.986.801	9.866.459	12.436.983	15.539.982	19.326.535	23.922.456	29.483.151	36.189.349	44.252.277	53.918.062
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**1.963.343**	**1.650.844**	**10.853.352**	**4.234.225**	**5.230.732**	**6.593.502**	**8.238.566**	**10.246.018**	**12.682.558**	**15.630.577**	**19.185.886**	**23.460.471**	**28.584.814**
Foreign Currency Buys	561.476	336.695	3.536.711	2.510.985	3.101.935	3.910.086	4.885.644	6.076.106	7.521.026	9.269.263	11.377.637	13.912.556	16.951.401
Foreign Currency Sells	884.619	347.954	3.113.163	1.723.240	2.128.797	2.683.416	3.352.922	4.169.912	5.161.532	6.361.313	7.808.249	9.547.914	11.633.413
NET BALANCE SHEET POSITION	**200.744**	**-314.720**	**-442.220**	**-1.164.401**	**-1.438.437**	**-1.813.196**	**-2.265.584**	**-2.817.628**	**-3.487.670**	**-4.298.367**	**-5.276.068**	**-6.451.567**	**-7.860.748**
NET OFF BALANCE SHEET POSITION	**-323.143**	**-11.259**	**423.548**	**787.745**	**973.138**	**1.226.671**	**1.532.723**	**1.906.194**	**2.359.494**	**2.907.950**	**3.569.388**	**4.364.642**	**5.317.988**
TOTAL POSITION	**-122.399**	**-325.979**	**-18.672**	**-376.655**	**-465.299**	**-586.525**	**-732.861**	**-911.434**	**-1.128.176**	**-1.390.417**	**-1.706.679**	**-2.086.925**	**-2.542.760**

Valuation Day	**30.06.2006**				**ISBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	1.724.760	2.981.343	3.686.941	4.611.811	5.730.601	7.091.766	8.740.138	10.730.025	13.124.601	15.997.544
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	1.536.310	2.110.967	2.073.871	2.062.085	2.036.829	2.003.679	1.961.726	1.914.433	1.861.422	1.803.563
Total Discounted Cash Flows	**19.364.883**									
Last Year Profit	15.997.544									
Discount Rate	**25,8%**									
Terminal Value	62.005.984									
Days To Maturity	3.471									
Discounted Terminal Value	**6.990.555**									
Discounted CFs + Terminal Value	**26.355.438**									
Book Value+General Provision	**8.429.552**									
DCF Value / Book Value	**3,13**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	48.755.562	60.229.967	75.921.771	94.864.080	117.979.159	146.035.034	179.980.388	220.918.486	270.138.764	329.143.711
Balance Sheet Weighted	61,41%	61,41%	61,41%	61,41%	61,41%	61,41%	61,41%	61,41%	61,41%	61,41%
Net Balance Sheet	29.940.700	36.987.111	46.623.419	58.255.855	72.450.783	89.679.844	110.525.623	135.665.632	165.891.714	202.126.542
Effective Rate Balance Sheet	**2,21%**	**2,21%**	**2,21%**	**2,21%**	**2,21%**	**2,21%**	**2,21%**	**2,21%**	**2,21%**	**2,21%**
Total Off Balance Sheet	16.161.834	19.965.450	25.167.078	31.446.207	39.108.555	48.408.712	59.661.155	73.231.601	89.547.482	109.106.854
Off-Balance Sheet Weighted	36,38%	36,38%	36,38%	36,38%	36,38%	36,38%	36,38%	36,38%	36,38%	36,38%
Net Off Balance Sheet	5.879.340	7.263.017	9.155.262	11.439.479	14.226.882	17.610.087	21.703.492	26.640.140	32.575.519	39.690.814
Effective Rate Off Balance Sheet	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**
Total Loss Weight	**2,64%**	**2,64%**	**2,64%**	**2,64%**	**2,64%**	**2,64%**	**2,64%**	**2,64%**	**2,64%**	**2,64%**
Lost Amount	686.539	848.113	1.069.073	1.335.805	1.661.294	2.056.356	2.534.349	3.110.808	3.803.891	4.634.755
Provision Left	1.124.179									
Total Provision	686.539	848.113	1.069.073	1.335.805	1.661.294	2.056.356	2.534.349	3.110.808	3.803.891	4.634.755
Additional Provision	-437.640	161.574	220.960	266.731	325.489	395.062	477.993	576.460	693.083	830.863

ISBANK	ACTUAL			FORECASTED										
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	31.022.944	45.802.659	62.939.145	67.669.304	75.693.190	95.934.057	121.739.073	153.074.987	191.201.192	237.396.767	293.190.565	360.365.328	441.001.252
Interest Income	4.962.269	5.872.017	7.772.520	4.271.182	9.477.377	12.011.692	15.242.681	19.166.182	23.939.880	29.723.926	36.709.744	45.120.548	55.216.795
Interest Rate	16,0%	12,8%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%	12,3%
Interest Bearing Liabilities	28.080.958	40.742.478	56.705.759	61.977.395	69.140.493	86.788.703	109.389.661	136.702.300	169.814.004	209.785.914	257.888.529	315.596.799	384.625.594
Interest Expense	2.466.055	2.921.729	4.460.164	2.491.565	5.513.743	6.921.133	8.723.491	10.901.590	13.542.147	16.729.784	20.565.821	25.167.879	30.672.714
Interest Rate	8,8%	7,2%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%	7,9%
Net Interest Margin	7,2%	5,6%	4,5%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	12.049.290	18.328.465	26.701.833	30.803.019	34.180.512	42.700.496	53.562.596	66.752.815	82.801.271	102.246.364	125.731.635	154.007.494	187.949.556
Cash Loans Commissions	77.480	67.240	111.064	65.485	144.146	180.076	225.883	281.509	349.188	431.192	530.233	649.478	792.618
Cash Loans Commissions Rate (%)	0,6%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Non-Cash Loans	5.830.898	6.260.042	7.211.740	7.871.082	9.137.012	11.414.543	14.318.160	17.844.122	22.134.138	27.332.130	33.610.128	41.168.729	50.241.999
Non-Cash Loans Commissions	73.497	71.654	79.814	44.523	102.526	128.082	160.663	200.228	248.366	306.692	377.137	461.952	563.763
Non-Cash Loans Commissions Rate (%)	1,3%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Cash & Non-Cash Loans	17.880.188	24.588.507	33.913.573	38.674.101	43.317.524	54.115.039	67.880.756	84.596.938	104.935.409	129.578.494	159.341.764	195.176.223	238.191.556
Other Commissions	735.910	873.078	961.064	560.163	1.244.608	1.554.845	1.950.365	2.430.657	3.015.027	3.723.077	4.578.242	5.607.845	6.843.771
Other Commissions Rate (%)	4,1%	3,6%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%
Funds Borrowed	4.742.137	7.870.481	12.287.779	15.001.176	16.646.027	20.795.288	26.085.169	32.508.851	40.324.504	49.794.331	61.231.739	75.002.180	91.532.081
Cash Loans Commissions Expense	25.378	27.093	32.048	19.997	44.018	54.990	68.978	85.965	106.632	131.673	161.918	198.332	242.042
Cash Loans Commissions Expense (%)	0,5%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Non-Cash Loans	5.830.898	6.260.042	7.211.740	7.871.082	9.137.012	11.414.543	14.318.160	17.844.122	22.134.138	27.332.130	33.610.128	41.168.729	50.241.999
Non-Cash Loans Commissions Expense	197	20	8	4	10	13	16	20	25	31	38	46	57
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	12.842.879	19.217.071	26.147.137	29.199.691	33.171.656	41.854.117	53.024.670	66.456.978	82.680.571	102.190.020	125.578.615	153.531.633	186.842.517
Other Commissions Expense	108.790	91.041	74.800	42.694	96.213	121.396	153.796	192.756	239.812	296.399	364.237	445.313	541.930
Other Commissions Expense rate (%)	0,8%	0,5%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Securities Portfolio	15.087.158	20.595.509	26.105.671	27.733.099	30.773.981	38.444.837	48.224.388	60.100.031	74.549.050	92.056.187	113.200.846	138.658.649	169.217.944
Trading Gain on Securities Portfolio	479.278	240.197	423.386	27.733	61.548	76.890	96.449	120.200	149.098	184.112	226.402	277.317	338.436
Trading Gain Rate	3,2%	1,2%	1,6%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	17.880.188	24.588.507	33.913.573	38.674.101	43.317.524	54.115.039	67.880.756	84.596.938	104.935.409	129.578.494	159.341.764	195.176.223	238.191.556
Other Operating Income	5.054.299	4.018.596	3.954.656	2.304.999	5.121.406	6.397.990	8.025.503	10.001.847	12.406.453	15.319.991	18.838.885	23.075.572	28.161.250
Other Operating Income Rate (%)	28,3%	16,3%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%	11,7%
Cost to Income Ratio	185,3%	131,7%	120,2%	120,2%	120,2%	120,2%	120,2%	120,2%	120,2%	120,2%	120,2%	120,2%	120,2%
ROE	45,4%	37,5%	-2,9%	23,5%	26,1%	24,9%	24,4%	23,8%	23,2%	22,7%	22,3%	21,8%	21,4%

ISBANK	ACTUAL			FORECASTED										
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Cash FC / Total Assets	0,3%	0,2%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	18,2%	19,1%	20,2%	20,2%	20,2%	20,2%	20,2%	20,2%	20,2%	20,2%	20,2%	20,2%	20,2%
Securities Portfolio FC / Total Assets	19,7%	18,2%	15,6%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%	15,9%
Loans TC / Total Assets	14,5%	20,1%	23,7%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%
Loans FC / Total Assets	15,8%	13,0%	13,0%	14,5%	14,5%	14,5%	14,5%	14,5%	14,5%	14,5%	14,5%	14,5%	14,5%
Accrued Interest Income TC / Total Assets	3,0%	2,7%	2,5%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%	2,0%
Accrued Interest Income FC / Total Assets	0,7%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Other Assets TC / Total Assets	1,7%	1,7%	1,9%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%	1,6%
Other Assets FC / Total Assets	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Customer Deposits TC / Total Assets	24,3%	26,8%	31,8%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%	32,2%
Customer Deposits FC / Total Assets	28,7%	23,4%	20,1%	20,7%	20,7%	20,7%	20,7%	20,7%	20,7%	20,7%	20,7%	20,7%	20,7%
Funds Borrowed TC / Total Assets	0,3%	1,4%	2,4%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%
Funds Borrowed FC / Total Assets	11,6%	12,8%	14,5%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%	17,3%
Accrued Interest Expense TC / Total Assets	0,5%	0,5%	0,6%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Accrued Interest Expense FC / Total Assets	0,2%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Other Liabilities TC / Total Assets	3,3%	3,1%	2,8%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%	3,0%
Other Liabilities FC / Total Assets	1,4%	0,9%	0,6%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Letters of Guarantees / Total Assets	10,5%	7,9%	6,8%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%	6,7%
Bank Acceptances / Total Assets	0,4%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Letters of Credits / Total Assets	22,5%	27,3%	28,6%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%	2,7%
Other Guarantees / Total Assets	3,0%	0,2%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%
Irrevocable Commitments / Total Assets	11,6%	12,3%	10,9%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%	10,5%
Total FC Assets / Total Assets	43,7%	39,7%	38,0%	40,5%	40,5%	40,5%	40,5%	40,5%	40,5%	40,5%	40,5%	40,5%	40,5%
Total FC Liabilities / Total Assets	43,9%	40,4%	39,2%	42,1%	42,1%	42,1%	42,1%	42,1%	42,1%	42,1%	42,1%	42,1%	42,1%
Foreign Currency Buys / Total Assets	0,9%	3,8%	4,1%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%	3,3%
Foreign Currency Sells / Total Assets	1,6%	3,5%	3,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%

ISBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**7.545.952**	**5.632.476**	**12.151.782**	**23.171.360**	**30.373.746**	**49.460.736**	**61,41%**	**83,60%**	**2,21%**
Cash	376.626	526	0	0					
Due from banks	2.575.265	4.733.726	0	139.222					
Interbank money market placements	43.400	0	0	0					
Receivables from reverse repo transactions	489	0	0	0					
Reserve deposits	1.745.687	0	0	0					
Special finance houses	0	0	0	0					
Loans	1.286.613	898.224	11.058.798	16.780.443					
Loans under follow-up (Net)	0	0	0	0					
Subsidiaries, associates and HTM Securities	0	0	0	2.425.084					
Miscellaneous receivables	6	0	0	827.808					
Marketable securities held to maturity (Net)	1.299.801	0	0	0					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	1.000.101	0					
Leased assets (Net)	0	0	92.883	0					
Fixed assets (Net)	0	0	0	2.718.999	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Other assets	218.065	0	0	279.804					
II -Off balance sheet items	**979.859**	**2.969.258**	**8.206.748**	**1.262.079**	**5.959.305**	**16.381.649**	**36,38%**	**16,40%**	**0,43%**
Guarantees and pledges	53.736	2.822.398	1.062.396	144.909					
Commitments	775.717	0	6.811.926	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	86.466	0	2.933					
Interest and income accruals	150.406	60.394	332.426	1.114.237	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	0	0	0					
III -Total risk weighted assets	**8.525.811**	**8.601.734**	**20.358.530**	**24.433.439**	**36.333.051**	**65.842.385**	**55,18%**	**100,00%**	**2,64%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	55,18%
Bank' Loans Under Follow Up	2,64%

2.8 Sekerbank

SEKERBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**291.137**	**461.562**	**468.334**	**507.682**	**521.685**	**622.384**	**730.616**	**854.606**	**995.852**	**1.156.655**	**1.339.546**	**1.547.369**	**1.783.311**
Cash TC	20.738	22.284	29.512	27.321	27.944	32.425	37.241	42.757	49.042	56.197	64.334	73.581	84.079
Cash FC	14.007	14.736	14.477	16.099	16.466	19.106	21.943	25.194	28.897	33.113	37.908	43.356	49.542
TCMB & Deposit Reserves TC	111.567	75.972	121.073	101.348	103.659	120.279	138.143	158.607	181.920	208.460	238.646	272.947	311.888
TCMB & Deposit Reserves FC	124.822	130.118	112.477	117.308	119.983	139.221	159.898	183.585	210.568	241.288	276.228	315.930	361.005
Banks & Interbank Placements TC	2.618	361	95.120	173.730	180.086	225.794	274.921	331.200	395.311	468.300	551.315	645.646	752.740
Banks & Interbank Placements FC	17.385	218.091	95.675	71.875	73.546	85.559	98.471	113.263	130.114	149.297	171.116	195.909	224.057
SECURITIES PORTFOLIO	**1.149.072**	**1.086.413**	**1.224.598**	**1.411.731**	**1.443.924**	**1.675.437**	**1.924.268**	**2.209.324**	**2.534.056**	**2.903.749**	**3.324.224**	**3.802.019**	**4.344.460**
Securities Portfolio TC	715.806	626.683	775.243	930.691	951.915	1.104.541	1.268.584	1.456.509	1.670.591	1.914.313	2.191.513	2.506.502	2.864.109
Securities Portfolio FC	433.266	459.730	449.355	481.039	492.009	570.896	655.684	752.815	863.466	989.436	1.132.711	1.295.517	1.480.351
LOANS PORTFOLIO	**833.188**	**1.412.013**	**1.282.918**	**1.434.943**	**1.467.665**	**1.702.985**	**1.955.908**	**2.245.651**	**2.575.723**	**2.951.494**	**3.378.883**	**3.864.534**	**4.415.894**
Loans TC	521.793	1.053.465	982.542	1.134.760	1.160.636	1.346.729	1.546.741	1.775.871	2.036.893	2.334.055	2.672.036	3.056.091	3.492.109
Loans FC	247.738	342.808	274.946	300.184	307.029	356.257	409.167	469.780	538.829	617.439	706.847	808.443	923.785
Non Performing Loans	111.170	128.772	254.377	14.991	15.333	17.792	20.434	23.461	26.910	30.836	35.301	40.374	46.135
Non Performing Loans Provision	-47.513	-113.032	-228.947	-14.991	-15.333	-17.792	-20.434	-23.461	-26.910	-30.836	-35.301	-40.374	-46.135
ACCRUED INTEREST GAIN	**224.520**	**118.772**	**135.437**	**78.090**	**79.871**	**92.677**	**106.441**	**122.209**	**140.171**	**160.621**	**183.880**	**210.309**	**240.314**
Accrued Interest & Income Accruals TC	197.100	65.698	86.432	55.702	56.972	66.107	75.925	87.172	99.985	114.572	131.163	150.015	171.418
Accrued Interest & Income Accruals FC	27.420	53.074	49.005	22.388	22.898	26.570	30.516	35.036	40.186	46.049	52.717	60.294	68.896
SUBSIDIARIES & ASSOCIATES	**16.504**	**10.813**	**11.982**	**11.022**	**11.022**	**11.022**	**11.022**	**11.022**	**11.022**	**11.022**	**11.022**	**11.022**	**11.022**
Subsidiaries & Associates TC	16.504	10.813	11.982	11.022	11.022	11.022	11.022	11.022	11.022	11.022	11.022	11.022	11.022
Subsidiaries & Associates FC	0	0	0	0	0	0	0	0	0	0	0	0	0
FIXED ASSETS	**107.537**	**103.019**	**98.143**	**95.347**	**95.347**	**95.347**	**95.347**	**95.347**	**95.347**	**95.347**	**95.347**	**95.347**	**95.347**
Fixed Assets TC	107.183	101.947	96.895	93.966	93.966	93.966	93.966	93.966	93.966	93.966	93.966	93.966	93.966
Fixed Assets FC	354	1.072	1.248	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381	1.381
OTHER ASSETS	**37.627**	**68.850**	**102.645**	**68.270**	**69.826**	**81.022**	**93.055**	**106.840**	**122.544**	**140.422**	**160.756**	**183.861**	**210.093**
Other Assets TC	27.564	46.183	79.131	47.551	48.635	56.433	64.815	74.416	85.354	97.806	111.969	128.062	146.333
Other Assets FC	10.063	22.667	23.514	20.719	21.191	24.589	28.241	32.424	37.190	42.616	48.787	55.799	63.760
TOTAL ASSETS	**2.659.585**	**3.261.442**	**3.324.057**	**3.607.084**	**3.689.340**	**4.280.874**	**4.916.657**	**5.644.999**	**6.474.716**	**7.419.311**	**8.493.658**	**9.714.461**	**11.100.441**

SEKERBANK	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**2.064.981**	**2.333.097**	**2.516.104**	**2.654.335**	**2.714.864**	**3.150.154**	**3.618.006**	**4.153.969**	**4.764.530**	**5.459.626**	**6.250.203**	**7.148.552**	**8.168.449**
Customer Deposits TC	987.914	1.198.933	1.586.385	1.689.134	1.727.653	2.004.658	2.302.384	2.643.454	3.031.995	3.474.333	3.977.430	4.549.111	5.198.141
Customer Deposits FC	1.077.067	1.134.164	929.719	965.200	987.211	1.145.496	1.315.622	1.510.515	1.732.535	1.985.294	2.272.773	2.599.441	2.970.308
BANKS & INTERBANK BORROWINGS	**207.535**	**270.322**	**83.271**	**-16.605**	**-99.711**	**-103.492**	**-116.213**	**-131.351**	**-150.016**	**-172.814**	**-200.498**	**-233.939**	**-274.144**
Banks & Interbank Borrowings TC	196.944	258.603	80.081	-18.787	-101.948	-106.124	-119.270	-134.894	-154.114	-177.542	-205.944	-240.201	-281.332
Banks & Interbank Borrowings FC	10.591	11.719	3.190	2.182	2.237	2.632	3.057	3.543	4.098	4.729	5.447	6.262	7.188
FUNDS BORROWED AND OTHERS	**107.293**	**200.513**	**189.433**	**203.850**	**208.498**	**241.928**	**277.858**	**319.020**	**365.910**	**419.293**	**480.008**	**549.000**	**627.327**
Funds Borrowed & Others TC	71.957	87.065	100.086	102.611	104.951	121.779	139.865	160.584	184.187	211.058	241.620	276.348	315.776
Funds Borrowed & Others FC	35.336	113.448	89.347	101.239	103.547	120.149	137.994	158.436	181.723	208.235	238.388	272.652	311.551
ACCRUED INTEREST EXPENSES	**33.391**	**23.080**	**23.269**	**24.466**	**25.024**	**29.037**	**33.349**	**38.289**	**43.917**	**50.324**	**57.611**	**65.892**	**75.293**
Accrued Interest & Expense Accruals TC	29.300	14.648	18.256	13.102	13.400	15.549	17.858	20.504	23.518	26.948	30.851	35.285	40.319
Accrued Interest & Expense Accruals FC	4.091	8.432	5.013	11.365	11.624	13.488	15.491	17.785	20.400	23.376	26.760	30.607	34.974
GENERAL PROVISIONS	**5.641**	**9.676**	**9.041**	**9.764**	**9.764**	**9.764**	**9.764**	**9.764**	**9.764**	**9.764**	**9.764**	**9.764**	**9.764**
General Provisions TC	5.390	9.420	8.950	9.648	9.648	9.648	9.648	9.648	9.648	9.648	9.648	9.648	9.648
General Provisions FC	251	256	91	116	116	116	116	116	116	116	116	116	116
OTHER PROVISIONS	**27.151**	**78.712**	**82.803**	**66.526**	**66.526**	**66.526**	**66.526**	**66.526**	**66.526**	**66.526**	**66.526**	**66.526**	**66.526**
Employees Termination Reserves TC	12.948	18.132	5.555	5.487	5.487	5.487	5.487	5.487	5.487	5.487	5.487	5.487	5.487
Employees Termination Reserves FC	0	2	5	6	6	6	6	6	6	6	6	6	6
Other Provisions TC	14.095	60.533	77.221	60.927	60.927	60.927	60.927	60.927	60.927	60.927	60.927	60.927	60.927
Other Provisions FC	108	45	22	106	106	106	106	106	106	106	106	106	106
OTHER LIABILITIES	**70.035**	**76.394**	**93.954**	**109.382**	**111.876**	**129.814**	**149.093**	**171.180**	**196.340**	**224.984**	**257.563**	**294.582**	**336.611**
Other Liabilities TC	66.001	63.051	88.601	104.628	107.014	124.172	142.613	163.740	187.807	215.206	246.369	281.779	321.981
Other Liabilities FC	4.034	13.343	5.353	4.754	4.862	5.642	6.480	7.440	8.533	9.778	11.194	12.803	14.630
SHAREHOLDERS EQUITY	**165.915**	**269.648**	**326.182**	**557.549**	**654.736**	**759.775**	**881.330**	**1.021.146**	**1.181.842**	**1.366.336**	**1.577.927**	**1.820.346**	**2.097.803**
Paid in Capital	76.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000	125.000
Other Reserves	23.673	66.769	144.572	184.276	184.276	184.276	184.276	184.276	184.276	184.276	184.276	184.276	184.276
Securities Revaluation Fund	0	0	16.651	-14.737	-14.737	-14.737	-14.737	-14.737	-14.737	-14.737	-14.737	-14.737	-14.737
Retained Earnings	66.242	77.879	39.959	263.010	360.197	465.236	586.791	726.607	887.303	1.071.797	1.283.388	1.525.807	1.803.264
TOTAL LIABILITIES	**2.681.942**	**3.261.442**	**3.324.057**	**3.607.084**	**3.689.340**	**4.280.874**	**4.916.657**	**5.644.999**	**6.474.716**	**7.419.311**	**8.493.658**	**9.714.461**	**11.100.441**

SEKERBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**310.985**	**308.163**	**222.869**	**256.830**	**285.357**	**331.119**	**382.399**	**441.055**	**507.983**	**584.282**	**671.184**	**770.069**
Interest Income	639.080	567.979	481.671	504.635	552.715	640.294	737.636	848.816	975.427	1.119.495	1.283.273	1.469.288
Interest Expense	328.095	259.816	258.803	247.805	267.358	309.175	355.237	407.761	467.444	535.213	612.089	699.218
Net Fees & Commissions Income	**102.833**	**106.763**	**110.199**	**117.892**	**129.145**	**148.961**	**171.031**	**196.248**	**224.980**	**257.689**	**294.891**	**337.165**
Fees & Commissions Received	119.872	128.330	130.671	137.184	149.853	172.928	198.576	227.870	261.230	299.189	342.341	391.353
Fees & Commissions Paid	17.039	21.567	20.471	19.292	20.708	23.967	27.545	31.621	36.249	41.500	47.450	54.188
Net Trading Income	**10.876**	**16.134**	**-28.278**	**-4.071**	**-4.447**	**-5.132**	**-5.893**	**-6.762**	**-7.752**	**-8.878**	**-10.159**	**-11.613**
Net Trading Gain on Securities	-5.829	12.334	6.956	2.856	3.119	3.600	4.134	4.743	5.438	6.228	7.126	8.146
Net Trading Gain on FC Positions	16.705	3.800	-35.234	-6.927	-7.566	-8.731	-10.026	-11.505	-13.190	-15.106	-17.285	-19.760
Other Operating Income	**41.032**	**70.129**	**73.838**	**76.462**	**83.523**	**96.385**	**110.680**	**127.007**	**145.601**	**166.758**	**190.810**	**218.128**
TOTAL OPERATING PROFIT	**465.726**	**501.189**	**378.627**	**447.113**	**493.578**	**571.333**	**658.217**	**757.549**	**870.812**	**999.852**	**1.146.726**	**1.313.748**
Provision for Losses	**111.710**	**167.974**	**-239.265**	**342**	**2.458**	**2.642**	**3.027**	**3.448**	**3.926**	**4.465**	**5.074**	**5.760**
Other Operating Expense	**239.220**	**271.062**	**289.129**	**325.288**	**359.820**	**416.747**	**480.420**	**553.230**	**636.269**	**730.898**	**838.629**	**961.166**
NET OPERATING INCOME	**114.796**	**62.153**	**328.763**	**121.483**	**131.299**	**151.943**	**174.769**	**200.871**	**230.617**	**264.489**	**303.023**	**346.822**
Monetary Gain & Losses	**-22.778**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**92.018**	**62.153**	**328.763**	**121.483**	**131.299**	**151.943**	**174.769**	**200.871**	**230.617**	**264.489**	**303.023**	**346.822**
Provision for Taxes	**14.596**	**22.371**	**-65.753**	**-24.297**	**-26.260**	**-30.389**	**-34.954**	**-40.174**	**-46.123**	**-52.898**	**-60.605**	**-69.364**
NET PROFIT/LOSSES	**106.614**	**84.524**	**263.010**	**97.187**	**105.040**	**121.555**	**139.815**	**160.697**	**184.493**	**211.591**	**242.419**	**277.458**

SEKERBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**1.250.020**	**1.865.408**	**1.728.499**	**1.839.914**	**1.881.872**	**2.183.604**	**2.507.906**	**2.879.421**	**3.302.646**	**3.784.469**	**4.332.476**	**4.955.187**	**5.662.153**
Letters of Guarantees	1.149.704	1.703.052	1.626.970	1.721.184	1.760.434	2.042.695	2.346.070	2.693.611	3.089.525	3.540.255	4.052.899	4.635.427	5.296.772
Bank Acceptances	15.624	30.539	26.330	23.164	23.692	27.490	31.573	36.250	41.579	47.644	54.544	62.383	71.283
Letters of Credits	45.426	96.166	58.492	64.918	66.399	77.045	88.487	101.596	116.529	133.529	152.864	174.836	199.780
Other Guarantees	39.266	35.651	16.707	30.648	31.347	36.373	41.776	47.964	55.014	63.040	72.168	82.541	94.317
COMMITMENTS	**27.423**	**707.549**	**713.914**	**724.903**	**741.433**	**860.312**	**988.083**	**1.134.455**	**1.301.201**	**1.491.033**	**1.706.940**	**1.952.281**	**2.230.816**
Irrevocable Commitments	27.423	707.549	713.914	724.903	741.433	860.312	988.083	1.134.455	1.301.201	1.491.033	1.706.940	1.952.281	2.230.816
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**59.379**	**191.301**	**298.362**	**341.693**	**349.485**	**405.520**	**465.747**	**534.741**	**613.339**	**702.819**	**804.590**	**920.235**	**1.051.527**
Foreign Currency Buys	29.871	96.213	140.750	177.632	181.683	210.813	242.123	277.990	318.850	365.367	418.274	478.393	546.646
Foreign Currency Sells	29.508	95.088	148.166	164.061	167.802	194.707	223.624	256.751	294.489	337.452	386.317	441.842	504.881
NET BALANCE SHEET POSITION	**-256.423**	**-39.113**	**-12.043**	**-53.975**	**-55.206**	**-64.057**	**-73.571**	**-84.470**	**-96.885**	**-111.020**	**-127.096**	**-145.364**	**-166.103**
NET OFF BALANCE SHEET POSITION	**363**	**1.125**	**-7.416**	**13.571**	**13.881**	**16.107**	**18.499**	**21.239**	**24.361**	**27.915**	**31.957**	**36.550**	**41.765**
TOTAL POSITION	**-256.060**	**-37.988**	**-19.459**	**-40.404**	**-41.325**	**-47.951**	**-55.072**	**-63.231**	**-72.524**	**-83.105**	**-95.139**	**-108.813**	**-124.338**

Valuation Day	**30.06.2006**				**SEKERBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	261.491	97.187	105.040	121.555	139.815	160.697	184.493	211.591	242.419	277.458
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	232.920	68.814	59.084	54.351	49.695	45.403	41.410	37.752	34.382	31.281
Total Discounted Cash Flows	**655.089**									
Last Year Profit	277.458									
Discount Rate	**25,8%**									
Terminal Value	1.075.417									
Days To Maturity	3.471									
Discounted Terminal Value	**121.243**									
Discounted CFs + Terminal Value	**776.332**									
Book Value+General Provision	**305.822**									
DCF Value / Book Value	**2,54**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	2.195.354	2.245.416	2.605.438	2.992.389	3.435.675	3.940.659	4.515.561	5.169.433	5.912.442	6.755.981
Balance Sheet Weighted	51,96%	51,96%	51,96%	51,96%	51,96%	51,96%	51,96%	51,96%	51,96%	51,96%
Net Balance Sheet	1.140.768	1.166.782	1.353.859	1.554.930	1.785.274	2.047.678	2.346.413	2.686.184	3.072.272	3.510.599
Effective Rate Balance Sheet	**1,15%**	**1,15%**	**1,15%**	**1,15%**	**1,15%**	**1,15%**	**1,15%**	**1,15%**	**1,15%**	**1,15%**
Total Off Balance Sheet	2.564.817	2.623.305	3.043.916	3.495.989	4.013.877	4.603.847	5.275.501	6.039.416	6.907.468	7.892.969
Off-Balance Sheet Weighted	16,81%	16,81%	16,81%	16,81%	16,81%	16,81%	16,81%	16,81%	16,81%	16,81%
Net Off Balance Sheet	431.265	441.099	511.823	587.838	674.918	774.120	887.056	1.015.505	1.161.465	1.327.173
Effective Rate Off Balance Sheet	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**	**0,43%**
Total Loss Weight	**1,58%**	**1,58%**	**1,58%**	**1,58%**	**1,58%**	**1,58%**	**1,58%**	**1,58%**	**1,58%**	**1,58%**
Lost Amount	14.991	15.333	17.792	20.434	23.461	26.910	30.836	35.301	40.374	46.135
Provision Left	228.947									
Total Provision	14.991	15.333	17.792	20.434	23.461	26.910	30.836	35.301	40.374	46.135
Additional Provison	-213.956	342	2.458	2.642	3.027	3.448	3.926	4.465	5.074	5.760

SEKERBANK	ACTUAL			FORECASTED										
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	2.540.700	2.939.323	3.109.782	3.300.611	3.349.899	3.669.069	4.250.442	4.896.619	5.634.661	6.475.141	7.431.500	8.518.698	9.753.514
Interest Income	639.080	567.979	462.046	250.648	504.635	552.715	640.294	737.636	848.816	975.427	1.119.495	1.283.273	1.469.288
Interest Rate	25,2%	19,3%	14,9%	14,9%	14,9%	14,9%	14,9%	14,9%	14,9%	14,9%	14,9%	14,9%	14,9%
Interest Bearing Liabilities	2.581.244	2.821.671	2.958.537	2.974.192	2.832.615	3.056.121	3.534.121	4.060.645	4.661.031	5.343.265	6.117.910	6.996.664	7.992.623
Interest Expense	328.095	259.816	255.276	131.165	247.805	267.358	309.175	355.237	407.761	467.444	535.213	612.089	699.218
Interest Rate	12,7%	9,2%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%	8,6%
Net Interest Margin	12,4%	10,1%	6,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	1.131.225	1.424.136	1.322.108	1.436.166	1.451.304	1.585.325	1.829.446	2.100.779	2.410.687	2.763.609	3.165.189	3.621.709	4.140.214
Cash Loans Commissions	26.866	30.231	27.112	15.053	30.175	32.961	38.037	43.678	50.122	57.459	65.809	75.301	86.081
Cash Loans Commissions Rate (%)	2,4%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%	2,1%
Non-Cash Loans	1.604.177	1.818.685	1.731.665	1.833.897	1.860.893	2.032.738	2.345.755	2.693.664	3.091.034	3.543.557	4.058.472	4.643.831	5.308.670
Non-Cash Loans Commissions	46.436	46.745	41.124	22.260	44.807	48.944	56.481	64.858	74.426	85.322	97.720	111.815	127.823
Non-Cash Loans Commissions Rate (%)	2,9%	2,6%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%	2,4%
Cash & Non-Cash Loans	2.735.403	3.242.820	3.053.773	3.270.063	3.312.197	3.618.063	4.175.201	4.794.443	5.501.721	6.307.166	7.223.661	8.265.540	9.448.884
Other Commissions	46.570	51.354	56.564	30.958	62.203	67.947	78.410	90.039	103.322	118.448	135.660	155.226	177.449
Other Commissions Rate (%)	1,7%	1,6%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%	1,9%
Funds Borrowed	141.746	213.278	192.451	204.023	206.174	225.213	259.893	298.439	342.465	392.601	449.650	514.504	588.164
Cash Loans Commissions Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash Loans Commissions Expense (%)	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%
Non-Cash Loans	1.604.177	1.818.685	1.731.665	1.833.897	1.860.893	2.032.738	2.345.755	2.693.664	3.091.034	3.543.557	4.058.472	4.643.831	5.308.670
Non-Cash Loans Commissions Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	2.018.131	2.264.690	2.123.405	2.151.494	2.008.909	2.156.349	2.495.796	2.868.321	3.292.815	3.774.744	4.321.467	4.941.117	5.642.792
Other Commissions Expense	17.039	21.567	20.112	10.415	19.292	20.708	23.967	27.545	31.621	36.249	41.500	47.450	54.188
Other Commissions Expense rate (%)	0,8%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Securities Portfolio	1.124.199	1.181.045	1.401.015	1.412.933	1.427.827	1.559.680	1.799.852	2.066.796	2.371.690	2.718.903	3.113.987	3.563.122	4.073.239
Trading Gain on Securities Portfolio	-5.829	12.334	11.086	1.413	2.856	3.119	3.600	4.134	4.743	5.438	6.228	7.126	8.146
Trading Gain Rate	-0,5%	1,0%	0,8%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	2.772.901	3.259.916	3.079.305	3.270.063	3.312.197	3.618.063	4.175.201	4.794.443	5.501.721	6.307.166	7.223.661	8.265.540	9.448.884
Other Operating Income	40.973	70.492	70.112	38.055	76.462	83.523	96.385	110.680	127.007	145.601	166.758	190.810	218.128
Other Operating Income Rate (%)	1,5%	2,2%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%
Cost to Income Ratio	57,8%	65,3%	86,8%	86,8%	86,8%	86,8%	86,8%	86,8%	86,8%	86,8%	86,8%	86,8%	86,8%
ROE	62,9%	33,7%	-0,3%	2,3%	16,0%	14,9%	14,8%	14,7%	14,6%	14,5%	14,4%	14,3%	14,2%

SEKERBANK	ACTUAL			FORECASTED										
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,7%	0,9%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Cash FC / Total Assets	0,6%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	21,2%	21,0%	26,9%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Securities Portfolio FC / Total Assets	16,9%	14,5%	13,3%	13,3%	13,3%	13,3%	13,3%	13,3%	13,3%	13,3%	13,3%	13,3%	13,3%
Loans TC / Total Assets	27,9%	32,5%	30,0%	31,5%	31,5%	31,5%	31,5%	31,5%	31,5%	31,5%	31,5%	31,5%	31,5%
Loans FC / Total Assets	10,4%	10,3%	8,0%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%	8,3%
Accrued Interest Income TC / Total Assets	3,8%	2,3%	2,1%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Accrued Interest Income FC / Total Assets	1,5%	1,4%	1,2%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Other Assets TC / Total Assets	1,3%	2,0%	1,9%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
Other Assets FC / Total Assets	0,7%	0,7%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Customer Deposits TC / Total Assets	37,1%	41,3%	47,0%	46,8%	46,8%	46,8%	46,8%	46,8%	46,8%	46,8%	46,8%	46,8%	46,8%
Customer Deposits FC / Total Assets	36,2%	30,2%	26,6%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%	26,8%
Funds Borrowed TC / Total Assets	2,4%	2,8%	2,9%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%
Funds Borrowed FC / Total Assets	2,4%	3,6%	2,6%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%
Accrued Interest Expense TC / Total Assets	0,9%	0,6%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Accrued Interest Expense FC / Total Assets	0,2%	0,3%	0,2%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Other Liabilities TC / Total Assets	2,3%	2,6%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%	2,9%
Other Liabilities FC / Total Assets	0,4%	0,3%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Letters of Guarantees / Total Assets	49,7%	50,5%	46,6%	47,7%	47,7%	47,7%	47,7%	47,7%	47,7%	47,7%	47,7%	47,7%	47,7%
Bank Acceptances / Total Assets	0,7%	0,9%	0,7%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Letters of Credits / Total Assets	4,6%	4,4%	3,5%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%
Other Guarantees / Total Assets	2,6%	1,7%	1,4%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Irrevocable Commitments / Total Assets	25,5%	22,4%	21,2%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%	20,1%
Total FC Assets / Total Assets	36,8%	33,9%	28,9%	28,6%	28,6%	28,6%	28,6%	28,6%	28,6%	28,6%	28,6%	28,6%	28,6%
Total FC Liabilities / Total Assets	39,5%	34,7%	29,6%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%	30,1%
Foreign Currency Buys / Total Assets	2,7%	4,6%	5,3%	4,9%	4,9%	4,9%	4,9%	4,9%	4,9%	4,9%	4,9%	4,9%	4,9%
Foreign Currency Sells / Total Assets	2,7%	4,6%	5,3%	4,5%	4,5%	4,5%	4,5%	4,5%	4,5%	4,5%	4,5%	4,5%	4,5%

SEKERBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**452.967**	**71.905**	**556.237**	**850.212**	**1.142.712**	**2.199.094**	**51,96%**	**72,68%**	**1,15%**
Cash	47.622	-	-	-					
Due from banks	197.324	71.905	-	-					
Interbank money market placements	54.700	-	-	-					
Receivables from reverse repo transactions	-	-	-	-					
Reserve deposits	75.438	-	-	-					
Special finance houses	-	-	-	-					
Loans	34.241	-	545.014	728.768					
Loans under follow-up (Net)	-	-	-	-					
Subsidiaries, associates and HTM Securities	-	-	-	4.579					
Miscellaneous receivables	-	-	-	18.581					
Marketable securities held to maturity (Net)	37.511	-	-	-					
Advances for assets acquired by financial leasing	-	-	-	-					
Financial lease receivables	-	-	-	-					
Leased assets (Net)	-	-	11.223	-					
Fixed assets (Net)	-	-	-	75.425	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Other assets	6.131	-	-	22.859					
II -Off balance sheet items	**196.209**	**841.408**	**342.128**	**90.103**	**429.449**	**2.554.018**	**16,81%**	**27,32%**	**0,43%**
Guarantees and pledges	10.978	840.931	13.744	64.989					
Commitments	-	-	328.384	-					
Other off balance sheet items	-	-	-	-					
Transactions related with derivative financial instruments	181.091	-	-	64					
Interest and income accruals	4.140	477	-	25.050	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	-	-	-	-					
III -Total risk weighted assets	**649.176**	**913.313**	**898.365**	**940.315**	**1.572.160**	**4.753.112**	**33,08%**	**100,00%**	**1,58%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	33,08%
Bank' Loans Under Follow Up	1,58%

2.9 TEB

TEB	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**1.992.232**	**1.980.163**	**1.701.811**	**2.405.832**	**2.955.150**	**3.388.441**	**3.924.588**	**4.531.544**	**5.228.122**	**6.024.881**	**6.935.821**	**7.976.349**	**9.163.929**
Cash TC	8.566	12.388	25.856	39.135	47.807	54.647	63.112	72.694	83.691	96.270	110.651	127.078	145.827
Cash FC	57.200	67.672	60.028	101.782	124.336	142.127	164.141	189.063	217.664	250.379	287.782	330.506	379.268
TCMB & Deposit Reserves TC	72.027	48.361	92.213	108.272	132.265	151.191	174.609	201.119	231.545	266.346	306.134	351.582	403.454
TCMB & Deposit Reserves FC	589.917	915.812	385.328	599.607	732.480	837.288	966.976	1.113.791	1.282.285	1.475.012	1.695.357	1.947.049	2.234.310
Banks & Interbank Placements TC	454.499	196.116	441.031	503.507	629.418	728.735	851.628	990.751	1.150.417	1.333.046	1.541.846	1.780.350	2.052.561
Banks & Interbank Placements FC	810.023	739.814	697.355	1.053.530	1.288.843	1.474.452	1.704.123	1.964.125	2.262.520	2.603.829	2.994.050	3.439.783	3.948.509
SECURITIES PORTFOLIO	**142.367**	**442.792**	**1.188.875**	**1.218.463**	**1.488.476**	**1.701.456**	**1.964.995**	**2.263.339**	**2.605.736**	**2.997.377**	**3.445.141**	**3.956.605**	**4.540.350**
Securities Portfolio TC	123.649	371.879	931.075	899.214	1.098.481	1.255.658	1.450.147	1.670.322	1.923.008	2.212.035	2.542.481	2.919.936	3.350.734
Securities Portfolio FC	18.718	70.913	257.800	319.249	389.995	445.798	514.848	593.017	682.728	785.342	902.660	1.036.668	1.189.615
LOANS PORTFOLIO	**1.984.250**	**2.359.577**	**3.841.606**	**5.462.646**	**6.673.177**	**7.628.017**	**8.809.521**	**10.147.067**	**11.682.111**	**13.437.926**	**15.445.358**	**17.738.364**	**20.355.427**
Loans TC	548.458	834.389	1.608.603	2.275.617	2.779.898	3.177.663	3.669.851	4.227.043	4.866.509	5.597.942	6.434.194	7.389.410	8.479.620
Loans FC	1.427.321	1.515.551	2.216.173	3.187.029	3.893.279	4.450.354	5.139.670	5.920.024	6.815.602	7.839.984	9.011.164	10.348.955	11.875.807
Non Performing Loans	24.415	20.881	33.679	94.979	116.027	132.629	153.172	176.428	203.118	233.646	268.549	308.418	353.921
Non Performing Loans Provision	-15.944	-11.244	-16.849	-94.979	-116.027	-132.629	-153.172	-176.428	-203.118	-233.646	-268.549	-308.418	-353.921
ACCRUED INTEREST GAIN	**37.857**	**49.706**	**81.663**	**204.129**	**249.365**	**285.046**	**329.196**	**379.178**	**436.540**	**502.152**	**577.166**	**662.851**	**760.646**
Accrued Interest & Income Accruals TC	15.639	29.600	55.204	164.101	200.466	229.150	264.644	304.824	350.938	403.684	463.988	532.872	611.490
Accrued Interest & Income Accruals FC	22.218	20.106	26.459	40.028	48.898	55.895	64.553	74.354	85.602	98.468	113.178	129.980	149.157
SUBSIDIARIES & ASSOCIATES	**892**	**656**	**1.535**	**1.468**	**1.468**	**1.468**	**1.468**	**1.468**	**1.468**	**1.468**	**1.468**	**1.468**	**1.468**
Subsidiaries & Associates TC	892	656	1.535	1.468	1.468	1.468	1.468	1.468	1.468	1.468	1.468	1.468	1.468
Subsidiaries & Associates FC	0	0	0	0	0	0	0	0	0	0	0	0	0
FIXED ASSETS	**52.397**	**53.837**	**67.817**	**71.559**	**71.559**	**71.559**	**71.559**	**71.559**	**71.559**	**71.559**	**71.559**	**71.559**	**71.559**
Fixed Assets TC	45.964	45.849	60.952	63.216	63.216	63.216	63.216	63.216	63.216	63.216	63.216	63.216	63.216
Fixed Assets FC	6.433	7.988	6.865	8.343	8.343	8.343	8.343	8.343	8.343	8.343	8.343	8.343	8.343
OTHER ASSETS	**77.402**	**51.441**	**79.426**	**94.426**	**115.350**	**131.855**	**152.279**	**175.399**	**201.933**	**232.284**	**266.984**	**306.620**	**351.857**
Other Assets TC	64.432	38.593	67.594	58.506	71.471	81.698	94.352	108.677	125.118	143.923	165.423	189.982	218.011
Other Assets FC	12.970	12.848	11.832	35.919	43.879	50.158	57.927	66.722	76.815	88.361	101.560	116.638	133.846
TOTAL ASSETS	**4.287.397**	**4.938.172**	**6.962.733**	**9.458.522**	**11.554.546**	**13.207.842**	**15.253.606**	**17.569.554**	**20.227.469**	**23.267.647**	**26.743.496**	**30.713.816**	**35.245.237**

TEB	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**2.903.838**	**3.152.726**	**4.187.301**	**6.138.032**	**7.498.229**	**8.571.122**	**9.898.704**	**11.401.620**	**13.126.453**	**15.099.352**	**17.354.976**	**19.931.483**	**22.872.112**
Customer Deposits TC	662.972	711.906	1.116.675	1.804.535	2.204.423	2.519.846	2.910.145	3.351.991	3.859.079	4.439.096	5.102.233	5.859.707	6.724.230
Customer Deposits FC	2.240.866	2.440.820	3.070.626	4.333.497	5.293.806	6.051.277	6.988.560	8.049.629	9.267.374	10.660.256	12.252.743	14.071.777	16.147.883
BANKS & INTERBANK BORROWINGS	**167.267**	**265.622**	**874.989**	**701.033**	**902.959**	**1.023.215**	**1.181.910**	**1.358.252**	**1.559.543**	**1.788.011**	**2.047.301**	**2.341.273**	**2.674.283**
Banks & Interbank Borrowings TC	94.142	199.331	835.269	639.369	825.014	932.428	1.075.233	1.233.586	1.414.232	1.619.086	1.851.378	2.114.511	2.412.324
Banks & Interbank Borrowings FC	73.125	66.291	39.720	61.665	77.945	90.787	106.677	124.666	145.311	168.925	195.923	226.762	261.959
FUNDS BORROWED AND OTHERS	**655.083**	**896.047**	**1.048.317**	**1.570.450**	**1.918.464**	**2.192.970**	**2.532.639**	**2.917.168**	**3.358.477**	**3.863.254**	**4.440.368**	**5.099.582**	**5.851.958**
Funds Borrowed & Others TC	115.963	117.588	325.069	452.977	553.358	632.536	730.509	841.422	968.712	1.114.309	1.280.771	1.470.913	1.687.927
Funds Borrowed & Others FC	539.120	778.459	723.248	1.117.472	1.365.106	1.560.434	1.802.130	2.075.746	2.389.764	2.748.944	3.159.597	3.628.668	4.164.031
ACCRUED INTEREST EXPENSES	**39.462**	**37.132**	**54.041**	**69.132**	**84.452**	**96.536**	**111.488**	**128.415**	**147.842**	**170.063**	**195.467**	**224.486**	**257.606**
Accrued Interest & Expense Accruals TC	24.225	21.928	30.947	38.764	47.354	54.130	62.514	72.005	82.898	95.358	109.603	125.874	144.445
Accrued Interest & Expense Accruals FC	15.237	15.204	23.094	30.368	37.098	42.406	48.974	56.410	64.944	74.705	85.865	98.612	113.161
GENERAL PROVISIONS	**7.886**	**10.235**	**18.300**	**22.836**	**22.836**	**22.836**	**22.836**	**22.836**	**22.836**	**22.836**	**22.836**	**22.836**	**22.836**
General Provisions TC	7.886	10.235	18.300	13.051	13.051	13.051	13.051	13.051	13.051	13.051	13.051	13.051	13.051
General Provisions FC	0	0	0	9.785	9.785	9.785	9.785	9.785	9.785	9.785	9.785	9.785	9.785
OTHER PROVISIONS	**54.933**	**36.115**	**59.750**	**10.968**	**10.968**	**10.968**	**10.968**	**10.968**	**10.968**	**10.968**	**10.968**	**10.968**	**10.968**
Employees Termination Reserves TC	2.361	2.735	2.945	2.233	2.233	2.233	2.233	2.233	2.233	2.233	2.233	2.233	2.233
Employees Termination Reserves FC	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Provisions TC	45.449	24.908	53.381	6.717	6.717	6.717	6.717	6.717	6.717	6.717	6.717	6.717	6.717
Other Provisions FC	7.123	8.472	3.424	2.018	2.018	2.018	2.018	2.018	2.018	2.018	2.018	2.018	2.018
OTHER LIABILITIES	**138.467**	**124.549**	**212.282**	**467.376**	**570.947**	**652.641**	**753.729**	**868.168**	**999.504**	**1.149.728**	**1.321.481**	**1.517.667**	**1.741.579**
Other Liabilities TC	94.096	76.088	106.919	137.782	168.314	192.398	222.198	255.934	294.652	338.938	389.571	447.406	513.415
Other Liabilities FC	44.371	48.461	105.363	329.594	402.633	460.244	531.531	612.233	704.851	810.790	931.911	1.070.261	1.228.164
SHAREHOLDERS EQUITY	**320.468**	**415.746**	**507.764**	**540.360**	**623.636**	**728.340**	**848.008**	**986.792**	**1.147.158**	**1.332.360**	**1.546.021**	**1.792.282**	**2.075.852**
Paid in Capital	55.125	57.800	57.800	76.362	76.362	76.362	76.362	76.362	76.362	76.362	76.362	76.362	76.362
Other Reserves	216.814	300.455	338.371	433.762	433.762	433.762	433.762	433.762	433.762	433.762	433.762	433.762	433.762
Securities Revaluation Fund	162	3.995	9.354	-29.674	-29.674	-29.674	-29.674	-29.674	-29.674	-29.674	-29.674	-29.674	-29.674
Retained Earnings	48.367	53.496	102.239	59.910	143.186	247.890	367.558	506.342	666.708	851.910	1.065.571	1.311.832	1.595.402
TOTAL LIABILITIES	**4.287.404**	**4.938.172**	**6.962.744**	**9.458.522**	**11.554.546**	**13.207.842**	**15.253.606**	**17.569.554**	**20.227.469**	**23.267.647**	**26.743.496**	**30.713.816**	**35.245.237**

TEB	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**206.180**	**257.431**	**331.449**	**401.083**	**472.756**	**544.884**	**629.711**	**726.603**	**837.708**	**964.895**	**1.110.388**	**1.276.677**
Interest Income	489.797	579.974	878.087	1.082.119	1.276.617	1.468.507	1.694.774	1.952.795	2.248.387	2.586.410	2.972.684	3.413.716
Interest Expense	283.617	322.543	546.638	681.036	803.860	923.623	1.065.063	1.226.192	1.410.680	1.621.515	1.862.296	2.137.039
Net Fees & Commissions Income	**53.736**	**67.013**	**128.441**	**166.944**	**196.647**	**226.043**	**260.691**	**300.212**	**345.494**	**397.285**	**456.478**	**524.073**
Fees & Commissions Received	73.443	91.696	152.697	198.921	234.415	269.432	310.722	357.808	411.749	473.434	543.923	624.405
Fees & Commissions Paid	19.707	24.683	24.255	31.978	37.767	43.389	50.031	57.596	66.255	76.149	87.445	100.332
Net Trading Income	**29.380**	**45.393**	**-58.054**	**-130.702**	**-154.023**	**-177.031**	**-204.161**	**-235.099**	**-270.541**	**-311.071**	**-357.387**	**-410.268**
Net Trading Gain on Securities	62.423	64.703	39.866	2.707	3.190	3.666	4.228	4.869	5.603	6.443	7.402	8.497
Net Trading Gain on FC Positions	-33.043	-19.310	-97.919	-133.409	-157.213	-180.698	-208.390	-239.968	-276.145	-317.514	-364.789	-418.765
Other Operating Income	**31.780**	**18.022**	**20.862**	**26.979**	**31.792**	**36.542**	**42.142**	**48.528**	**55.843**	**64.209**	**73.769**	**84.685**
TOTAL OPERATING PROFIT	**321.076**	**387.859**	**422.698**	**464.303**	**547.173**	**630.438**	**728.382**	**840.244**	**968.504**	**1.115.318**	**1.283.249**	**1.475.168**
Provision for Losses	**10.912**	**18.644**	**73.216**	**21.048**	**16.602**	**20.543**	**23.256**	**26.690**	**30.528**	**34.903**	**39.869**	**45.503**
Other Operating Expense	**190.735**	**220.400**	**274.594**	**339.160**	**399.691**	**460.310**	**531.646**	**613.097**	**706.473**	**813.338**	**935.553**	**1.075.203**
NET OPERATING INCOME	**119.429**	**148.815**	**74.888**	**104.095**	**130.880**	**149.585**	**173.480**	**200.457**	**231.503**	**267.076**	**307.827**	**354.462**
Monetary Gain & Losses	**-39.163**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**80.266**	**148.815**	**74.888**	**104.095**	**130.880**	**149.585**	**173.480**	**200.457**	**231.503**	**267.076**	**307.827**	**354.462**
Provision for Taxes	**-26.894**	**-46.576**	**-14.978**	**-20.819**	**-26.176**	**-29.917**	**-34.696**	**-40.091**	**-46.301**	**-53.415**	**-61.565**	**-70.892**
NET PROFIT/LOSSES	**53.372**	**102.239**	**59.910**	**83.276**	**104.704**	**119.668**	**138.784**	**160.366**	**185.202**	**213.661**	**246.261**	**283.570**

TEB	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**1.210.793**	**1.530.562**	**2.038.584**	**3.454.323**	**4.219.806**	**4.823.602**	**5.570.730**	**6.416.532**	**7.387.222**	**8.497.518**	**9.766.924**	**11.216.914**	**12.871.822**
Letters of Guarantees	730.790	951.320	1.183.268	1.662.324	2.030.698	2.321.262	2.680.803	3.087.828	3.554.953	4.089.261	4.700.137	5.397.916	6.194.308
Bank Acceptances	48.514	45.697	52.685	67.769	82.787	94.633	109.291	125.884	144.928	166.710	191.615	220.062	252.529
Letters of Credits	430.692	515.191	696.330	1.097.831	1.341.112	1.533.006	1.770.454	2.039.261	2.347.759	2.700.626	3.104.061	3.564.887	4.090.840
Other Guarantees	797	18.354	106.301	626.399	765.210	874.701	1.010.183	1.163.559	1.339.581	1.540.920	1.771.111	2.034.049	2.334.146
COMMITMENTS	**616.217**	**620.395**	**722.920**	**722.522**	**882.633**	**1.008.926**	**1.165.199**	**1.342.110**	**1.545.144**	**1.777.379**	**2.042.893**	**2.346.180**	**2.692.328**
Irrevocable Commitments	613.719	600.029	698.719	722.522	882.633	1.008.926	1.165.199	1.342.110	1.545.144	1.777.379	2.042.893	2.346.180	2.692.328
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**684.104**	**1.016.720**	**3.029.916**	**2.547.894**	**3.112.512**	**3.557.869**	**4.108.948**	**4.732.807**	**5.448.785**	**6.267.734**	**7.204.043**	**8.273.550**	**9.494.204**
Foreign Currency Buys	317.892	432.441	1.290.010	1.596.774	1.950.621	2.229.728	2.575.091	2.966.066	3.414.771	3.928.009	4.514.797	5.185.060	5.950.048
Foreign Currency Sells	304.928	382.423	1.033.955	951.121	1.161.891	1.328.141	1.533.857	1.766.742	2.034.014	2.339.725	2.689.246	3.088.489	3.544.156
NET BALANCE SHEET POSITION	**24.958**	**-7.003**	**-303.635**	**-538.912**	**-658.336**	**-752.535**	**-869.095**	**-1.001.049**	**-1.152.487**	**-1.325.706**	**-1.523.747**	**-1.749.961**	**-2.008.145**
NET OFF BALANCE SHEET POSITION	**12.964**	**50.018**	**256.055**	**645.653**	**788.731**	**901.587**	**1.041.234**	**1.199.324**	**1.380.757**	**1.588.284**	**1.825.551**	**2.096.571**	**2.405.893**
TOTAL POSITION	**37.922**	**43.015**	**-47.580**	**106.741**	**130.395**	**149.052**	**172.139**	**198.275**	**228.270**	**262.579**	**301.804**	**346.610**	**397.747**

Valuation Day	**30.06.2006**				**TEB**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	-3.628	83.276	104.704	119.668	138.784	160.366	185.202	213.661	246.261	283.570
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	-3.231	58.964	58.895	53.507	49.328	45.309	41.569	38.121	34.927	31.970
Total Discounted Cash Flows	**409.358**									
Last Year Profit	283.570									
Discount Rate	**25,8%**									
Terminal Value	1.099.107									
Days To Maturity	3.471									
Discounted Terminal Value	**123.913**									
Discounted CFs + Terminal Value	**533.271**									
Book Value+General Provision	**566.824**									
DCF Value / Book Value	**0,94**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	8.240.060	10.066.070	11.506.386	13.288.611	15.306.215	17.621.733	20.270.270	23.298.355	26.757.211	30.704.887
Balance Sheet Weighted	58,26%	58,26%	58,26%	58,26%	58,26%	58,26%	58,26%	58,26%	58,26%	58,26%
Net Balance Sheet	4.800.821	5.864.690	6.703.847	7.742.206	8.917.702	10.266.768	11.809.858	13.574.079	15.589.277	17.889.271
Effective Rate Balance Sheet	**1,91%**	**1,91%**	**1,91%**	**1,91%**	**1,91%**	**1,91%**	**1,91%**	**1,91%**	**1,91%**	**1,91%**
Total Off Balance Sheet	4.176.844	5.102.439	5.832.528	6.735.929	7.758.642	8.932.366	10.274.896	11.809.817	13.563.094	15.564.150
Off-Balance Sheet Weighted	22,38%	22,38%	22,38%	22,38%	22,38%	22,38%	22,38%	22,38%	22,38%	22,38%
Net Off Balance Sheet	934.946	1.142.131	1.305.554	1.507.772	1.736.696	1.999.422	2.299.935	2.643.511	3.035.965	3.483.882
Effective Rate Off Balance Sheet	**0,34%**	**0,34%**	**0,34%**	**0,34%**	**0,34%**	**0,34%**	**0,34%**	**0,34%**	**0,34%**	**0,34%**
Total Loss Weight	**2,25%**	**2,25%**	**2,25%**	**2,25%**	**2,25%**	**2,25%**	**2,25%**	**2,25%**	**2,25%**	**2,25%**
Lost Amount	94.979	116.027	132.629	153.172	176.428	203.118	233.646	268.549	308.418	353.921
Provision Left	16.849									
Total Provision	94.979	116.027	132.629	153.172	176.428	203.118	233.646	268.549	308.418	353.921
Additional Provision	78.130	21.048	16.602	20.543	23.256	26.690	30.528	34.903	39.869	45.503

TEB	ACTUAL			FORECAST									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	4.462.774	5.166.706	7.383.759	8.785.510	9.945.342	11.732.900	13.496.495	15.576.022	17.947.403	20.664.075	23.770.711	27.320.810	31.374.172
Interest Income	489.797	579.974	792.396	481.889	1.082.119	1.276.617	1.468.507	1.694.774	1.952.795	2.248.387	2.586.410	2.972.684	3.413.716
Interest Rate	11,0%	11,2%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%	10,7%
Interest Bearing Liabilities	4.112.333	4.737.476	6.835.060	8.224.060	9.364.583	11.053.480	12.700.280	14.645.147	16.860.756	19.397.544	22.296.631	25.607.492	29.385.346
Interest Expense	283.617	322.543	490.268	301.504	681.036	803.860	923.623	1.065.063	1.226.192	1.410.680	1.621.515	1.862.296	2.137.039
Interest Rate	6,9%	6,8%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%	7,2%
Net Interest Margin	4,1%	4,4%	3,6%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	2.231.839	2.892.483	4.436.205	5.369.085	6.067.912	7.150.597	8.218.769	9.478.294	10.914.589	12.560.019	14.441.642	16.591.861	19.046.896
Cash Loans Commissions	6.867	10.079	15.806	9.777	21.920	25.831	29.690	34.240	39.428	45.372	52.170	59.937	68.806
Cash Loans Commissions Rate (%)	0,3%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Non-Cash Loans	1.413.662	1.706.409	2.381.397	3.189.536	3.837.064	4.521.704	5.197.166	5.993.631	6.901.877	7.942.370	9.132.221	10.491.919	12.044.368
Non-Cash Loans Commissions	18.985	19.480	26.536	18.165	43.350	51.085	58.717	67.715	77.976	89.731	103.174	118.536	136.075
Non-Cash Loans Commissions Rate (%)	1,3%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Cash & Non-Cash Loans	3.645.501	4.598.892	6.817.603	8.558.621	9.904.976	11.672.301	13.415.935	15.471.925	17.816.466	20.502.388	23.573.862	27.083.780	31.091.264
Other Commissions	47.591	62.137	90.732	58.217	133.651	157.498	181.026	208.768	240.403	276.646	318.090	365.450	419.525
Other Commissions Rate (%)	1,3%	1,4%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%	1,3%
Funds Borrowed	782.645	872.082	1.252.308	1.543.552	1.744.457	2.055.717	2.362.804	2.724.904	3.137.823	3.610.865	4.151.811	4.769.975	5.475.770
Cash Loans Commissions Expense	3.458	4.414	1.492	940	2.107	2.483	2.854	3.292	3.790	4.362	5.015	5.762	6.614
Cash Loans Commissions Expense (%)	0,4%	0,5%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Non-Cash Loans	1.413.662	1.706.409	2.381.397	3.189.536	3.837.064	4.521.704	5.197.166	5.993.631	6.901.877	7.942.370	9.132.221	10.491.919	12.044.368
Non-Cash Loans Commissions Expense	187	76	102	70	167	196	226	260	300	345	397	456	523
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	2.435.798	3.019.775	4.282.399	5.380.691	6.383.517	7.540.508	8.662.533	9.988.615	11.498.597	13.227.012	15.201.688	17.456.180	20.027.916
Other Commissions Expense	16.062	20.193	19.654	12.622	29.704	35.088	40.309	46.479	53.506	61.548	70.737	81.228	93.194
Other Commissions Expense rate (%)	0,7%	0,7%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Securities Portfolio	330.524	673.663	1.119.322	1.197.593	1.353.469	1.594.966	1.833.225	2.114.167	2.434.538	2.801.556	3.221.259	3.700.873	4.248.477
Trading Gain on Securities Portfolio	62.423	64.703	77.336	1.198	2.707	3.190	3.666	4.228	4.869	5.603	6.443	7.402	8.497
Trading Gain Rate	18,9%	9,6%	6,9%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	3.655.140	4.610.363	6.832.092	8.558.621	9.904.976	11.672.301	13.415.935	15.471.925	17.816.466	20.502.388	23.573.862	27.083.780	31.091.264
Other Operating Income	31.715	17.798	18.354	11.752	26.979	31.792	36.542	42.142	48.528	55.843	64.209	73.769	84.685
Other Operating Income Rate (%)	0,9%	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Cost to Income Ratio	73,4%	67,9%	59,7%	59,7%	59,7%	59,7%	59,7%	59,7%	59,7%	59,7%	59,7%	59,7%	59,7%
ROE	20,9%	-17,9%	7,1%	22,2%	14,3%	15,5%	15,2%	15,1%	15,0%	14,9%	14,8%	14,8%	14,7%

TEB	ACTUAL			FORECAST									
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,2%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Cash FC / Total Assets	1,3%	1,1%	1,0%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	5,3%	9,0%	10,8%	9,5%	9,5%	9,5%	9,5%	9,5%	9,5%	9,5%	9,5%	9,5%	9,5%
Securities Portfolio FC / Total Assets	1,7%	3,4%	3,6%	3,4%	3,4%	3,4%	3,4%	3,4%	3,4%	3,4%	3,4%	3,4%	3,4%
Loans TC / Total Assets	14,7%	21,4%	24,2%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%	24,1%
Loans FC / Total Assets	32,7%	31,5%	32,8%	33,7%	33,7%	33,7%	33,7%	33,7%	33,7%	33,7%	33,7%	33,7%	33,7%
Accrued Interest Income TC / Total Assets	0,5%	0,8%	1,1%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%	1,7%
Accrued Interest Income FC / Total Assets	0,4%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Other Assets TC / Total Assets	1,2%	0,9%	0,9%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Other Assets FC / Total Assets	0,3%	0,3%	0,3%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Customer Deposits TC / Total Assets	16,1%	15,2%	18,7%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%	19,1%
Customer Deposits FC / Total Assets	49,4%	47,5%	44,7%	45,8%	45,8%	45,8%	45,8%	45,8%	45,8%	45,8%	45,8%	45,8%	45,8%
Funds Borrowed TC / Total Assets	2,3%	3,3%	4,9%	4,8%	4,8%	4,8%	4,8%	4,8%	4,8%	4,8%	4,8%	4,8%	4,8%
Funds Borrowed FC / Total Assets	14,3%	12,7%	11,2%	11,8%	11,8%	11,8%	11,8%	11,8%	11,8%	11,8%	11,8%	11,8%	11,8%
Accrued Interest Expense TC / Total Assets	0,6%	0,5%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%	0,4%
Accrued Interest Expense FC / Total Assets	0,3%	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Other Liabilities TC / Total Assets	2,0%	1,7%	1,6%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%	1,5%
Other Liabilities FC / Total Assets	1,1%	1,5%	2,3%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%
Letters of Guarantees / Total Assets	17,9%	19,5%	17,5%	17,6%	17,6%	17,6%	17,6%	17,6%	17,6%	17,6%	17,6%	17,6%	17,6%
Bank Acceptances / Total Assets	1,0%	0,9%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Letters of Credits / Total Assets	36,5%	32,3%	34,5%	11,6%	11,6%	11,6%	11,6%	11,6%	11,6%	11,6%	11,6%	11,6%	11,6%
Other Guarantees / Total Assets	0,5%	2,3%	5,8%	6,6%	6,6%	6,6%	6,6%	6,6%	6,6%	6,6%	6,6%	6,6%	6,6%
Irrevocable Commitments / Total Assets	14,2%	12,6%	10,2%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%
Total FC Assets / Total Assets	67,0%	60,2%	54,6%	56,5%	56,5%	56,5%	56,5%	56,5%	56,5%	56,5%	56,5%	56,5%	56,5%
Total FC Liabilities / Total Assets	67,0%	63,0%	59,3%	62,2%	62,2%	62,2%	62,2%	62,2%	62,2%	62,2%	62,2%	62,2%	62,2%
Foreign Currency Buys / Total Assets	8,0%	16,8%	16,8%	16,9%	16,9%	16,9%	16,9%	16,9%	16,9%	16,9%	16,9%	16,9%	16,9%
Foreign Currency Sells / Total Assets	7,2%	13,8%	11,8%	10,1%	10,1%	10,1%	10,1%	10,1%	10,1%	10,1%	10,1%	10,1%	10,1%

TEB	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**1.755.753**	**986.292**	**1.093.833**	**3.892.197**	**4.636.372**	**7.957.802**	**58,26%**	**85,04%**	**1,91%**
Cash	136.869	402	0	-					
Due from banks	823.939	865.379	0	257					
Interbank money market placements	198.600	0	0	0					
Receivables from reverse repo transactions	4.028	0	0	0					
Reserve deposits	274.098	0	0	0					
Special finance houses	0	0	0	0					
Loans	301.931	120.511	778.496	3.768.232					
Loans under follow-up (Net)	0	0	0	12.081					
Subsidiaries, associates and HTM Securities	0	0	0	0					
Miscellaneous receivables	0	0	0	19.321					
Marketable securities held to maturity (Net)	0	0	0	0					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	306.353	0					
Leased assets (Net)	0	0	8.984	0					
Fixed assets (Net)	0	0	0	44.024	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Other assets	16.288	0	0	48.282					
II -Off balance sheet items	**93.033**	**1.236.118**	**515.241**	**310.577**	**815.421**	**3.642.872**	**22,38%**	**14,96%**	**0,34%**
Guarantees and pledges	65.830	1.192.775	165.565	167.775					
Commitments	20.351	0	347.775	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	32.094	0	34.317					
Interest and income accruals	6.852	4.119	1.901	108.485	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	7.130	0	0					
III -Total risk weighted assets	**1.848.786**	**2.222.410**	**1.609.074**	**4.202.774**	**5.451.793**	**11.600.674**	**47,00%**	**100,00%**	**2,25%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	47,00%
Bank' Loans Under Follow Up	2,25%

2.10 Tekstilbank

TEKSTILBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**359.381**	**336.225**	**411.083**	**611.309**	**656.711**	**763.416**	**875.892**	**1.003.877**	**1.147.954**	**1.310.236**	**1.492.869**	**1.698.271**	**1.929.127**
Cash TC	3.906	3.079	5.675	8.990	9.573	10.945	12.390	14.035	15.886	17.972	20.319	22.959	25.926
Cash FC	5.432	6.015	6.595	9.451	10.065	11.507	13.026	14.756	16.702	18.895	21.363	24.138	27.257
TCMB & Deposit Reserves TC	9.928	12.810	103.295	49.195	52.388	59.893	67.803	76.804	86.937	98.350	111.194	125.640	141.875
TCMB & Deposit Reserves FC	276.196	209.853	162.538	171.985	183.148	209.383	237.037	268.504	303.928	343.828	388.731	439.233	495.992
Banks & Interbank Placements TC	57.554	50.453	54.672	21.021	28.110	44.770	62.331	82.314	104.809	130.147	158.662	190.733	226.777
Banks & Interbank Placements FC	6.365	54.015	78.308	350.667	373.427	426.919	483.304	547.464	619.691	701.044	792.600	895.569	1.011.299
SECURITIES PORTFOLIO	**133.923**	**129.166**	**196.061**	**335.078**	**356.827**	**407.941**	**461.819**	**523.127**	**592.142**	**669.879**	**757.364**	**855.756**	**966.341**
Securities Portfolio TC	43.969	83.328	125.879	243.800	259.624	296.814	336.015	380.622	430.837	487.397	551.050	622.639	703.100
Securities Portfolio FC	89.954	45.838	70.182	91.279	97.203	111.127	125.804	142.505	161.306	182.482	206.314	233.116	263.241
LOANS PORTFOLIO	**549.529**	**805.124**	**1.280.399**	**2.013.892**	**2.144.606**	**2.451.811**	**2.775.631**	**3.144.103**	**3.558.903**	**4.026.116**	**4.551.921**	**5.143.277**	**5.807.915**
Loans TC	230.962	360.792	561.687	880.028	937.148	1.071.390	1.212.892	1.373.907	1.555.165	1.759.328	1.989.093	2.247.503	2.537.936
Loans FC	317.360	441.849	706.495	1.133.864	1.207.459	1.380.422	1.562.739	1.770.197	2.003.738	2.266.789	2.562.828	2.895.774	3.269.979
Non Performing Loans	1.869	3.602	17.844	40.667	43.306	49.510	56.049	63.489	71.865	81.300	91.918	103.859	117.280
Non Performing Loans Provision	-662	-1.119	-5.627	-40.667	-43.306	-49.510	-56.049	-63.489	-71.865	-81.300	-91.918	-103.859	-117.280
ACCRUED INTEREST GAIN	**33.718**	**29.497**	**32.574**	**129.892**	**138.322**	**158.136**	**179.022**	**202.788**	**229.541**	**259.675**	**293.589**	**331.730**	**374.597**
Accrued Interest & Income Accruals TC	31.515	26.218	26.881	119.302	127.046	145.244	164.427	186.255	210.828	238.505	269.654	304.686	344.058
Accrued Interest & Income Accruals FC	2.203	3.279	5.693	10.589	11.277	12.892	14.595	16.532	18.713	21.170	23.935	27.044	30.539
SUBSIDIARIES & ASSOCIATES	**94**	**107**	**107**	**132**	**132**	**132**	**132**	**132**	**132**	**132**	**132**	**132**	**132**
Subsidiaries & Associates TC	94	107	107	132	132	132	132	132	132	132	132	132	132
Subsidiaries & Associates FC	0	0	0	0	0	0	0	0	0	0	0	0	0
FIXED ASSETS	**73.862**	**74.963**	**92.721**	**88.065**	**88.065**	**88.065**	**88.065**	**88.065**	**88.065**	**88.065**	**88.065**	**88.065**	**88.065**
Fixed Assets TC	73.859	74.960	92.720	88.064	88.064	88.064	88.064	88.064	88.064	88.064	88.064	88.064	88.064
Fixed Assets FC	3	3	1	1	1	1	1	1	1	1	1	1	1
OTHER ASSETS	**45.270**	**42.793**	**15.926**	**27.349**	**29.124**	**33.295**	**37.693**	**42.697**	**48.330**	**54.674**	**61.815**	**69.845**	**78.871**
Other Assets TC	45.038	41.976	15.655	19.111	20.351	23.267	26.339	29.836	33.772	38.206	43.196	48.807	55.114
Other Assets FC	232	817	271	8.238	8.772	10.029	11.353	12.861	14.557	16.468	18.619	21.038	23.757
TOTAL ASSETS	**1.195.777**	**1.417.875**	**2.028.871**	**3.205.717**	**3.413.788**	**3.902.797**	**4.418.253**	**5.004.789**	**5.665.067**	**6.408.778**	**7.245.754**	**8.187.076**	**9.245.047**

TEKSTILBANK	ACTUAL			FORECASTED									
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**773.579**	**833.658**	**1.163.986**	**1.730.529**	**1.842.851**	**2.106.831**	**2.385.087**	**2.701.715**	**3.058.150**	**3.459.624**	**3.911.446**	**4.419.596**	**4.990.716**
Customer Deposits TC	201.476	301.581	563.413	819.920	873.138	998.211	1.130.048	1.280.065	1.448.944	1.639.161	1.853.233	2.093.993	2.364.588
Customer Deposits FC	572.103	532.077	600.573	910.609	969.713	1.108.620	1.255.039	1.421.649	1.609.207	1.820.463	2.058.213	2.325.603	2.626.128
BANKS & INTERBANK BORROWINGS	**119.862**	**151.268**	**208.244**	**356.513**	**351.208**	**403.949**	**454.545**	**512.319**	**576.696**	**648.592**	**728.795**	**818.204**	**917.805**
Banks & Interbank Borrowings TC	119.794	151.221	179.987	346.814	340.879	392.141	441.177	497.177	559.557	629.203	706.873	793.434	889.835
Banks & Interbank Borrowings FC	68	47	28.257	9.699	10.328	11.808	13.367	15.142	17.139	19.389	21.922	24.769	27.970
FUNDS BORROWED AND OTHERS	**138.117**	**232.579**	**382.613**	**687.056**	**731.650**	**836.455**	**946.929**	**1.072.636**	**1.214.148**	**1.373.542**	**1.552.924**	**1.754.670**	**1.981.417**
Funds Borrowed & Others TC	15.670	21.148	21.334	34.163	36.381	41.592	47.085	53.336	60.372	68.298	77.218	87.249	98.524
Funds Borrowed & Others FC	122.447	211.431	361.279	652.892	695.269	794.863	899.844	1.019.300	1.153.776	1.305.244	1.475.707	1.667.421	1.882.893
ACCRUED INTEREST EXPENSES	**6.026**	**8.145**	**16.466**	**40.090**	**42.692**	**48.807**	**55.253**	**62.588**	**70.845**	**80.146**	**90.613**	**102.385**	**115.615**
Accrued Interest & Expense Accruals TC	3.650	5.826	8.339	20.391	21.715	24.825	28.104	31.835	36.035	40.766	46.090	52.078	58.807
Accrued Interest & Expense Accruals FC	2.376	2.319	8.127	19.698	20.977	23.982	27.149	30.753	34.810	39.380	44.523	50.307	56.808
GENERAL PROVISIONS	**3.413**	**4.959**	**7.292**	**9.000**	**9.000**	**9.000**	**9.000**	**9.000**	**9.000**	**9.000**	**9.000**	**9.000**	**9.000**
General Provisions TC	3.413	4.959	7.292	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000
General Provisions FC	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER PROVISIONS	**1.709**	**1.413**	**1.776**	**3.147**	**3.147**	**3.147**	**3.147**	**3.147**	**3.147**	**3.147**	**3.147**	**3.147**	**3.147**
Employees Termination Reserves TC	1.388	1.278	1.381	1.467	1.467	1.467	1.467	1.467	1.467	1.467	1.467	1.467	1.467
Employees Termination Reserves FC	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Provisions TC	321	135	395	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680	1.680
Other Provisions FC	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER LIABILITIES	**35.888**	**49.253**	**83.137**	**62.052**	**66.079**	**75.545**	**85.522**	**96.876**	**109.657**	**124.052**	**140.253**	**158.474**	**178.953**
Other Liabilities TC	14.226	34.863	46.265	36.694	39.076	44.673	50.573	57.287	64.845	73.358	82.938	93.713	105.823
Other Liabilities FC	21.662	14.390	36.872	25.358	27.004	30.872	34.949	39.589	44.812	50.695	57.315	64.761	73.130
SHAREHOLDERS EQUITY	**117.183**	**136.600**	**165.357**	**327.030**	**377.489**	**430.871**	**492.137**	**561.650**	**640.563**	**730.064**	**831.498**	**946.370**	**1.076.365**
Paid in Capital	122.500	122.500	145.000	300.000	300.000	300.000	300.000	300.000	300.000	300.000	300.000	300.000	300.000
Other Reserves	-14.286	7.382	9.535	19.304	19.304	19.304	19.304	19.304	19.304	19.304	19.304	19.304	19.304
Securities Revaluation Fund	3.091	2.368	1.136	-166	-166	-166	-166	-166	-166	-166	-166	-166	-166
Retained Earnings	5.878	4.350	9.686	7.892	58.351	111.733	172.999	242.512	321.425	410.926	512.360	627.232	757.227
TOTAL LIABILITIES	**1.195.777**	**1.417.875**	**2.028.871**	**3.205.717**	**3.413.788**	**3.902.797**	**4.418.253**	**5.004.789**	**5.665.067**	**6.408.778**	**7.245.754**	**8.187.076**	**9.245.047**

TEKSTILBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**52.029**	**62.270**	**62.591**	**83.993**	**94.936**	**109.257**	**125.176**	**143.205**	**163.560**	**186.532**	**212.438**	**241.632**
Interest Income	149.519	166.689	238.817	319.819	354.476	404.414	459.201	521.188	590.989	669.575	757.986	857.383
Interest Expense	97.490	104.419	176.226	235.826	259.539	295.157	334.025	377.983	427.429	483.043	545.548	615.751
Net Fees & Commissions Income	**18.019**	**17.704**	**24.177**	**32.579**	**36.045**	**40.994**	**46.431**	**52.582**	**59.510**	**67.312**	**76.091**	**85.964**
Fees & Commissions Received	21.882	22.962	30.736	41.591	45.971	52.282	59.206	67.040	75.861	85.792	96.966	109.527
Fees & Commissions Paid	3.863	5.258	6.559	9.012	9.925	11.287	12.775	14.458	16.351	18.481	20.874	23.563
Net Trading Income	**14.845**	**9.410**	**18.995**	**40.185**	**44.417**	**50.515**	**57.204**	**64.774**	**73.297**	**82.893**	**93.688**	**105.825**
Net Trading Gain on Securities	4.953	5.167	2.612	692	765	870	985	1.115	1.262	1.427	1.613	1.822
Net Trading Gain on FC Positions	9.892	4.243	16.384	39.493	43.652	49.645	56.220	63.658	72.035	81.465	92.075	104.003
Other Operating Income	**6.824**	**4.499**	**6.983**	**9.352**	**10.337**	**11.756**	**13.313**	**15.075**	**17.058**	**19.292**	**21.804**	**24.629**
TOTAL OPERATING PROFIT	**91.717**	**93.883**	**112.747**	**166.109**	**185.736**	**212.523**	**242.124**	**275.635**	**313.425**	**356.028**	**404.021**	**458.050**
Provision for Losses	**16.853**	**9.421**	**28.155**	**2.640**	**6.203**	**6.539**	**7.441**	**8.376**	**9.435**	**10.618**	**11.941**	**13.421**
Other Operating Expense	**64.148**	**68.876**	**74.727**	**100.395**	**112.805**	**129.401**	**147.792**	**168.618**	**192.115**	**218.618**	**248.490**	**282.136**
NET OPERATING INCOME	**10.716**	**15.586**	**9.865**	**63.074**	**66.727**	**76.582**	**86.891**	**98.642**	**111.876**	**126.793**	**143.590**	**162.493**
Monetary Gain & Losses	**-3.866**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**6.850**	**15.586**	**9.865**	**63.074**	**66.727**	**76.582**	**86.891**	**98.642**	**111.876**	**126.793**	**143.590**	**162.493**
Provision for Taxes	**-2.500**	**-5.900**	**-1.973**	**-12.615**	**-13.345**	**-15.316**	**-17.378**	**-19.728**	**-22.375**	**-25.359**	**-28.718**	**-32.499**
NET PROFIT/LOSSES	**4.350**	**9.686**	**7.892**	**50.460**	**53.381**	**61.266**	**69.513**	**78.913**	**89.501**	**101.434**	**114.872**	**129.995**

TEKSTILBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**783.208**	**1.146.032**	**1.275.869**	**2.211.645**	**2.355.194**	**2.692.565**	**3.048.182**	**3.452.836**	**3.908.367**	**4.421.457**	**4.998.893**	**5.648.317**	**6.378.218**
Letters of Guarantees	524.423	857.540	967.042	1.546.139	1.646.493	1.882.346	2.130.954	2.413.844	2.732.301	3.090.997	3.494.677	3.948.683	4.458.950
Bank Acceptances	15.607	20.664	24.038	29.532	31.448	35.953	40.702	46.105	52.187	59.039	66.749	75.421	85.167
Letters of Credits	193.090	230.692	229.982	505.708	538.532	615.674	696.988	789.515	893.675	1.010.997	1.143.032	1.291.527	1.458.424
Other Guarantees	50.088	37.136	54.807	130.266	138.721	158.592	179.538	203.372	230.203	260.424	294.435	332.686	375.678
COMMITMENTS	**82.484**	**156.761**	**192.017**	**277.502**	**295.514**	**337.845**	**382.465**	**433.239**	**490.395**	**554.775**	**627.227**	**708.713**	**800.296**
Irrevocable Commitments	82.484	156.761	192.017	277.502	295.514	337.845	382.465	433.239	490.395	554.775	627.227	708.713	800.296
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**369.204**	**314.024**	**564.046**	**1.020.960**	**1.087.227**	**1.242.967**	**1.407.130**	**1.593.931**	**1.804.217**	**2.041.075**	**2.307.636**	**2.607.430**	**2.944.374**
Foreign Currency Buys	184.099	123.217	228.560	400.751	426.762	487.893	552.331	625.655	708.197	801.169	905.801	1.023.476	1.155.735
Foreign Currency Sells	161.899	129.461	225.681	620.210	660.465	755.074	854.799	968.276	1.096.020	1.239.906	1.401.836	1.583.953	1.788.639
NET BALANCE SHEET POSITION	**-20.911**	**1.405**	**-5.025**	**157.818**	**168.062**	**192.136**	**217.512**	**246.387**	**278.893**	**315.506**	**356.710**	**403.052**	**455.136**
NET OFF BALANCE SHEET POSITION	**22.200**	**-6.244**	**2.879**	**-219.459**	**-233.704**	**-267.181**	**-302.468**	**-342.622**	**-387.823**	**-438.737**	**-496.035**	**-560.477**	**-632.904**
TOTAL POSITION	**1.289**	**-4.839**	**-2.146**	**-61.641**	**-65.642**	**-75.045**	**-84.956**	**-96.235**	**-108.931**	**-123.231**	**-139.325**	**-157.425**	**-177.768**

Valuation Day	**30.06.2006**				**TEKSTILBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	22.851	50.460	53.381	61.266	69.513	78.913	89.501	101.434	114.872	129.995
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	20.354	35.728	30.027	27.394	24.707	22.296	20.088	18.098	16.292	14.656
Total Discounted Cash Flows	**229.639**									
Last Year Profit	129.995									
Discount Rate	**25,8%**									
Terminal Value	503.856									
Days To Maturity	3.471									
Discounted Terminal Value	**56.805**									
Discounted CFs + Terminal Value	**286.444**									
Book Value+General Provision	**313.179**									
DCF Value / Book Value	**0,91**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	2.870.638	3.056.961	3.494.856	3.956.434	4.481.662	5.072.925	5.738.899	6.488.390	7.331.320	8.278.707
Balance Sheet Weighted	70,46%	70,46%	70,46%	70,46%	70,46%	70,46%	70,46%	70,46%	70,46%	70,46%
Net Balance Sheet	2.022.779	2.154.070	2.462.631	2.787.879	3.157.978	3.574.608	4.043.883	4.572.008	5.165.974	5.833.545
Effective Rate Balance Sheet	**1,82%**	**1,82%**	**1,82%**	**1,82%**	**1,82%**	**1,82%**	**1,82%**	**1,82%**	**1,82%**	**1,82%**
Total Off Balance Sheet	2.489.147	2.650.708	3.030.410	3.430.647	3.886.075	4.398.762	4.976.232	5.626.120	6.357.030	7.178.514
Off-Balance Sheet Weighted	26,46%	26,46%	26,46%	26,46%	26,46%	26,46%	26,46%	26,46%	26,46%	26,46%
Net Off Balance Sheet	658.747	701.504	801.991	907.913	1.028.441	1.164.123	1.316.949	1.488.940	1.682.374	1.899.778
Effective Rate Off Balance Sheet	**0,58%**	**0,58%**	**0,58%**	**0,58%**	**0,58%**	**0,58%**	**0,58%**	**0,58%**	**0,58%**	**0,58%**
Total Loss Weight	**2,40%**	**2,40%**	**2,40%**	**2,40%**	**2,40%**	**2,40%**	**2,40%**	**2,40%**	**2,40%**	**2,40%**
Lost Amount	40.667	43.306	49.510	56.049	63.489	71.865	81.300	91.918	103.859	117.280
Provision Left	5.627									
Total Provision	40.667	43.306	49.510	56.049	63.489	71.865	81.300	91.918	103.859	117.280
Additional Provision	35.040	2.640	6.203	6.539	7.441	8.376	9.435	10.618	11.941	13.421

TEKSTILBANK	ACTUAL			FORECASTED									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	1.052.739	1.372.363	1.967.892	2.578.224	3.040.172	3.369.612	3.844.321	4.365.121	4.954.364	5.617.887	6.364.918	7.205.339	8.150.203
Interest Income	149.519	166.689	204.182	136.726	319.819	354.476	404.414	459.201	521.188	590.989	669.575	757.986	857.383
Interest Rate	14,2%	12,1%	10,4%	10,4%	10,4%	10,4%	10,4%	10,4%	10,4%	10,4%	10,4%	10,4%	10,4%
Interest Bearing Liabilities	1.035.178	1.304.975	1.849.507	2.415.286	2.849.903	3.136.472	3.566.898	4.036.615	4.567.832	5.165.376	5.837.461	6.592.817	7.441.204
Interest Expense	97.490	104.419	150.948	100.752	235.826	259.539	295.157	334.025	377.983	427.429	483.043	545.548	615.751
Interest Rate	9,4%	8,0%	8,2%	8,2%	8,2%	8,2%	8,2%	8,2%	8,2%	8,2%	8,2%	8,2%	8,2%
Net Interest Margin	4,8%	4,1%	2,2%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	662.340	984.923	1.375.151	1.776.795	2.079.249	2.298.209	2.613.721	2.959.867	3.351.503	3.792.510	4.289.018	4.847.599	5.475.596
Cash Loans Commissions	1.126	1.087	1.120	740	1.717	1.898	2.158	2.444	2.768	3.132	3.542	4.003	4.522
Cash Loans Commissions Rate (%)	0,2%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
Non-Cash Loans	1.012.702	1.195.724	1.422.877	1.935.170	2.283.420	2.523.880	2.870.373	3.250.509	3.680.602	4.164.912	4.710.175	5.323.605	6.013.268
Non-Cash Loans Commissions	14.761	15.227	15.972	11.103	25.988	28.724	32.668	36.994	41.889	47.401	53.607	60.588	68.437
Non-Cash Loans Commissions Rate (%)	1,5%	1,3%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Cash & Non-Cash Loans	1.675.042	2.180.647	2.798.028	3.711.965	4.362.669	4.822.089	5.484.094	6.210.376	7.032.105	7.957.422	8.999.194	10.171.204	11.488.864
Other Commissions	5.995	6.648	8.784	5.956	13.886	15.348	17.456	19.767	22.383	25.328	28.644	32.374	36.569
Other Commissions Rate (%)	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Funds Borrowed	191.324	273.540	447.967	606.168	709.353	784.052	891.692	1.009.782	1.143.392	1.293.845	1.463.233	1.653.797	1.868.044
Cash Loans Commissions Expense	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash Loans Commissions Expense (%)	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%
Non-Cash Loans	1.012.702	1.195.724	1.422.877	1.935.170	2.283.420	2.523.880	2.870.373	3.250.509	3.680.602	4.164.912	4.710.175	5.323.605	6.013.268
Non-Cash Loans Commissions Expense	162	164	68	47	111	122	139	158	178	202	228	258	291
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	1.349.649	1.645.453	2.052.274	2.823.664	3.346.632	3.685.510	4.191.312	4.743.723	5.368.502	6.071.402	6.862.102	7.750.902	8.749.316
Other Commissions Expense	3.701	5.094	5.384	3.786	8.902	9.803	11.148	12.618	14.280	16.149	18.252	20.616	23.272
Other Commissions Expense rate (%)	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Securities Portfolio	139.202	169.593	236.300	295.629	345.953	382.384	434.880	492.473	557.634	631.011	713.621	806.560	911.048
Trading Gain on Securities Portfolio	4.953	5.167	4.632	296	692	765	870	985	1.115	1.262	1.427	1.613	1.822
Trading Gain Rate	3,6%	3,0%	2,0%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	1.676.480	2.185.446	2.811.279	3.711.965	4.362.669	4.822.089	5.484.094	6.210.376	7.032.105	7.957.422	8.999.194	10.171.204	11.488.864
Other Operating Income	6.824	4.499	5.944	4.011	9.352	10.337	11.756	13.313	15.075	17.058	19.292	21.804	24.629
Other Operating Income Rate (%)	0,4%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Cost to Income Ratio	91,6%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%	86,1%
ROE	15,6%	9,4%	61,6%	6,5%	14,3%	13,2%	13,3%	13,2%	13,1%	13,1%	13,0%	12,9%	12,9%

TEKSTILBANK	ACTUAL			FORECASTED									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Cash FC / Total Assets	0,5%	0,4%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	5,8%	6,8%	7,1%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%	7,6%
Securities Portfolio FC / Total Assets	5,6%	4,2%	3,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%	2,8%
Loans TC / Total Assets	25,1%	28,5%	29,1%	27,5%	27,5%	27,5%	27,5%	27,5%	27,5%	27,5%	27,5%	27,5%	27,5%
Loans FC / Total Assets	29,2%	35,7%	34,6%	35,4%	35,4%	35,4%	35,4%	35,4%	35,4%	35,4%	35,4%	35,4%	35,4%
Accrued Interest Income TC / Total Assets	2,5%	1,7%	2,4%	3,7%	3,7%	3,7%	3,7%	3,7%	3,7%	3,7%	3,7%	3,7%	3,7%
Accrued Interest Income FC / Total Assets	0,2%	0,3%	0,1%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Other Assets TC / Total Assets	3,7%	2,4%	1,0%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Other Assets FC / Total Assets	0,1%	0,0%	0,1%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%	0,3%
Customer Deposits TC / Total Assets	18,5%	22,5%	28,5%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%	25,6%
Customer Deposits FC / Total Assets	38,8%	33,3%	28,1%	28,4%	28,4%	28,4%	28,4%	28,4%	28,4%	28,4%	28,4%	28,4%	28,4%
Funds Borrowed TC / Total Assets	1,6%	1,5%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Funds Borrowed FC / Total Assets	14,1%	16,4%	19,7%	20,4%	20,4%	20,4%	20,4%	20,4%	20,4%	20,4%	20,4%	20,4%	20,4%
Accrued Interest Expense TC / Total Assets	0,4%	0,5%	0,5%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Accrued Interest Expense FC / Total Assets	0,2%	0,3%	0,5%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Other Liabilities TC / Total Assets	1,5%	2,0%	1,9%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%	1,1%
Other Liabilities FC / Total Assets	1,9%	1,5%	1,1%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Letters of Guarantees / Total Assets	58,8%	59,1%	48,3%	48,2%	48,2%	48,2%	48,2%	48,2%	48,2%	48,2%	48,2%	48,2%	48,2%
Bank Acceptances / Total Assets	1,6%	1,4%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Letters of Credits / Total Assets	23,0%	18,9%	21,0%	15,8%	15,8%	15,8%	15,8%	15,8%	15,8%	15,8%	15,8%	15,8%	15,8%
Other Guarantees / Total Assets	4,4%	3,5%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%	4,1%
Irrevocable Commitments / Total Assets	9,8%	11,5%	9,5%	8,7%	8,7%	8,7%	8,7%	8,7%	8,7%	8,7%	8,7%	8,7%	8,7%
Total FC Assets / Total Assets	53,5%	51,3%	50,9%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%	55,4%
Total FC Liabilities / Total Assets	55,1%	52,0%	50,0%	50,5%	50,5%	50,5%	50,5%	50,5%	50,5%	50,5%	50,5%	50,5%	50,5%
Foreign Currency Buys / Total Assets	11,3%	11,1%	12,0%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%
Foreign Currency Sells / Total Assets	10,7%	10,5%	13,7%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%	19,3%

TEKSTILBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**242.260**	**281.208**	**158.828**	**1.410.836**	**1.546.492**	**2.194.712**	**70,46%**	**75,75%**	**1,82%**
Cash	14.099	0	0	0					
Due from banks	49.834	275.695	0	0					
Interbank money market placements	0	0	0	0					
Receivables from reverse repo transactions	0	0	0	0					
Reserve deposits	93.204	0	0	0					
Special finance houses	0	0	0	0					
Loans	74.168	0	156.681	1.308.848					
Loans under follow-up (Net)	0	0	0	13.770					
Subsidiaries, associates and Mark.Sec.held to Maturity	0	0	0	132					
Miscallenous receivables	0	5.513	0	2.330					
Marketable securities held to maturity (Net)	0	0	0	83.963					
Advances for assets acquired by financial leasing	0	0	0	1.793					
Financial lease receivables	0	0	0	0					
Leased assets (Net)	0	0	2.147	0					
Fixed assets (Net)	0	0	0	0	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Other assets	10.955	0	0	0					
II -Off balance sheet items	**14.932**	**635.564**	**277.848**	**229.081**	**495.118**	**1.870.856**	**26,46%**	**24,25%**	**0,58%**
Guarantees and pledges	13.730	629.472	108.860	160.794					
Commitments	0	0	168.988	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	5.914	0	2.193					
Interest and income accruals	1.202	178	0	66.094	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	0	0	0					
III -Total risk weighted assets	**257.192**	**916.772**	**436.676**	**1.639.917**	**2.041.609**	**4.065.568**	**50,22%**	**100,00%**	**2,40%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	50,22%
Bank' Loans Under Follow Up	2,40%

2.11 Vakifbank

VAKIFBANK	ACTUAL			FORECASTED									
ASSETS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CASH AND BANK PLACEMENTS	**2.875.914**	**4.891.048**	**7.088.329**	**5.224.503**	**6.802.719**	**8.965.979**	**11.602.927**	**14.849.967**	**18.826.537**	**23.680.685**	**29.586.334**	**36.748.663**	**45.409.002**
Cash TC	115.473	145.406	249.687	279.535	346.617	438.566	550.650	688.665	857.689	1.064.015	1.315.034	1.619.469	1.987.577
Cash FC	29.727	36.351	31.828	44.429	55.091	69.706	87.521	109.457	136.322	169.115	209.012	257.399	315.907
TCMB & Deposit Reserves TC	244.617	645.687	1.126.000	953.680	1.182.541	1.496.242	1.878.634	2.349.497	2.926.151	3.630.066	4.486.462	5.525.092	6.780.954
TCMB & Deposit Reserves FC	734.557	844.326	912.077	1.424.590	1.766.460	2.235.061	2.806.271	3.509.638	4.371.035	5.422.530	6.701.800	8.253.289	10.129.273
Banks & Interbank Placements TC	285.708	1.353.890	3.251.004	998.861	1.562.451	2.334.965	3.276.635	4.436.173	5.856.231	7.589.677	9.698.620	12.256.332	15.348.992
Banks & Interbank Placements FC	1.465.832	1.865.388	1.517.733	1.523.408	1.889.558	2.391.439	3.003.216	3.756.537	4.679.110	5.805.282	7.175.406	8.837.082	10.846.299
SECURITIES PORTFOLIO	**7.602.726**	**9.523.673**	**11.263.549**	**11.229.311**	**13.924.095**	**17.617.835**	**22.120.390**	**27.664.670**	**34.454.613**	**42.743.009**	**52.826.830**	**65.056.418**	**79.843.837**
Securities Portfolio TC	4.020.566	5.367.735	6.994.491	6.716.659	8.328.507	10.537.868	13.231.010	16.547.245	20.608.557	25.566.149	31.597.649	38.912.610	47.757.503
Securities Portfolio FC	3.582.160	4.155.938	4.269.058	4.512.652	5.595.587	7.079.967	8.889.380	11.117.425	13.846.056	17.176.861	21.229.182	26.143.808	32.086.334
LOANS PORTFOLIO	**5.011.163**	**8.462.049**	**12.374.871**	**17.195.836**	**21.322.452**	**26.978.805**	**33.873.726**	**42.363.874**	**52.761.552**	**65.453.862**	**80.895.569**	**99.623.163**	**122.267.653**
Loans TC	2.887.845	5.357.138	8.349.462	10.532.878	13.060.533	16.525.190	20.748.501	25.948.928	32.317.764	40.092.121	49.550.551	61.021.669	74.891.983
Loans FC	2.108.385	3.104.851	4.025.342	6.662.958	8.261.919	10.453.615	13.125.225	16.414.946	20.443.787	25.361.741	31.345.018	38.601.494	47.375.670
Non Performing Loans	932.878	850.058	1.053.291	424.347	526.181	665.765	835.913	1.045.427	1.302.014	1.615.226	1.996.286	2.458.433	3.017.238
Non Performing Loans Provision	-917.945	-849.998	-1.053.224	-424.347	-526.181	-665.765	-835.913	-1.045.427	-1.302.014	-1.615.226	-1.996.286	-2.458.433	-3.017.238
ACCRUED INTEREST GAIN	**853.529**	**619.212**	**846.950**	**603.747**	**748.632**	**947.227**	**1.189.308**	**1.487.398**	**1.852.461**	**2.298.089**	**2.840.248**	**3.497.775**	**4.292.824**
Accrued Interest & Income Accruals TC	595.245	444.204	664.940	332.984	412.892	522.423	655.938	820.343	1.021.686	1.267.462	1.566.479	1.929.124	2.367.617
Accrued Interest & Income Accruals FC	258.284	175.008	182.010	270.763	335.740	424.804	533.370	667.055	830.775	1.030.626	1.273.769	1.568.651	1.925.207
SUBSIDIARIES & ASSOCIATES	**367.255**	**353.744**	**305.195**	**311.461**	**311.461**	**311.461**	**311.461**	**311.461**	**311.461**	**311.461**	**311.461**	**311.461**	**311.461**
Subsidiaries & Associates TC	359.666	346.044	298.853	311.457	311.457	311.457	311.457	311.457	311.457	311.457	311.457	311.457	311.457
Subsidiaries & Associates FC	7.589	7.700	6.342	4	4	4	4	4	4	4	4	4	4
FIXED ASSETS	**1.109.563**	**1.268.527**	**1.166.816**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**	**1.040.548**
Fixed Assets TC	1.107.241	1.266.576	1.164.779	1.038.195	1.038.195	1.038.195	1.038.195	1.038.195	1.038.195	1.038.195	1.038.195	1.038.195	1.038.195
Fixed Assets FC	2.322	1.951	2.037	2.353	2.353	2.353	2.353	2.353	2.353	2.353	2.353	2.353	2.353
OTHER ASSETS	**212.225**	**420.847**	**662.603**	**766.612**	**950.582**	**1.202.749**	**1.510.134**	**1.888.635**	**2.352.177**	**2.918.016**	**3.606.427**	**4.441.327**	**5.450.847**
Other Assets TC	150.834	384.197	560.419	509.653	631.958	799.602	1.003.955	1.255.587	1.563.755	1.939.932	2.397.596	2.952.647	3.623.788
Other Assets FC	61.391	36.650	102.184	256.959	318.624	403.147	506.179	633.048	788.421	978.084	1.208.831	1.488.679	1.827.059
TOTAL ASSETS	**18.032.375**	**25.539.100**	**33.708.313**	**36.372.018**	**45.100.489**	**57.064.605**	**71.648.494**	**89.606.553**	**111.599.349**	**138.445.670**	**171.107.417**	**210.719.355**	**258.616.171**

VAKIFBANK	ACTUAL			FORECASTED										
LIABILITIES	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
CUSTOMER LOANS	**12.618.507**	**16.885.221**	**22.574.383**	**23.466.461**	**29.097.887**	**36.816.883**	**46.226.102**	**57.812.264**	**72.001.553**	**89.322.235**	**110.394.907**	**135.951.697**	**166.853.716**
Customer Deposits TC	6.989.992	10.736.579	15.922.161	15.894.661	19.709.024	24.937.372	31.310.567	39.158.283	48.769.188	60.501.096	74.774.360	92.084.874	113.015.899
Customer Deposits FC	5.628.515	6.148.642	6.652.222	7.571.800	9.388.863	11.879.511	14.915.535	18.653.981	23.232.365	28.821.139	35.620.548	43.866.824	53.837.816
BANKS & INTERBANK BORROWINGS	**886.520**	**1.732.371**	**836.790**	**1.125.635**	**1.275.630**	**1.669.061**	**2.059.198**	**2.478.154**	**2.909.555**	**3.338.995**	**3.744.668**	**4.096.915**	**4.356.019**
Banks & Interbank Borrowings TC	312.786	827.520	464.460	-26.616	-158.080	-150.443	-230.578	-390.697	-668.475	-1.104.721	-1.752.258	-2.677.337	-3.962.713
Banks & Interbank Borrowings FC	573.734	904.851	372.330	1.152.251	1.433.709	1.819.504	2.289.776	2.868.851	3.578.030	4.443.716	5.496.926	6.774.252	8.318.732
FUNDS BORROWED AND OTHERS	**2.030.603**	**2.994.934**	**3.939.817**	**5.567.791**	**6.903.936**	**8.735.390**	**10.967.877**	**13.716.878**	**17.083.512**	**21.193.119**	**26.192.945**	**32.256.699**	**39.588.694**
Funds Borrowed & Others TC	219.738	212.479	196.979	188.770	234.070	296.163	371.853	465.055	579.197	718.529	888.042	1.093.627	1.342.210
Funds Borrowed & Others FC	1.810.865	2.782.455	3.742.838	5.379.021	6.669.866	8.439.227	10.596.023	13.251.823	16.504.315	20.474.590	25.304.903	31.163.073	38.246.484
ACCRUED INTEREST EXPENSES	**205.346**	**194.916**	**256.885**	**296.350**	**367.468**	**464.949**	**583.775**	**730.093**	**909.285**	**1.128.022**	**1.394.142**	**1.716.890**	**2.107.142**
Accrued Interest & Expense Accruals TC	180.162	155.107	198.659	207.663	257.497	325.805	409.071	511.601	637.166	790.443	976.922	1.203.083	1.476.546
Accrued Interest & Expense Accruals FC	25.184	39.809	58.226	88.688	109.971	139.143	174.704	218.492	272.118	337.579	417.220	513.807	630.596
GENERAL PROVISIONS	**46.852**	**61.764**	**87.062**	**105.955**	**105.955**	**105.955**	**105.955**	**105.955**	**105.955**	**105.955**	**105.955**	**105.955**	**105.955**
General Provisions TC	44.955	59.955	83.955	105.955	105.955	105.955	105.955	105.955	105.955	105.955	105.955	105.955	105.955
General Provisions FC	1.897	1.809	3.107	0	0	0	0	0	0	0	0	0	0
OTHER PROVISIONS	**326.801**	**758.410**	**977.259**	**781.647**	**781.647**	**781.647**	**781.647**	**781.647**	**781.647**	**781.647**	**781.647**	**781.647**	**781.647**
Employees Termination Reserves TC	15.425	17.453	18.859	20.074	20.074	20.074	20.074	20.074	20.074	20.074	20.074	20.074	20.074
Employees Termination Reserves FC	124	126	105	103	103	103	103	103	103	103	103	103	103
Other Provisions TC	307.360	738.928	945.214	740.973	740.973	740.973	740.973	740.973	740.973	740.973	740.973	740.973	740.973
Other Provisions FC	3.892	1.903	13.081	20.497	20.497	20.497	20.497	20.497	20.497	20.497	20.497	20.497	20.497
OTHER LIABILITIES	**973.006**	**1.016.908**	**876.482**	**1.047.547**	**1.298.935**	**1.643.512**	**2.063.541**	**2.580.749**	**3.214.161**	**3.987.360**	**4.928.047**	**6.068.907**	**7.448.378**
Other Liabilities TC	710.720	788.341	657.200	838.058	1.039.173	1.314.841	1.650.873	2.064.649	2.571.391	3.189.965	3.942.533	4.855.243	5.958.847
Other Liabilities FC	262.286	228.567	219.282	209.489	259.762	328.671	412.668	516.100	642.770	797.395	985.514	1.213.664	1.489.531
SHAREHOLDERS EQUITY	**944.740**	**1.894.580**	**4.159.637**	**5.132.883**	**6.702.741**	**8.666.712**	**11.150.175**	**14.269.665**	**18.171.711**	**23.032.054**	**29.062.031**	**36.514.896**	**45.693.353**
Paid in Capital	320.777	420.145	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000	1.279.000
Other Reserves	356.092	683.511	2.082.779	2.283.849	2.283.849	2.283.849	2.283.849	2.283.849	2.283.849	2.283.849	2.283.849	2.283.849	2.283.849
Securities Revaluation Fund	12.606	52.661	182.286	-194.058	-194.058	-194.058	-194.058	-194.058	-194.058	-194.058	-194.058	-194.058	-194.058
Retained Earnings	255.265	738.263	615.572	1.764.092	3.333.950	5.297.921	7.781.384	10.900.874	14.802.920	19.663.263	25.693.240	33.146.105	42.324.562
TOTAL LIABILITIES	**18.032.375**	**25.539.104**	**33.708.315**	**36.372.018**	**45.100.489**	**57.064.605**	**71.648.494**	**89.606.553**	**111.599.349**	**138.445.670**	**171.107.417**	**210.719.355**	**258.616.171**

VAKIFBANK	ACTUAL		FORECASTED									
INCOME STATEMENTS	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
Net Interest Income	**1.310.943**	**1.378.476**	**1.724.075**	**2.016.716**	**2.580.002**	**3.298.566**	**4.186.579**	**5.283.579**	**6.633.155**	**8.287.733**	**10.309.465**	**12.771.967**
Interest Income	3.216.210	3.678.832	4.498.306	5.230.044	6.606.292	8.371.979	10.536.318	13.193.419	16.441.670	20.399.505	25.206.372	31.026.511
Interest Expense	1.905.267	2.300.356	2.774.231	3.213.328	4.026.290	5.073.413	6.349.740	7.909.840	9.808.516	12.111.772	14.896.907	18.254.544
Net Fees & Commissions Income	**251.100**	**297.274**	**341.707**	**422.351**	**529.968**	**667.586**	**837.068**	**1.045.883**	**1.302.090**	**1.615.384**	**1.997.227**	**2.461.163**
Fees & Commissions Received	350.752	389.085	476.267	588.369	737.804	929.525	1.164.533	1.453.046	1.805.746	2.235.495	2.757.433	3.389.393
Fees & Commissions Paid	99.652	91.811	134.560	166.018	207.836	261.939	327.465	407.163	503.656	620.111	760.206	928.230
Net Trading Income	**110.568**	**195.218**	**-935**	**56.525**	**70.881**	**89.300**	**111.877**	**139.595**	**173.479**	**214.765**	**264.908**	**325.620**
Net Trading Gain on Securities	63.963	130.403	43.239	25.153	31.542	39.738	49.785	62.119	77.198	95.570	117.883	144.900
Net Trading Gain on FC Positions	46.605	64.815	-44.174	31.371	39.339	49.562	62.092	77.475	96.281	119.195	147.024	180.720
Other Operating Income	**1.393.375**	**740.001**	**1.405.555**	**1.716.869**	**2.152.924**	**2.712.370**	**3.398.126**	**4.240.010**	**5.269.197**	**6.523.210**	**8.046.232**	**9.890.304**
TOTAL OPERATING PROFIT	**3.065.986**	**2.610.969**	**3.470.402**	**4.212.461**	**5.333.775**	**6.767.822**	**8.533.650**	**10.709.067**	**13.377.920**	**16.641.092**	**20.617.831**	**25.449.055**
Provision for Losses	**289.581**	**437.099**	**-554.231**	**101.834**	**139.584**	**170.148**	**209.514**	**256.587**	**313.212**	**381.060**	**462.147**	**558.805**
Other Operating Expense	**1.805.396**	**1.315.595**	**1.819.518**	**2.148.304**	**2.739.228**	**3.493.344**	**4.424.774**	**5.574.922**	**6.989.279**	**8.722.560**	**10.839.603**	**13.417.179**
NET OPERATING INCOME	**971.009**	**858.275**	**2.205.115**	**1.962.323**	**2.454.963**	**3.104.329**	**3.899.361**	**4.877.557**	**6.075.429**	**7.537.472**	**9.316.082**	**11.473.070**
Monetary Gain & Losses	**-68.065**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
INCOME BEFORE TAXES	**902.944**	**858.275**	**2.205.115**	**1.962.323**	**2.454.963**	**3.104.329**	**3.899.361**	**4.877.557**	**6.075.429**	**7.537.472**	**9.316.082**	**11.473.070**
Provision for Taxes	**-164.355**	**-235.916**	**-441.023**	**-392.465**	**-490.993**	**-620.866**	**-779.872**	**-975.511**	**-1.215.086**	**-1.507.494**	**-1.863.216**	**-2.294.614**
NET PROFIT/LOSSES	**738.589**	**622.359**	**1.764.092**	**1.569.859**	**1.963.971**	**2.483.463**	**3.119.489**	**3.902.046**	**4.860.343**	**6.029.977**	**7.452.866**	**9.178.456**

VAKIFBANK	ACTUAL			FORECASTED									
OFF BALANCE SHEET COMMITMENTS	**31.12.2003**	**31.12.2004**	**31.12.2005**	**31.12.2006**	**31.12.2007**	**31.12.2008**	**31.12.2009**	**31.12.2010**	**31.12.2011**	**31.12.2012**	**31.12.2013**	**31.12.2014**	**31.12.2015**
GUARANTEES AND WARRANTIES	**3.614.635**	**3.748.230**	**4.593.176**	**6.448.840**	**7.996.418**	**10.117.683**	**12.703.439**	**15.887.443**	**19.786.815**	**24.546.728**	**30.337.729**	**37.361.015**	**45.853.228**
Letters of Guarantees	2.175.031	2.550.361	3.141.280	3.967.008	4.919.001	6.223.898	7.814.528	9.773.170	12.171.871	15.099.934	18.662.272	22.982.650	28.206.640
Bank Acceptances	330.365	194.822	62.258	82.567	102.382	129.541	162.648	203.414	253.339	314.282	388.427	478.349	587.078
Letters of Credits	1.037.843	967.773	1.350.307	2.329.588	2.888.637	3.654.926	4.589.008	5.739.202	7.147.816	8.867.294	10.959.243	13.496.344	16.564.083
Other Guarantees	71.396	35.274	39.331	69.677	86.398	109.318	137.256	171.658	213.789	265.218	327.788	403.672	495.427
COMMITMENTS	**1.558.924**	**2.688.397**	**2.979.755**	**2.940.858**	**3.646.598**	**4.613.956**	**5.793.136**	**7.245.134**	**9.023.361**	**11.194.019**	**13.834.884**	**17.037.705**	**20.910.401**
Irrevocable Commitments	1.474.500	2.629.946	2.936.548	2.940.858	3.646.598	4.613.956	5.793.136	7.245.134	9.023.361	11.194.019	13.834.884	17.037.705	20.910.401
				0	0	0	0	0	0	0	0	0	0
DERIVATIVE FINANCIAL INSTRUMENTS	**118.049**	**125.782**	**33.308**	**9.531**	**11.818**	**14.954**	**18.775**	**23.481**	**29.244**	**36.279**	**44.838**	**55.218**	**67.769**
Foreign Currency Buys	59.968	55.332	10.756	4.766	5.909	7.477	9.388	11.741	14.622	18.140	22.419	27.609	33.885
Foreign Currency Sells	58.081	56.934	10.812	4.766	5.909	7.477	9.388	11.741	14.622	18.140	22.419	27.609	33.885
NET BALANCE SHEET POSITION	**-56.250**	**120.001**	**-12.580**	**276.267**	**342.565**	**433.440**	**544.214**	**680.616**	**847.664**	**1.051.578**	**1.299.664**	**1.600.541**	**1.964.346**
NET OFF BALANCE SHEET POSITION	**1.887**	**-1.602**	**-56**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL POSITION	**-54.363**	**118.399**	**-12.636**	**276.267**	**342.565**	**433.440**	**544.214**	**680.616**	**847.664**	**1.051.578**	**1.299.664**	**1.600.541**	**1.964.346**

Valuation Day	**30.06.2006**				**VAKIFBANK**					
Date	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Days To Maturity	184	549	915	1.280	1.645	2.010	2.376	2.741	3.106	3.471
Net Income	1.320.683	1.569.859	1.963.971	2.483.463	3.119.489	3.902.046	4.860.343	6.029.977	7.452.866	9.178.456
Discount Rate	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%	25,8%
Discounted Cash Flows	1.176.383	1.111.552	1.104.716	1.110.434	1.108.761	1.102.468	1.090.905	1.075.858	1.057.017	1.034.779
Total Discounted Cash Flows	**10.972.873**									
Last Year Profit	9.178.456									
Discount Rate	**25,8%**									
Terminal Value	35.575.411									
Days To Maturity	3.471									
Discounted Terminal Value	**4.010.772**									
Discounted CFs + Terminal Value	**14.983.646**									
Book Value+General Provision	**3.918.155**									
DCF Value / Book Value	**3,82**									
Cost of Equity	**25,8%**									
Risk Weighted Assets	**31-Ara-06**	**31-Ara-07**	**31-Ara-08**	**31-Ara-09**	**31-Ara-10**	**31-Ara-11**	**31-Ara-12**	**31-Ara-13**	**31-Ara-14**	**31-Ara-15**
Total Balance Sheet	25.142.707	31.176.394	39.446.770	49.528.104	61.941.883	77.144.736	95.702.660	118.280.586	145.662.937	178.772.334
Balance Sheet Weighted	69,07%	69,07%	69,07%	69,07%	69,07%	69,07%	69,07%	69,07%	69,07%	69,07%
Net Balance Sheet	17.365.278	21.532.557	27.244.645	34.207.506	42.781.314	53.281.447	66.098.823	81.692.687	100.604.817	123.472.438
Effective Rate Balance Sheet	**2,41%**	**2,41%**	**2,41%**	**2,41%**	**2,41%**	**2,41%**	**2,41%**	**2,41%**	**2,41%**	**2,41%**
Total Off Balance Sheet	9.389.699	11.643.016	14.731.639	18.496.575	23.132.578	28.810.176	35.740.748	44.172.613	54.398.720	66.763.629
Off-Balance Sheet Weighted	22,89%	22,89%	22,89%	22,89%	22,89%	22,89%	22,89%	22,89%	22,89%	22,89%
Net Off Balance Sheet	2.149.161	2.664.912	3.371.851	4.233.589	5.294.700	6.594.218	8.180.522	10.110.449	12.451.052	15.281.194
Effective Rate Off Balance Sheet	**0,30%**	**0,30%**	**0,30%**	**0,30%**	**0,30%**	**0,30%**	**0,30%**	**0,30%**	**0,30%**	**0,30%**
Total Loss Weight	**2,70%**	**2,70%**	**2,70%**	**2,70%**	**2,70%**	**2,70%**	**2,70%**	**2,70%**	**2,70%**	**2,70%**
Lost Amount	424.347	526.181	665.765	835.913	1.045.427	1.302.014	1.615.226	1.996.286	2.458.433	3.017.238
Provision Left	1.053.224									
Total Provision	424.347	526.181	665.765	835.913	1.045.427	1.302.014	1.615.226	1.996.286	2.458.433	3.017.238
Additional Provision	-628.877	101.834	139.584	170.148	209.514	256.587	313.212	381.060	462.147	558.805

VAKIFBANK	ACTUAL			FORECASTED									
P / L DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Interest Earning Assets	17.781.700	25.631.959	31.742.896	32.905.183	37.486.622	47.350.952	60.006.610	75.519.631	94.564.540	117.846.559	146.214.556	180.668.031	222.384.192
Interest Income	3.216.210	3.678.832	4.368.026	2.314.293	5.230.044	6.606.292	8.371.979	10.536.318	13.193.419	16.441.670	20.399.505	25.206.372	31.026.511
Interest Rate	18,1%	14,4%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%	13,8%
Interest Bearing Liabilities	17.341.931	23.850.022	28.548.722	29.819.391	33.718.670	42.249.393	53.237.256	66.630.237	83.000.958	102.924.485	127.093.435	156.318.916	191.551.870
Interest Expense	1.905.267	2.300.356	2.683.372	1.432.545	3.213.328	4.026.290	5.073.413	6.349.740	7.909.840	9.808.516	12.111.772	14.896.907	18.254.544
Interest Rate	11,0%	9,6%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%	9,4%
Net Interest Margin	7,1%	4,7%	4,4%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Cash Loans	6.773.490	9.844.605	14.411.647	16.987.338	19.259.144	24.150.629	30.426.265	38.118.800	47.562.713	59.107.707	73.174.715	90.259.366	110.945.408
Cash Loans Commissions	18.683	24.991	33.724	20.317	45.693	57.299	72.188	90.439	112.845	140.236	173.611	214.145	263.224
Cash Loans Commissions Rate (%)	0,3%	0,3%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Non-Cash Loans	3.673.652	4.012.572	5.244.356	6.342.629	7.222.629	9.057.050	11.410.561	14.295.441	17.837.129	22.166.772	27.442.229	33.849.372	41.607.122
Non-Cash Loans Commissions	36.017	37.727	42.864	26.496	59.853	75.055	94.558	118.465	147.814	183.693	227.410	280.506	344.793
Non-Cash Loans Commissions Rate (%)	1,0%	0,9%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Cash & Non-Cash Loans	10.447.142	13.857.178	19.656.003	23.329.967	26.481.773	33.207.679	41.836.826	52.414.241	65.399.842	81.274.478	100.616.944	124.108.738	152.552.530
Other Commissions	296.052	326.367	353.464	214.427	482.822	605.451	762.780	955.630	1.192.386	1.481.817	1.834.474	2.262.782	2.781.376
Other Commissions Rate (%)	2,8%	2,4%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%	1,8%
Funds Borrowed	2.446.375	3.304.473	4.503.546	5.500.282	6.235.863	7.819.663	9.851.634	12.342.377	15.400.195	19.138.316	23.693.032	29.224.822	35.922.697
Cash Loans Commissions Expense	26.419	4.586	8.088	5.049	11.355	14.239	17.938	22.474	28.042	34.848	43.142	53.214	65.410
Cash Loans Commissions Expense (%)	1,1%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Non-Cash Loans	3.673.652	4.012.572	5.244.356	6.342.629	7.222.629	9.057.050	11.410.561	14.295.441	17.837.129	22.166.772	27.442.229	33.849.372	41.607.122
Non-Cash Loans Commissions Expense	468	639	930	575	1.299	1.628	2.052	2.570	3.207	3.986	4.934	6.086	7.481
Non-Cash Loans Commissions Expense Rate (%)	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%
Banks, Interbank, Non-Cash Loans	7.235.508	8.597.474	10.848.222	12.980.087	14.659.125	18.349.059	23.126.324	28.906.495	35.931.179	44.429.362	54.677.092	66.994.986	81.756.285
Other Commissions Expense	72.765	86.586	111.940	68.457	153.365	191.969	241.949	302.421	375.914	464.823	572.035	700.905	855.339
Other Commissions Expense rate (%)	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%	1,0%
Securities Portfolio	8.055.728	10.512.499	11.114.452	11.093.157	12.576.703	15.770.965	19.869.113	24.892.530	31.059.642	38.598.811	47.784.920	58.941.624	72.450.127
Trading Gain on Securities Portfolio	63.963	130.403	64.292	11.093	25.153	31.542	39.738	49.785	62.119	77.198	95.570	117.883	144.900
Trading Gain Rate	0,8%	1,2%	0,6%	0,1%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Off-Balance Sheet Positions Yearly Cost	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%	10,0%
Cash & Non-Cash Loans	10.450.435	13.857.240	19.656.072	23.329.967	26.481.773	33.207.679	41.836.826	52.414.241	65.399.842	81.274.478	100.616.944	124.108.738	152.552.530
Other Operating Income	1.338.741	734.415	1.256.888	762.481	1.716.869	2.152.924	2.712.370	3.398.126	4.240.010	5.269.197	6.523.210	8.046.232	9.890.304
Other Operating Income Rate (%)	12,8%	5,3%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%
Cost to Income Ratio	115,6%	78,5%	88,1%	88,1%	88,1%	88,1%	88,1%	88,1%	88,1%	88,1%	88,1%	88,1%	88,1%
ROE	68,8%	31,5%	5,0%	24,0%	26,5%	25,6%	25,1%	24,5%	24,1%	23,6%	23,2%	22,7%	22,3%

VAKIFBANKED	ACTUAL			FORECASTED										
BALANCE SHEET DRIVERS	**2004**	**2005**	**2006 1-2**	**2006 3-4**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**
Cash TC / Total Assets	0,6%	0,7%	0,7%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Cash FC / Total Assets	0,2%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%	0,1%
TCMB TC / Customer Deposits TC	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%	6,0%
TCMB FC / Customer Deposits FC	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%	11,0%
Securities Portfolio TC / Total Assets	19,9%	21,8%	19,4%	18,5%	18,5%	18,5%	18,5%	18,5%	18,5%	18,5%	18,5%	18,5%	18,5%
Securities Portfolio FC / Total Assets	19,5%	14,9%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%	12,4%
Loans TC / Total Assets	20,4%	22,2%	26,3%	29,0%	29,0%	29,0%	29,0%	29,0%	29,0%	29,0%	29,0%	29,0%	29,0%
Loans FC / Total Assets	12,7%	12,1%	14,9%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%	18,3%
Accrued Interest Income TC / Total Assets	2,2%	1,9%	1,5%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Accrued Interest Income FC / Total Assets	1,1%	0,6%	0,6%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Other Assets TC / Total Assets	1,2%	1,7%	1,6%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%	1,4%
Other Assets FC / Total Assets	0,2%	0,3%	0,4%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%	0,7%
Customer Deposits TC / Total Assets	40,6%	45,5%	45,6%	43,7%	43,7%	43,7%	43,7%	43,7%	43,7%	43,7%	43,7%	43,7%	43,7%
Customer Deposits FC / Total Assets	26,8%	21,7%	20,1%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%	20,8%
Funds Borrowed TC / Total Assets	1,1%	0,7%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%	0,5%
Funds Borrowed FC / Total Assets	10,9%	10,8%	12,4%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%	14,8%
Accrued Interest Expense TC / Total Assets	0,9%	0,7%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Accrued Interest Expense FC / Total Assets	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Other Liabilities TC / Total Assets	3,7%	2,7%	2,5%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%	2,3%
Other Liabilities FC / Total Assets	1,3%	0,8%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%	0,6%
Letters of Guarantees / Total Assets	11,5%	9,6%	9,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%	10,9%
Bank Acceptances / Total Assets	1,2%	0,4%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Letters of Credits / Total Assets	28,1%	27,2%	32,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%	6,4%
Other Guarantees / Total Assets	1,2%	0,9%	0,4%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%	0,2%
Irrevocable Commitments / Total Assets	12,7%	10,0%	8,3%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%	8,1%
Total FC Assets / Total Assets	42,6%	36,3%	35,7%	40,4%	40,4%	40,4%	40,4%	40,4%	40,4%	40,4%	40,4%	40,4%	40,4%
Total FC Liabilities / Total Assets	42,8%	36,1%	35,4%	39,7%	39,7%	39,7%	39,7%	39,7%	39,7%	39,7%	39,7%	39,7%	39,7%
Foreign Currency Buys / Total Assets	0,6%	0,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Foreign Currency Sells / Total Assets	0,6%	0,3%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%

VAKIFBANK	Risk Weights								
	Consolidated								
Risk Weights	**0%**	**20%**	**50%**	**100%**					
Risk Weighted Assets					Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
I - Balance Sheet items (Net)	**3.557.330**	**1.773.361**	**4.309.892**	**14.434.556**	**16.944.174**	**24.533.002**	**69,07%**	**88,99%**	**2,41%**
Cash	316.129	23.161	0	0					
Due from banks	1.358.472	1.720.992	0	108.606					
Interbank money market placements	625.000	0	0	0					
Receivables from reverse repo transactions	122.000	0	0	0					
Reserve deposits	790.584	0	0	0					
Special finance houses	0	0	0	0					
Loans	101.507	29.208	4.092.595	12.290.895					
Loans under follow-up (Net)	0	0	0	80					
Subsidiaries, associates and HTM Securities	0	0	0	293.036					
Miscellaneous receivables	0	0	0	524.432					
Marketable securities held to maturity (Net)	170.029	0	0	110.828					
Advances for assets acquired by financial leasing	0	0	0	0					
Financial lease receivables	0	0	217.297	0					
Leased assets (Net)	0	0	0	0					
Fixed assets (Net)	0	0	0	1.013.454	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Other assets	73.609	0	0	93.225					
II -Off balance sheet items	**126.137**	**2.895.605**	**2.475.499**	**280.361**	**2.097.232**	**9.162.817**	**22,89%**	**11,01%**	**0,30%**
Guarantees and pledges	79.150	2.804.272	371.765	69.269					
Commitments	16.784	40.074	2.030.147	0					
Other off balance sheet items	0	0	0	0					
Transactions related with derivative financial instruments	0	200	0	0					
Interest and income accruals	30.203	3.720	73.587	211.092	Weighted Amount	Balance Sheet Amount	Risk Weight	Share %	Effective Rate
Not risk weighted accounts	0	47.339	0	0					
III -Total risk weighted assets	**3.683.467**	**4.668.966**	**6.785.391**	**14.714.917**	**19.041.406**	**33.695.819**	**56,51%**	**100,00%**	**2,70%**

Sector Risk Weights	55,46%
Sector Loans Under Follow Up	2,65%
Bank' Risk Weights	56,51%
Bank' Loans Under Follow Up	2,70%

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