



Learning business by doing business



TOPSIM-Simulations
Learning business by doing business

TOPSIM – Banking

Participants Manual

Version 8.3

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1. The basis of TOPSIM – banking

1.1. Letter of resignation of the retiring management

Dear successors,

My management colleagues and I would like to welcome you to your first day of work at the bank.

As you already know, the prior management personnel unanimously agreed to retire for age reasons in order to make room for younger management personnel.

We have worked successfully in the national and international banking market for some time. Last year, we earned a net income of 250 million Euros after taxes and employed more than 7000 employees.

The prognosis for banking institutes with extensive services is good – according to a study on the expected market opportunities, excerpts of which are quoted in the following:

"The competitive situation of many companies is marked by growing cost pressure on one hand and the necessity of intensive market attention on the other.

An increasing replacement of small banking institutes by large, international institutes can be observed as a result of this development.

This development is promoted by the decrease of margin in interest transactions and can lead to additional concentrations in the future."

We are leaving you all records of the peculiarities of your company and the information regarding the last business year to aid you.

We wish you lots of success!

Sincerely,

Robert F. Chairman

1.2. Economic and banking conditions

1.2.1. Development of the global economy

The development of the global economy has been marked in the past few years by a consistent economic upswing, which began eight years ago and has lasted until the present. Practically every industrialized country has profited from this economic upswing, even if it cannot be denied that the regional differences have become greater in the recent past. Increased growth impulses have especially been present in Europe due to the EU and the reform processes in Eastern Europe. The future development of the EU and the former East German States is of particular importance, especially for the German national economy. The unmistakable possibilities of the unified German economic market also entail very clear risks, especially in the area of interest and currency.

The creation of a European economic market (EEM) should also have a great effect on the European banking and financial market. Banking competition has already begun to intensify within the EU. As the freedom and liberalization rules will probably be adopted in the future EWR in one form or the other, intensification in competition can also be expected for banking in Germany.

1.2.2. Economic situation in Germany

Germany is very dependent upon the development of the global environment due to its intensive orientation toward foreign markets. The general economic trend has recently paralleled the development of the global economy to a large degree. Since the Federal Republic of Germany is one of the biggest trading partners of the EU countries, we must be particularly attuned to the development in these countries.

There has been increasing competition in the banking sector in the past few years. Many banking institutes, especially small and mid-sized institutes, were surprised by the quick and lasting change in conditions. The difficulty of finding qualified personnel, quickly changing information and processing technology, a change in the customer profile, and tight earnings margins in retail banking are just a few factors in the changing competition situation. The competitive battle in the banking sector will most likely intensify in the future. The EU-behavioral rules in the area of banking and finance markets favor this, among other things.

1.3. You are taking over the bank!

The retiring management of the bank presents you with an extensive business report for the past three years.

1.3.1. Explanation of the profit and loss accounting

Active trading in nearly all lines of business led to a slight improvement in the profit and loss accounting. **The net profits increased by 3.7 % to 223 million Euro over the previous year.**

1.3.2. Return

The noticeably higher interest on average when compared to the previous year in Germany and in other countries not only caused the interest proceeds to increase noticeably (+ 18 %), but also the interest we paid (21 %). The surplus from interest receivable, which increased dramatically in the previous year, also increased this year. This new, substantial improvement was solely the result of the larger volume of credit granted. The margins were especially under constant pressure in German mortgage dealings.

1.3.3. Expenses

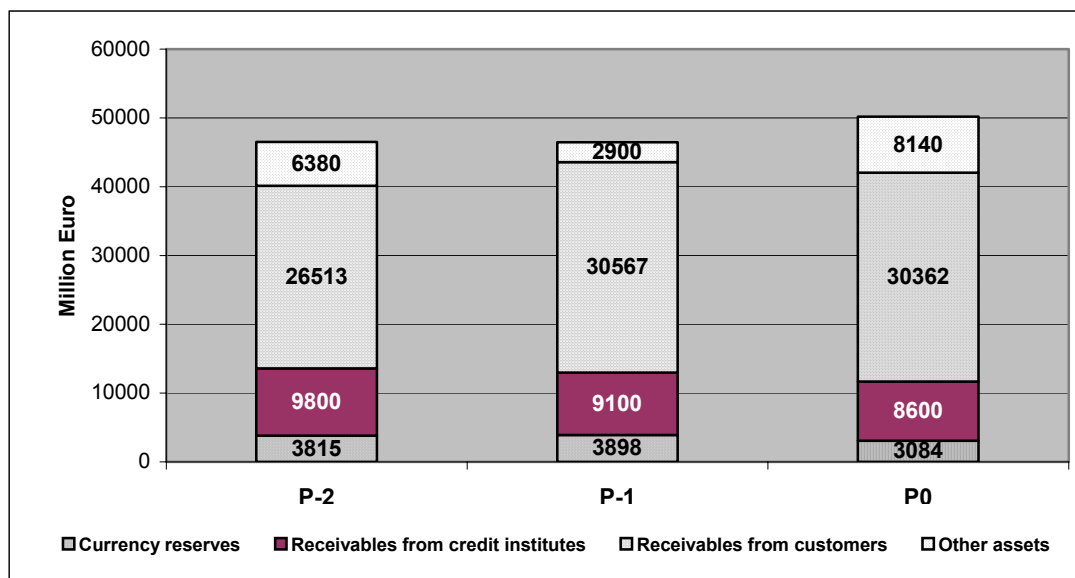
Thanks to deliberate attempts at saving, the costs increased much more slowly in the last period than did the operating earnings. About 50 % of the increase in expenses of 138 million Euro was due to personnel costs.

1.3.4. Balance development

The balance sum increased by 7.6 % in the period 0 to 50,187 billion Euro. This is a fairly average development when compared to larger banks.

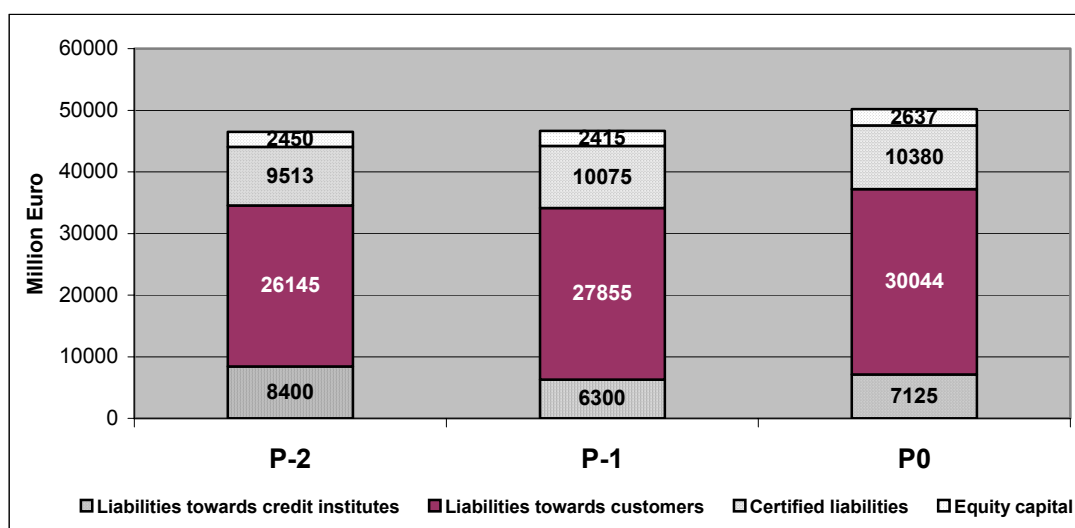
1.3.5. Assets

In lending and investment business, the granting of credit to customers increased again on average. Our share of the balance sum thus increased slightly in comparison with last year. The share of receivables from credit institutes remained practically unchanged.



1.3.6. Liabilities

In borrowing transactions, the change from savings deposits to the much more profitable time deposits that was noted in the previous year continued at an accelerated pace and made refinancing much more expensive. In spite of this, the relationship between savings deposits and mortgage loans remains good in comparison with the competition. Since the share of granted credit also increased, the balance can continue to be considered strong in regard to yields.

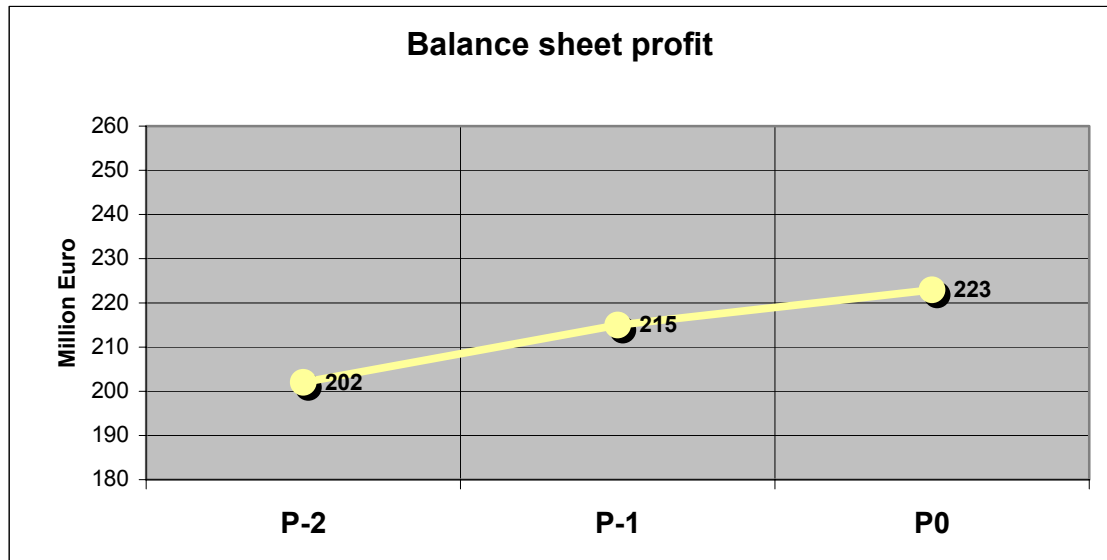


1.3.7. Capital resources

At the end of Period 0, the share capital remained at 800 million €. 215 million € were added to the reserves in the year under review.

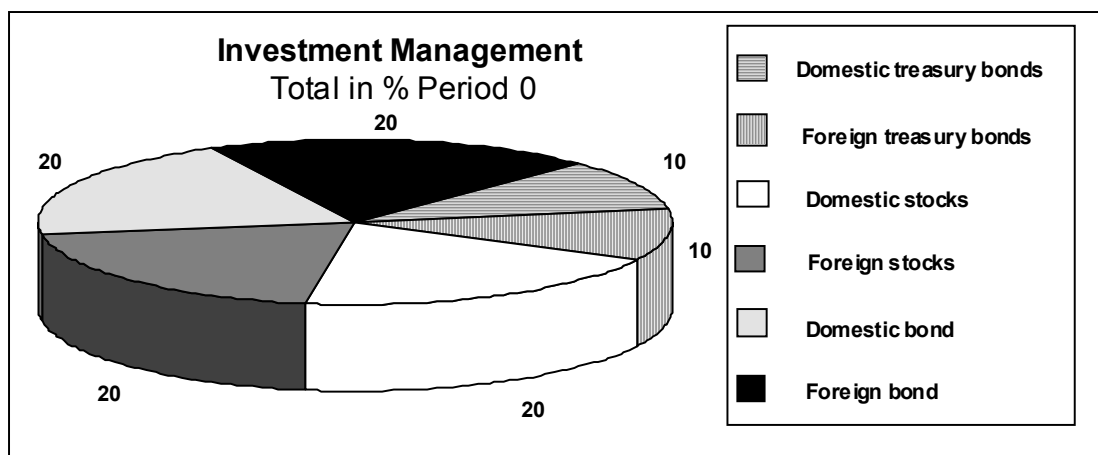
1.3.8. Net profits

With a gross profit of around 1712 million Euro¹ and operating expenses after taxes of around 963 million Euro², a net profit of around 223 million Euro³ remains after deductions for the business year of the Period 0. This is an increase in net profit of 8 million Euro or 3.7 % over the previous year.



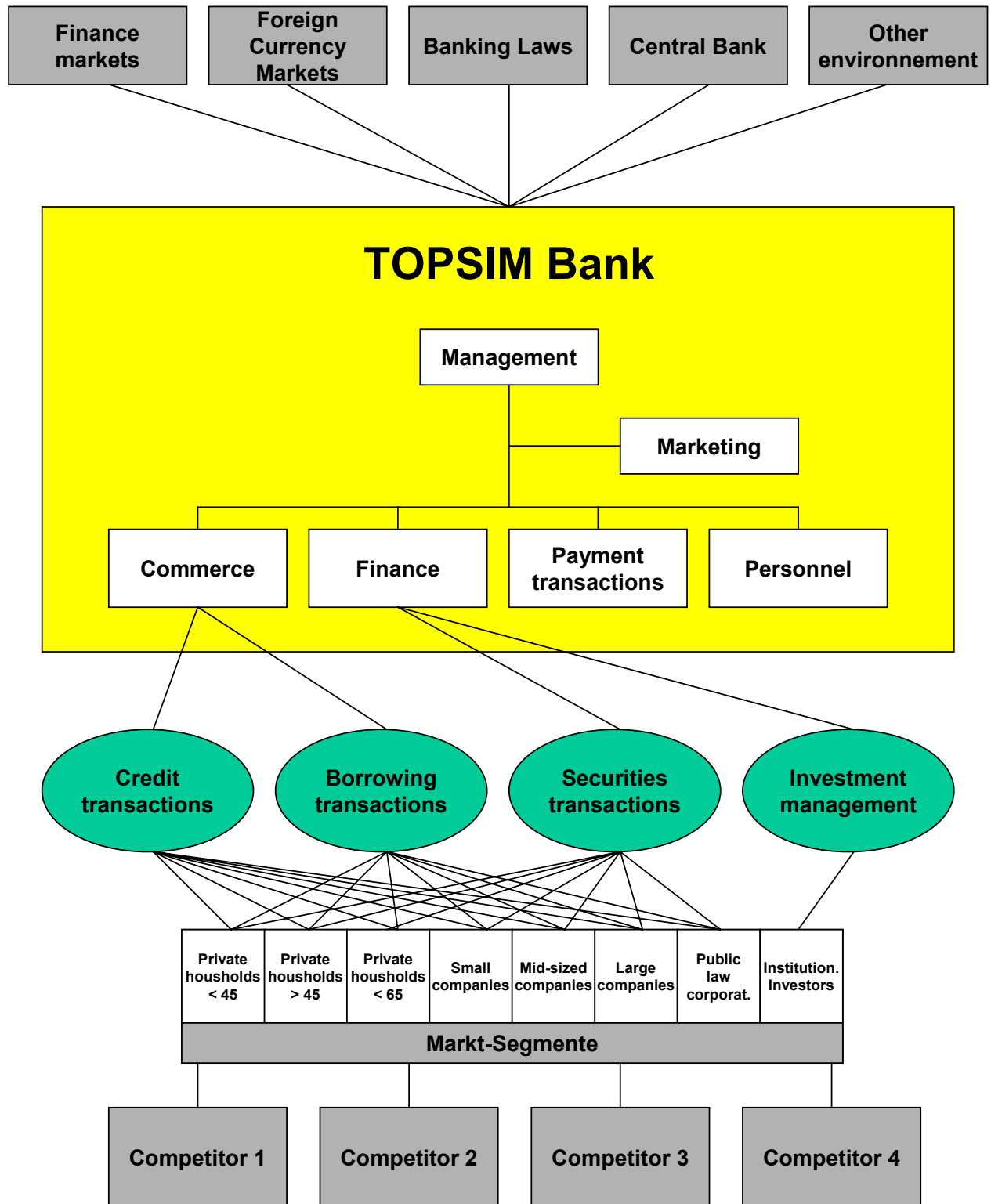
1.3.9. Investment management

The balance sheet does not include the management authorization orders, which were 11.2 billion Euro for the Period 0. This is an increase of 5.3 % over the previous year. 50 % of the total managed deposits were invested in Euro. The performance of 2.8 % must be seen as below average in comparison with the branch average.



¹ Interest margin + balance of commissions profit and expenses + securities profit
² Administrative expenses, personnel benefits, and other personnel costs, material costs, taxes, allowances for depreciation, securities, losses, other expenses
³ The program calculates internally with values behind the decimal, which are then rounded. This results in the values of 223 shown in the balance sheet.

1.4. Organizational diagram of the bank



Course of the simulation

The course of a simulation can be portrayed as follows for a bank (= work group):

1. Initial situation

Overall economic developments
(economic situation, interest
level, exchange rate, etc.)
Business results of the bank
(balance sheet, profit and loss,
etc.)

2. Prognosis

Probable development of the
overall economy and the
economic situation

3. Analysis

General situation and the situation in your own bank

4. Goals

Determination of the strategic and operative goals

5. Decisions

Temporarily determine action variables

6. Budget

Calculate probable results

7. Final decisions

Make final decisions based on the budget results

8. Simulation

Entry of all decision variables into the computer model and
calculation of the results

9. Results

Output of the results to the individual banks
Comments and explanations by the trainer

These work phases represent one business year (=period of play). Several business years will be played in the course of a planning game.

2. Module A: Accounting business

You can influence the success of your bank with a series of decision variables.

2.1. Decision form I (part I)

With decision form I, **volume** and **interest decisions** can be made for the lending and borrowing transactions.

Decision form I			Bank:				
TOPSIM - Banking							
ACCOUNTING BUSINESS							
ASSETS			P0	P1	P2	P3	P4
Receivables from credit institutes	Due daily	Mio €	600				
	With a fixed term	Mio €	8000				
Receivables from customers	Current account credits	%	10.50				
	Credits rep. by installm.	%	13.25				
	Loans grant. to local auth.	%	8.00				
	Other loans	%	9.00				
	Mortgage loans	%	8.50				
LIABILITIES			P0	P1	P2	P3	P4
Liabilities tow. credit institutes	Due daily	%	8.50				
	With a fixed term	%	7.75				
Liabilities towards customers	Savings deposits	%	4.75				
	Demand deposits	%	0.50				
	Fixed term dep. (short-term)	%	7.50				
	Fixed term dep. (med.-term)	%	6.75				
Debenture bonds (medium-term)		%	6.25				
Debenture bonds (long-term)		Mio €	400				
Subordinate		Mio €	0				
Market research report		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PLANNING VALUES	Balance sheet total	Mio €	50000				
	Net income per year	Mio €	230				

2.1.1. Volume decisions

Your bank can make volume decisions for the balance sheet items: **receivables from credit institutes** and **debenture bonds** (long-term).

Receivables from credit institutes

The desired volumes for these items can be entered in the appropriate entry field. The appropriate amounts are drawn from the **currency reserves** and therefore result in interest earnings. The interest rates depend upon the market and can be taken from the economic situation.

The interest rates in the initial solution (Period 0) were:

Receivables from credit institutes due daily 8.50 %
Receivables from credit institutes with a fixed term 7.75 %

Your decisions for each period for the items **receivables from credit institutes** are **absolute** and **not in addition** to the previous period.

Debenture bonds (long-term)

The bank debenture can issue bonds with a term of 12 years and fixed interest rate to create long-term loan capital. The interest rate for new issues depends upon the current capital market situation and can be taken from the economic situation.

The interest rate in the initial solution (Period 0) was: 6.75 %

The decision you make will be added to the balance sheet value of the previous period.
Debenture bonds of €uro 400 million are due for each period.

2.1.2. Volume limitations

Maximum values exist for volume decisions for each period. These are binding and remain the same for the entire planning game.

Assets (Mio. €uro)		Max.	Liabilities (Mio. €uro)	Max.
Receivables from credit institutes	Due daily	10.000	Debenture bonds (long-term.)	3.000
	With a fixed term	10.000		

2.1.3. Interest decisions

You determine the valid interest rates for your bank for the next period for the following assets and liabilities.

Assets

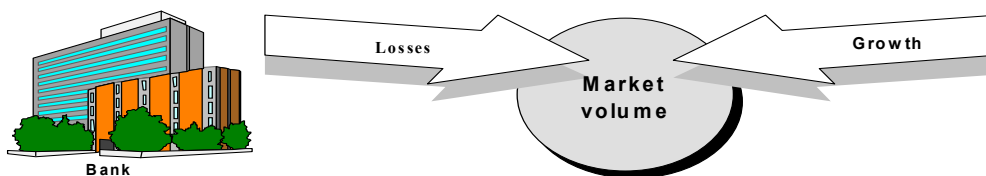
- Receivables from customers
- Current account credits
- Credits repayable by installments
- Loans granted to local authorities
- Other loans
- Mortgage loans

Liabilities


- Liabilities towards
- Credit institutes due daily/with a fixed term
- Liabilities towards customers
- Savings deposits
- Demand deposits
- Fixed term deposits short and medium-term
- Certified liabilities
- Debenture bonds (medium-term)

2.1.4. Effects of interest decisions

Your interest decisions affect customer behavior in the individual balance sheet items. The market volumes in the individual categories are calculated as follows:



Better interest conditions in comparison with the competition mean less loss of established customers and more gaining of new customers, which means that the bank will grow more strongly than the competition in the respective area.

It should be taken into account that the market volumes can shrink or grow if the interest rate of the bank deviates from the interest rate that is standard in the market. The standard market interest rate is the average interest rate of the respective minimum and maximum rates (exceptions: liabilities towards credit institutes/demand deposits) in the interest limitation table. (current interest limitation table  see economic situation report).

2.1.5. Interest structure (curve)

The interest structure plays an important roll in bank control, especially for the control of bank assets and bank liabilities. The interest structure curve – also referred to as the yield structure curve – graphically portrays the yields of a basic loan depending upon the remaining term. In the planning game, the yields of the "current interest rate" are used as the "yields of the basic loan".

2.1.6. Interest limitations

You can only make your interest decisions within a set bandwidth. You will be informed of the respective bandwidths for each period. The minimum and maximum values for Period 0 were (for example):

Assets (%)	Min.	Max.	Liabilities (%)	Min.	Max.
Receivables from customers			Liab. tow. credit inst. due daily	7.50	9.50
Current account credits	9.00	12.00	Liab. tow. credit inst. with a fixed term	5.50	8.50
Credits rep. by installments	11.75	14.75	Liabilities towards customers		
Loans grant. to local auth.	6.50	9.50	- Savings deposits	3.25	6.25
Other loans	7.50	10.50	- Demand deposits	0.00	3.00
Mortgage loans	7.50	9.50	- Fixed term deposits short-term	6.00	9.00
			- Fixed term deposits medium-term	5.25	8.25
			Certified liabilities		
			- Debenture bonds medium-term	4.75	7.75

2.1.7. Market research report

In order to receive information about the decisions and the market shares of the competition, you can order a market research report. This costs **5 million Euro** and will be charged to the **material costs** account in the profit and loss account.

- = **Yes** You will receive the market research report
 = **No** You will **not** receive the market research report.

2.1.8. Planning values

Entry of the balance sheet total and the net profit expected as a result of the planning balance sheet.

2.2. Reports module A: Accounting business

2.2.1. Balance sheet

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION			Copyright (c) 2002 by TERTIA Edusoft Bank 1 V8.2			Period 0 Date 30. 9.2003	
B A L A N C E S H E E T							
ASSETS (MEUR)	prev.per.	period	LIABILITIES (MEUR)	prev.per.	period		
Currency reserves	3898	3084	Liabilities tow. cred.inst.				
Treasury bonds	0	3000	- due daily	600	625		
Receivables from credit inst.			- incl. bridging credit	0	0		
- due daily	600	600	- with a fixed term	5700	6500		
- with a fixed term	8500	8000	Liabilites towards custom.				
Receivables from customers			- Savings deposits	9050	9358		
- Current account credits	2817	2788	- Demand deposits	5015	5517		
- Credits rep. by installm.	3395	3734	- Fixed term dep.(short-t.)	10100	11110		
- Loans granted to loc.aut.	4000	3921	- Fixed term dep.(med.-t.)	3690	4059		
- Other loans	6200	6014	Certified liabilities				
- Mortgage loans	14335	13905	- Debent. bonds (med.-term)	4875	5180		
Shares			- Debent. bonds (long-term)	4800	4800		
- Domestic shares	0	250	- incl. subordinated	0	0		
- Foreign shares	0	250	Other liabilities	400	400		
Debenture bonds			Equity capital				
- Domestic debenture bonds	0	1000	- Capital	800	800		
- Foreign debenture bonds	0	1000	- Capital reserve	400	400		
Participations	0	0	- Retained income	1000	1215		
Material assets	2000	1900					
Bank's own stocks	100	100					
Other assets	800	640					
Balance sheet loss	0	0	Balance sheet profit	215	223		
SUM OF ASSETS	46645	50187	SUM OF LIABILITIES	46645	50187		

2.2.2. Overview of balance sheet items with a fixed term

Tertia Edusoft GmbH	Copyright (c) 2002 by TERTIA Edusoft
TOPSIM - Banking	Bank 1
BANK PLANNING SIMULATION	Period 0
	V8.2
	Date 9.10.2003

Overview of Credits repayable by installments	Volume (MEUR)	Due date in Period	Interest (%)
Period -3	805	1	11,50
Period -2	873	2	12,00
Period -1	1004	3	12,25
Period 0	1052	4	13,25
TOTAL:		3734	AVERAGE: 12,31

Overview of Loans granted to local authorities	Volume (MEUR)	Due date in Period	Interest (%)
Period -1	1985	1	7,00
Period 0	1936	2	8,00
TOTAL:		3921	AVERAGE: 7,49

Overview of Mortgage loans	Volume (MEUR)	Due date in Period	Interest (%)
Period -4	3179	1	6,50
Period -3	3003	2	6,75
Period -2	2625	3	7,25
Period -1	2315	4	7,50
Period 0	2783	5	8,50
TOTAL:		13905	AVERAGE: 7,26

Overview of Fixed term deposits (medium-term)	Volume (MEUR)	Due date in Period	Interest (%)
Period -3	897	1	5,00
Period -2	952	2	5,50
Period -1	1038	3	5,75
Period 0	1172	4	6,75
TOTAL:		4059	AVERAGE: 5,81

Overview of Debenture bonds (medium-term)	Volume (MEUR)	Due date in Period	Interest (%)
Period -4	910	1	4,25
Period -3	950	2	4,50
Period -2	1005	3	5,00
Period -1	1135	4	5,25
Period 0	1180	5	6,25
TOTAL:		5180	AVERAGE: 5,12

2.2.3. Explanations of the selected balance sheet items

2.2.3.1. Assets

Currency reserves

The currency reserves are the cash management of the banks. They mainly consist of cash and credit at the European Central Bank. The currency reserves increase if customers make deposits or if transfers arrive from other banks, for example. Withdrawals by customers reduce the currency reserves accordingly.

The bank must keep a minimum reserve of currency on hand in accordance with the regulations of the European Central Bank, the so-called minimum reserve. The European Central Bank determines the amount of the necessary minimum reserve. These minimum reserves are stipulated percentage rates of the liability items demand, short-term fixed-term, and savings deposits. The European Central Bank sometimes changes the minimum reserve rates in order to affect the economic situation. An increase of the minimum reserve rates always leads to higher overall currency reserves at the banks. Among other things, this reduces available money, which banks can lend, and results in the economy having fewer credit possibilities.

In TOPSIM – Banking, a minimum currency reserve is requested for simplification, which is set by the leader of the game (Period 0: 1,000 million Euro). If the minimum reserves are not complied with, the system assigns a mandatory bridging loan to the bank in question. The amount of this loan is set so that the filled currency reserves are sufficient to meet the required minimum reserve. Bridging loans are comparatively more expensive and this leads to a clear reduction in profit.

Treasury bonds

Treasury bonds are money-market papers, which the state issues to bridge short-term solvency shortages. Their term is never longer than 12 months. This means that the entire stock of treasury bonds is due within one period. You can invest in foreign and domestic treasury bonds.

Receivables from credit institutes

Loans to other banks are listed under this item in the balance sheet. The opportunity to give loans to other banks is often used if a high short-term currency surplus exists. Interest can be earned with money invested in this manner. The interest is formed in the market by supply and demand. In contrast with the European Central Bank, an individual commercial bank cannot directly influence the interest rate.

The game groups can give loans to other banks with their bank. To do so, you enter the volume that the bank wants to invest in other banks in the decision form I in the field "**loans to credit institutes due daily and with a fixed term**". The interest rate at which loans can be given to other credit institutes in the game is determined by the leader of the game and announced in the economic situation report.

Receivables from customers *

- Current account credits

This balance sheet item contains the advances on current account of private and corporate clients. Current account credits can only be utilized by customers of a bank if the bank has granted them a so-called line of overdraft credit. This means that a certain maximum credit volume has been agreed upon with the customers. In TOPSIM – Banking, the lines of credit are always utilized completely. The banks therefore do not earn any additional interest (provision fee) for granting of lines of credit.

The interest that a bank charges its customers for current account credits is entered in the decision form I. The demand for current account credits at the individual banks depends upon this structure of conditions – among other things, such as the economic environment.

- Credits repayable by installments

Credits repayable by installments are usually consumer credits, which are used by private customers for the financing of automobiles or HiFi-systems, for example. The **terms** vary and are for an average of **four years** in TOPSIM - Banking.

The teams enter the interest rate that they want to charge their customers for credits repayable by installments in the decision form I. The interest conditions have a major effect on the demand for credits repayable by installments. The credit losses are normally very high since credits repayable by installments are not covered by any normal securities.

- Loans granted to local authorities

Loans granted to local authorities are credits to public authorities (OerK). These credits are for the financing of public plans. Loans granted to local authorities are considered to be without risk. Therefore, public authorities usually must only pay relatively low interest rates.

The game groups determine the interest rate they will offer the public authorities for their credit demand in the decision form I. The demand for loans granted to local authorities at the individual banks depends upon this interest rate. Overall, the demand for loans granted to local authorities at the individual banks in the individual game periods can fluctuate due to economic reasons or other public interests. Loans granted to local authorities always have a **term of 2 years** in the simulation.

Other loans

Other loans are primarily credits to corporate customers, which are secured by means of assignments of claims or transfer of ownership by way of security. These securities usually do not have the quality of a mortgage. Therefore, other loans are considered riskier than mortgage loans.

In the game, other loans have an average term of 1 - 3 years. 50 % are granted in the form of current accounts. The other 50 % are granted as advances of a fixed amount. The interest on the reserve from the previous period is variable and depends among other things on the interest that the bank in question grants for deposits.

* **Note:** Discount credits are not dealt with in TOPSIM Banking, since this form of credit has lost importance and will continue to lose importance.

Mortgage loans

Mortgage loans are primarily used by customers to finance houses and real estate. Companies use this type of credit to finance other investments over the long term.

In order to cover the risk of nonpayment of these loans, the bank regularly applies liens, which make it possible for the bank to sell the house or real estate if the borrower is unable to pay. This greatly limits the risk for the bank resulting from these loans.

The game groups enter the interest rate that they will offer mortgage loans at in the decision form I. This interest rate is in effect for **new loans** and a **fixed term of 5 years**.

Securities

The securities listed under this balance sheet item are the result of the bank's own business with fixed interest securities and stocks. When buying, the fixed interest securities are entered into the balance sheet at nominal value, whereas stocks are entered at current price. If the interest level for loans changes, the loans that were bought in the previous periods are reevaluated. The same is true for market rate changes with stocks.

Material assets

Real estate that the bank needs for bank operations. The balance sheet value of this item is reduced each period by the amount of the depreciation. **The depreciation per period is 5 %** and refers to the net book value.

The bank's stocks

This item contains the bank's own stocks. The initial value remains unchanged throughout the entire game.

Other assets

This balance sheet category contains among other things **the transitory assets, the bank's stocks of precious metals, and the operating and business equipment of the bank**. In addition, the **investments in automation** with decision form IV are listed in this item. **The depreciation per period is 20 %** and refers to the net book value.

2.2.3.2. Liabilities

Liabilities towards credit institutes

This balance sheet category is the opposite of "Receivables from credit institutes". The information stated there is also in effect for this category.

Liabilities towards customers

- Savings deposits

The issuing and keeping of a savings book for the customers is a striking characteristic of the investments listed under this title. Savings deposits are usually subject to variable interest. The interest rate for savings deposits is also referred to as basic savings rate. The bank uses savings deposits for long-term refinancing.

The game groups decided on the basic savings rate of their bank. This interest rate is an average interest rate for the savings deposits in the next period. The basic savings rate, the marketing measures, and the personnel decisions in the area of liabilities are the major influences on the volume that can be achieved in the market.

- Demand deposits

Assets of customers, which the customers can access at any time, are called credit balances payable on demand. For example, demand deposits include the salary accounts of private customers. Demand deposits primarily allow the customers to carry out their payment transactions. Although the volume of the individual demand deposits are subject to great fluctuations, these fluctuations often cancel each other out due to the great number of accounts. As a result, one can assume a relatively constant average number of demand deposits (sediment theory). Usually, demand deposits are only subjected to low interest rates in practice.

In TOPSIM – Banking, the game groups decide upon the interest that they offer their customers for their demand deposits. In addition, the measures taken in the payment transactions (see marketing and personnel module) have a positive or negative on the bank where the customers keep their demand deposits.

- Short-term fixed term deposits

Fixed term deposits are interest-bearing investments of the customers with a term of less than 3 months. They especially serve the company customers for short-term investment of currency surpluses.

In the planning game, it is assumed that the items listed in the balance sheets correspond with the average reserves of fixed term deposits of the expired period. Therefore, one can formally assume a term of one period.

The game groups determine the interest rate that the bank offers its customers for the investment of short-term fixed term deposits. The interest rate should be considered an average interest rate for the entire next period. The volume of short-term investments that can be achieved in the market depends primarily upon this interest condition in addition to other factors.

- **Medium-term fixed term deposits**

With medium-term fixed term deposits, the investors are usually primarily interested in the savings aspect. The terms are 3 months to 4 years and longer. In TOPSIM – Banking, it is assumed that the long-term fixed term deposits have an **average term of four periods**. The long-term fixed term deposits deposited four years ago are always due in the ongoing period. In addition to other influences, the interest conditions granted are especially decisive for the volume that can be achieved in the market for the next period.

Certified liabilities

- **Debenture bonds (medium-term)**

In order to refinance over the medium term, banks can issue their own debenture bonds. The debenture bonds have a term of **5 years** (= 5 periods) in the game. The buyers of debenture bonds react strongly to changes in interest rates. The interest rate that the banks offer is only in effect for new transactions in this period and is therefore fixed for 5 periods.

The overview of medium-term debenture bonds below the balance sheet shows which period the debenture bonds were issued in, the volume, the due date, and the average interest rate.

- **Debenture bonds (long-term)**

Long-term funds for financing lending and investment business. The term of the debenture bonds in the game is **12 periods** each. **400 million Euro** from earlier periods **is due** per period.

The game groups enter the volume of debenture bonds (in the **Maximum Euro 3'000 million**) that they want to issue in this period in the decision form. The interest rate is set by the leader of the game and is fixed for the term of these debenture bonds.

- **Subordinate debenture bonds**

The bank can issue long-term debenture bonds as subordinate bonds. Subordinate liabilities are only paid after the claims of other creditors in case of liquidation or of bank bankruptcy.

Subordinate liabilities may be counted as 2nd class supplementary capital to the liable equity capital up to half the amount of the core capital, in order to fulfill Rule I: Liable equity capital according to §10 KWG (see explanations of the structure statistics).

The interest for subordinate debenture bonds is **1/2 %** higher than for normal debenture bonds.

Other liabilities

Reserves are especially located in this item. This item remains unchanged throughout the course of the planning game.

- Equity capital

The equity capital is the capital that the bank owners constantly provide to the bank. In the banking area, there are special legal regulations for equity capital (see complying with Rule I - equity capital rule - § 10 KWG) Equity capital includes the share capital, the capital reserve, the retained income, and the balance sheet profit. Any balance sheet loss in the simulation is immediately deducted from the profit or capital reserve.

- Capital

The capital of the bank consists of 16,000.000 bearer shares @ Euro 50.00 nominal at the beginning of the planning game. The capital can be changed by an increase in stock capital.

- Balance sheet profit / balance sheet loss

The balance sheet profit is the profit after taxes of the statement period. Undistributed profits are entered as retained income. Profits not distributed to the owners by the bank thus increase the equity capital. This is particularly important when calculating the figures that are connected to bank supervision regulations.

2.2.4. Profit and loss account

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 Period 0 V8.2 Date 9.10.2003		
P R O F I T A N D L O S S A C C O U N T				
(all values in million EUR)		previous period		Period
Income from interests				3716
· Currency reserves			31	
· Receivables from credit institutes due daily			51	
· Receivables from credit institutes with a fixed term			620	
· Receivables from customers: Current account credits			293	
· Receivables from customers: Credits repayable by install.			460	
· Receivables from customers: Loans granted to local auth.			294	
· Receivables from customers: Other loans			541	
· Receivables from customers: Mortgage loans			1010	
· Credit commission as share of interest			58	
· Treasury bonds			206	
· Earnings from securities			152	
Interest payments				-2610
· Liabilities towards credit institutes due daily			-53	
· including bridging credit			0	
· Liabilities towards credit institutes with a fixed term			-504	
· Liabilities towards customers: savings deposits			-444	
· Liabilities towards customers: demand deposits			-28	
· Liabilities towards customers: fixed term dep. (short-t.)			-833	
· Liabilities towards customers: fixed term dep. (med.-t.)			-236	
· Debenture bonds (medium-term)			-265	
· Debenture bonds (long-term) (incl. subordinate)			-247	
EARNINGS FROM INTEREST SPREAD				1106
Earnings from participations				0
Commission proceeds			674	
Commission expenses			-67	
EARNINGS FROM COMMISSION TRANSACTIONS				606
GROSS PROCEEDS (A)				1712
Personnel costs			-399	
Material costs (incl. depreciation on material assets)			-565	
MANAGEMENT COSTS (gross demand) (B)				-963
PARTIAL OPERATION RESULTS (A - B)				749
Allowance for depreciation on claims			-281	
Allowance for depreciation and depreciation on securities			-63	
Appreciation on securities			0	
Allowance for depreciation and depreciation on particip.			0	
Appreciation on participations			0	
EVALUATION PROCEEDS				-344
OPERATION RESULTS				405
+ / - Extraordinary result (= rem. exp. + extr. result)				0
NET INCOME FOR THE YEAR (before taxes)				405
TAXES				-182
NET INCOME FOR THE YEAR (after taxes) [ROE]				223

2.2.5. Explanation of the profit and loss account

2.2.5.1. Earnings from interest spread

The interest earnings that the bank receives for loans granted and the interest payments that the bank has to pay for loans taken out or investments taken out are listed separately. In addition, the commission earnings from the current account credit transactions and the interest and dividends (basis: stock at the end of the current period) on the bank's own securities also appear here. In the credit transaction, the rate of commission is 1 % (determined by the leader of the game) of the volume of the item of current account credits.

The difference between the interest earnings and the interest payments results in the earnings from the interest spread. The **interest spread** is an important source of earnings for your bank (see ROI-ANALYSIS).

2.2.5.2. Earnings from participations

Dividends of stocks bought for participation reasons.

2.2.5.3. Earnings from commission transactions

Commission from the securities transactions of the customers. The rate of commission by the banks is determined in decision form II.

Turnover from securities transactions of customers

Turnover from deposit transactions (see report MARKET DATA)

- + Turnover from trust investments (see report STOCKS reserves and value)
- + Reapportionment fees VV (see report STOCKS reserves and value)
- + **Gross proceeds from issuing business**

The commission is **0.1 % of the turnover of the securities transaction.**

2.2.5.4. Personnel expenses

The personnel expenses include:

- **Wage costs:** number of employees x wages and salaries
- **Additional personnel costs:** 37 % on the wage costs
- **Other personnel costs:** hiring and dismissal expenses, overtime, temporary personnel, and training costs

2.2.5.5. Material costs (incl. depreciation on material assets)

The material costs include:

- **Costs for operating and business equipment:** 0.6 % of the balance sheet total
- **Advertising expenditures:** customers and line of business advertising in accordance with decision form III
- **Costs for market research report:** 5 million Euro
- **Costs from issuing business:** 10 million Euro fixed costs / 1 % variable costs
- **Depreciation on material assets:** 5 % on item material assets *)
- **Depreciation automation:** 20 % on item other assets *)

*) on the net book value

2.2.5.6. Allowance for depreciation and appreciation

Allowance for depreciation on claims

These are loan losses. These losses depend upon the volume and have the following percentage rates for period 0:

Current account credits	2.0 %
Credits repayable by installments	4.0 %
Loans granted to local authorities	0.0 %
Other loans	0.8 %
Mortgage loans	0.2 %

Allowance for depreciation and depreciation on securities

Accounting losses and costs for coverage against risks from the bank's own securities are listed here. In addition, foreign exchange losses with the added module foreign exchange are listed here.

Appreciation on securities

Stock price gains on the bank's own securities and foreign exchange profits with the added module foreign exchange.

Allowance for depreciation and depreciation on participations

Stock price losses on participations

Appreciation on participations

Stock price gains on participations

2.2.5.7. Extraordinary result

The leader of the game can charge individual banks extraordinary expenses or credit them with extraordinary earnings under this item.

2.2.5.8. Taxes

Are **45 % of the net profit before taxes**.

2.2.6. ROI-Analysis, statistics, and planning quality

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 V8.2						Period 0 Date 9.10.2003	
R O I - A N A L Y S I S and S T A T I S T I C S									
ROI-ANALYSIS	Per. 0	Per.-	Per.-	Per.-	Per.-	Per.-	Per.-		
Interest spread (%)	2,3								
+ Commission spread (%)	1,3								
= Gross proceed spread (%)	3,5								
- Personnel costs (%)	-0,8								
- Material costs (%)	-1,2								
= Gross demand spread (%)	-2,0								
= Partial operating results spr. (%)	1,5								
± Evaluation spread (%)	-0,7								
= Operating results spread (%)	0,8								
± Extraordinary result (%)	0,0								
= Net profit spread before taxes (%)	0,8								
- Tax factor (%)	-0,4								
= ROE (%)	0,5								
STATISTICS		PLANNING QUALITY			Desired values	Actual values	Deviations		
							Absolute	in %	
Growth of bal. sheet (% py)	7,6	Balance sheet total			50000	50187	187	0,4	
		Profit			230	223	-7	-3,1	
Share price (EUR)	225	Planning quality (factor)							8,66
P / E Ratio	14,4								
Gross demand income (MEUR)	1712,0								
Cost-/Income Ratio	177,7								
Investment yield	227,7								
Share of wallet	12,5								

2.2.7. Explanation of the ROI-analysis

The individual items are basically self-explanatory. They are calculated as follows:

Interest spread	$(\text{interest proceeds} - \text{interest payments}) * 100 / \text{balance sheet total prev. per.} + \text{balance sheet total P} / 2$
Commission spread	$(\text{commission proceeds} - \text{commission expenses}) * 100 / (\text{Bal. sht. tot. prev. per.} + \text{Bal. sht. tot. P}) / 2$
Gross proceeds spread	$\text{gross proceeds} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Personnel costs	$\text{personnel costs} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Material costs	$\text{material costs} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Gross demand spread	$(\text{personnel costs} + \text{material costs}) * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Partial operating results spread	$(\text{gross proceeds} - \text{management costs}) * 100 / (\text{Bal. sht. tot. prev. per.} + \text{Bal. sht. tot. P}) / 2$
Evaluation spread	$\text{Evaluation result} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Operating results spread	$\text{Operating results} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Extraordinary result	$\text{extraordinary result} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Net profit spread before taxes	$\text{net income for the year before taxes} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
Tax factor	$\text{Taxes} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$
ROE	$\text{net income for the year after taxes} * 100 / (\text{balance sheet total prev. per.} + \text{balance sheet total P}) / 2$

2.2.8. Explanations of the statistics

2.2.8.1. Market price (€uro)

A market price is determined for each bank in the game, which gives information regarding the quality of the bank. The following factors are taken into consideration for calculating the market price with varying importance:

Factor	Importance
1. Balance sheet total	++
2. Net profit	+++
3. Net loss	---
4. Bridging loan	--
5. Deposit performance index	++
6. Planning quality factor	+
7. Ø-number of training days	+
8. Advertising expenditures	+
9. Dividend	++
10. Profitability of the bank's own funds	++
11. Insufficient coverage of rule I: §10 KWG	-
12. Noncompliance with rules II: §11 KWG	--
13. Fluctuation rate	-
14. Open foreign exchange positions in % the bank's own funds	-
15. Market price of the previous period	+

2.2.8.2. p/e ratio

The p/e ratio shows the relationship between the market price of the stock and the profit per stock. A p/e ratio of 10 indicates that the market price of the stock is 10 x higher than the profit per stock or the value of the stock will be acquired in 10 years. Generally: A low p/e ratio can be viewed as positive. However, note that a low p/e ratio indicates that a reduction in profit can be expected.

2.2.8.3. Cost-/Income-Ratio

The Cost-/Income-Ratio compares the gross proceeds with the management costs (personnel costs + material costs)

2.2.8.4. Investment yield

Percentage of the share of investments (deposits b) on the equity capital.

2.2.8.5. Share of Wallet

Share of customer depenses (interest payments + commission expenses) for banking services on the total customer depenses (in the simulation = interest payments + commission proceeds of all participating banks).

2.2.9. Explanation of the planning quality

The planning deviation of the balance sheet total and the net profit entered in the decision form I are converted together into a planning quality factor. The planning quality factor has an effect on the market price. For the period 0, it was 8.66.





2.2.10. Currency calculations

Tertia Edusoft GmbH		Copyright (c) 2002 by TERTIA Edusoft		
TOPSIM - Banking		Bank 1		Period 0
BANK PLANNING SIMULATION		V8.2		Date 9.10.2003
C U R R E N C Y C A L C U L A T I O N S				
All values in Million EUR	withdraw	deposit	Balan.I	Balan.II
ASSETS				-4615
Treasury bonds	3000	0	-3000	
Receivables from credit institutes:				
- due daily	600	600	0	
- with a fixed term	8000	8500	500	
Receivables from customers:				
- Current account credits	1429	1459	29	
- Credits repayable by installments	1052	713	-339	
- Loans granted to local authorities	1936	2015	79	
- Other loans	1674	1860	186	
- Mortgage loans	2783	3213	430	
Stocks				
- domestic	250	0	-250	
- foreign	250	0	-250	
Debenture bonds				
- domestic	1000	0	-1000	
- foreign	1000	0	-1000	
Inflow from securities protection	0	0	0	
Participations	0	0	0	
Other assets	0	0	0	
LIABILITIES				3319
Liabilities towards credit institutes:				
- due daily	600	625	25	
- with a fixed term	5700	6500	800	
Liabilities towards customers:				
- savings deposits	1955	2263	308	
- demand deposits	752	1254	502	
- fixed term deposits (short-term)	5050	6060	1010	
- fixed term deposits (medium-term)	803	1172	369	
Certified liabilities:				
- debenture bonds (medium-term)	875	1180	305	
- debenture bonds (long-term)	400	400	0	
Capital (nominal)	0	0	0	
Premium for the underwriting of securit.	0	0	0	
PROFIT AND LOSS ACCOUNT ITEMS				483
Balance sheet profit / loss	0	223	223	
Distribution of a dividend	0	0	0	
± Allowance for deprec. of securities	0	0	0	
Participations	0	0	0	
Depreciation	0	260	260	
Bridging credit I				0
EXCESSIVE/INSUFF. COV. OF THE FLOW OF F.				-814
Beginning surplus of currency				3898
Final surplus of currency				3084

2.2.11. Explanation of the currency calculations

The currency calculations show the movements of currency (= deposits and withdrawals of liquid assets) in the expired period.

The following is displayed for each item:

Withdrawal		Cash drain
Deposit		Accrual of liquid assets
Balance I		Difference between withdrawal and deposit
Balance II		Total values

The currency calculations should not be confused with a movement balance sheet.

2.2.12. Bridging loan I

If your bank does not receive sufficient borrowings during the game and therefore becomes illiquid or the supervisory regulations are not complied with, the system automatically assigns a bridging loan to your bank at an increased interest rate.

2.3. Current interest rate method

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION			Copyright (c) 2002 by TERTIA Edusoft Bank 1 Period 0 V8.2 Date 9.10.2003				
CURRENT INTEREST RATE METHOD							
STRUCTURAL CONTRIBUTION							
BALANCE SHEET ITEMS			Curr. int. rate %	Bank's own int. r. %	Margin %	Volume (MEUR)	Inter. cond contr(MEUR)
Currency reserves			8,50	1,00	-7,50	3084	-231
Treasury bonds			7,75	6,88	-0,88	3000	-26
Rec. from credit inst.	due daily		8,50	8,50	0,00	600	0
Rec. from credit inst.	with a fixed t.		7,75	7,75	0,00	8000	0
Rec. from customers	Current acc.cr.	CA	8,50	11,50	3,00	2788	84
Rec. from customers	Installment cr.	FL	6,85	12,31	5,46	3734	204
Rec. from customers	Municip. loans	FL	7,35	7,49	0,14	3921	6
Rec. from customers	Other loans	CA	7,00	10,00	3,00	3007	90
Rec. from customers	Other loans	FL	7,00	9,00	2,00	3007	60
Rec. from customers	Mortgage loans	FL	6,75	7,26	0,51	13905	71
Securities	Stocks		7,35	3,25	-4,10	500	-20
Securities	Bonds		7,00	6,80	-0,20	2000	-4
Liab. tow. cred. inst.	due daily		8,50	8,50	0,00	625	0
Liab. tow. cred. inst.	with a fixed t.		7,75	7,75	0,00	6500	0
Liab. tow. customers	Savings depos.		7,00	4,75	2,25	9358	211
Liab. tow. customers	Demand deposits		8,50	0,50	8,00	5517	441
Liab. tow. customers	F term d. (s-t)		7,75	7,50	0,25	11110	28
Liab. tow. customers	F term d. (m-t)		6,85	5,81	1,04	4059	42
Certified liabilities	Deb. bonds(m-t)		6,75	5,12	1,63	5180	85
Certified liabilities	Deb. bonds(l-t)		6,75	5,15	1,60	4800	77
CA = current account form / FL = fixed loans Interest conditions contribution Sum							Σ 1116
STRUCTURE CONTRIBUTION							
BALANCE SHEET ITEM			Curr. int. rate %			Volume (MEUR)	Int. proc. (MEUR)
Currency reserves			8,50			3084	262
Treasury bonds			7,75			3000	233
Rec. from credit inst.	due daily		8,50			600	51
Rec. from credit inst.	with a fixed t.		7,75			8000	620
Rec. from customers	Current acc.cr.	CA	8,50			2788	237
Rec. from customers	Installm. cr.	FL	6,85			3734	256
Rec. from customers	Municipal loans	FL	7,35			3921	288
Rec. from customers	Other loans	CA	7,00			3007	210
Rec. from customers	Other loans	FL	7,00			3007	210
Rec. from customers	Mortgage loans	FL	6,75			13905	939
Securities	Stocks		7,35			500	37
Securities	Bonds		7,00			2000	140
Liab. tow. cred. inst.	due daily		8,50			625	53
Liab. tow. cred. inst.	with a fixed t.		7,75			6500	504
Liab. tow. customers	Savings depos.		7,00			9358	655
Liab. tow. customers	Demand deposits		8,50			5517	469
Liab. tow. customers	Term d. (short)		7,75			11110	861
Liab. tow. customers	Term d. (long)		6,85			4059	278
Certified liabilities	Deb. bonds(m-t)		6,75			5180	350
Certified liabilities	Deb. bonds(l-t)		6,75			4800	324
Structure contribution Sum							Σ -11

2.3.1. Explanation current interest rate method

2.3.1.1. Interest conditions contribution

With the "interest conditions contribution", the **bank's own interest rate is compared to the current interest rate**. The **current interest rate** always refers to the **current interest rate on the interbank market** (what does a credit cost or what will my savings earn on the interbank market?). This statistic gives information about the profit contribution of your own interest in comparison to the current interest rate. In the report, the profit contribution is expressed as a margin (%) and as interest conditions contribution (in million Euro).

If your own **interest receivable is higher than the current interest rate**, for example, this means that your own bank - in comparison to the market – is making a "profit" (you are getting more from the respective transaction than is "determined" by the current interest rate). This "profit" is referred to as a **(positive) interest conditions contribution**.

The following is in effect for borrowings: If the bank's own **credit interest rate is lower than the current interest rate**, we have caused fewer "interest costs" in comparison to the market. These lower "interest costs" are also referred to as a **(positive) interest conditions contribution**. The liability items can also contribute toward interest earnings!

The "interest conditions contribution" factor helps the management to see which items are **earning**, for example, and how great the **latitude for pricing** (determination of conditions) is.

2.3.1.2. Structure contribution

The "structure contribution" factor investigates the **profit contribution** of the **assets and liabilities structure** of your own bank.

The assets and liabilities structure of a bank refers to the "**composition**" of the two **balance sheet sides** - as a result of the business policy of your own bank - **in short and long-term money**.

The profit contribution results from the interest on the various funds. Normally, the short-term funds have a lower interest rate than the long-term funds. **Therefore, if a bank refinances its long-term assets (usually higher interest rates) with short-term borrowings (usually lower interest rates), it creates a positive structure contribution**. The current interest rates are used for the calculation of the structure contribution – as above.

You must keep in mind that short-term financing involves risks. On one hand, **liquidity problems** can arise as the golden rule of banking, which says that short-term borrowings should only be used for short-term loans, is violated. On the other hand, the bank incurs the **risk of a change in interest rates** if the market suddenly has an inverse interest structure.

The "structure contribution" factor helps the management to recognize where possible **risks** exist in your company policy in regard to the assets and borrowings structure and where countermeasures should be made within the scope of risk management.

2.3.1.3. Current interest rate method - overview of products

The products regarding terms, linking the interest rate to a fixed interest period, risk-WB, risk-GS1, and current interest rate are defined in TOPSIM-Banking as follows:

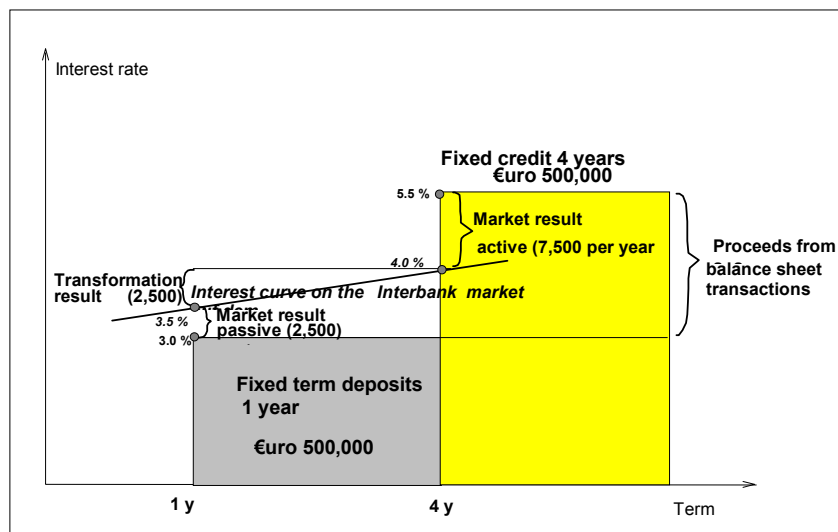
Assets

Product name	Term	Linking the interest rate to a fixed interest period	Risk-WB	Risk-acc. to rule I	Current interest rate
Treasury bonds	1 year	variable 1 year	0.0 %	20.0 %	short-term
Receivables from credit institutes	due daily	short-term money market rate	0.0 %	20.0 %	short-term
	1 year	variable 1 year	0.0 %	20.0 %	short-term
Current account credits	1 year	variable 1 year	2.0 %	100.0 %	short-term
Credits repayable by installments	average 4 years	fixed	4.0 %	100.0 %	long-term
Loans granted to local authorities	2 years	fixed	0.0 %	0.0 %	medium-term
Other loans	mixed	mixed	0.8 %	100.0 %	medium-term
Mortgage loans	5 years	fixed	0.2 %	50.0 %	long-term

Liabilities

Product name	Term	Linking the interest rate to a fixed interest period	Risk-WB	Risk-acc. to rule II	Current interest rate
Liabilities towards credit institutes	due daily	short-term money market rate		40.0 %	short-term
	with a fixed t.	variable 1 year		100.0 %	short-term
Demand deposits	due daily	short-term money market rate		10.0 %	short-term
Savings deposits	average	variable 3 years		10.0 %	medium-term
Fixed term deposits	short-term	fixed 1 year		100.0 %	short-term
Fixed term deposits	medium-term	fixed 4 years		100.0 %	long-term
Debenture bonds	5 years	fixed 5 years		100.0 %	long-term

2.3.1.4. Illustration of the reference rate system



2.3.2. Due date overview

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 V8.2					Period 0 Date 9.10.2003
D U E D A T E O V E R V I E W							
ASSETS (MEUR)	P E R I O D S						
	1	2	3	4	5	6	
Treasury bonds	3000	0	0	0	0	0	
Receivables from credit inst. due daily	600	0	0	0	0	0	
with a fixed term	8000	0	0	0	0	0	
Receivables from customers							
Current account credits	2788	0	0	0	0	0	
Credit rep. by installments	805	873	1004	1052	0	0	
Loans granted to local auth.	1985	1936	0	0	0	0	
Other loans	3664	1432	560	219	85	33	
Mortgage loans	3179	3003	2625	2315	2783	0	
SUM OF ASSETS	24021	7244	4189	3586	2868	33	
LIABILITIES (MEUR)	1	2	3	4	5	6	
Liabilities tow. credit inst. due daily	625	0	0	0	0	0	
with a fixed term	6500	0	0	0	0	0	
Liabilities tow. customers							
Savings deposits	3448	2178	1375	868	548	346	
Demand deposits	1580	1127	805	574	410	292	
Fixed term dep. (short-term)	10605	482	22	1	0	0	
Fixed term dep. (medium-term)	897	952	1038	1172	0	0	
Certified liabilities							
Debenture bonds (medium-term)	910	950	1005	1135	1180	0	
Debenture bonds (long-term)	400	400	400	400	400	400	
SUM OF LIABILITIES	24965	6089	4645	4151	2538	1039	

2.3.3. Explanation of the due date overview

The due date overview shows you what amounts are due in the assets and liabilities (with fixed terms) in which periods.

2.3.4. Market and competition report

(Example with eight competing banks)

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 Period 0 V8.2 Date 9.10.2003						
M A R K E T - a n d C O M P E T I T I O N R E P O R T page 1								
BALANCE SHEET DATA (MEUR)	Bank 1	Bank 2	Bank 3	Bank 4	Bank 5	Bank 6	Bank 7	Bank 8
Balance sheet loss	0	0	0	0	0	0	0	0
Other assets	2640	2640	2640	2640	2640	2640	2640	2640
Securities	2500	2500	2500	2500	2500	2500	2500	2500
Receivables from mortgage loans customers	13905	13905	13905	13905	13905	13905	13905	13905
loans	9935	9935	9935	9935	9935	9935	9935	9935
credits	6522	6522	6522	6522	6522	6522	6522	6522
Receivables from credit institutes	8600	8600	8600	8600	8600	8600	8600	8600
Treasury bonds	3000	3000	3000	3000	3000	3000	3000	3000
Currency reserves	3084	3084	3084	3084	3084	3084	3084	3084
Balance sheet profit	223	223	223	223	223	223	223	223
Retained income	1215	1215	1215	1215	1215	1215	1215	1215
Capital reserve	400	400	400	400	400	400	400	400
Capital	800	800	800	800	800	800	800	800
Other liabilities	400	400	400	400	400	400	400	400
Debenture bonds (long-term)	4800	4800	4800	4800	4800	4800	4800	4800
Debenture bonds (medium-term)	5180	5180	5180	5180	5180	5180	5180	5180
Liabilities fixed term dep. (l-t.)	4059	4059	4059	4059	4059	4059	4059	4059
towards fixed term dep. (s-t.)	11110	11110	11110	11110	11110	11110	11110	11110
customers demand deposits	5517	5517	5517	5517	5517	5517	5517	5517
savings deposits	9358	9358	9358	9358	9358	9358	9358	9358
Liabilities towards credit institutes	7125	7125	7125	7125	7125	7125	7125	7125
BALANCE SHEET TOTAL	50187	50187	50187	50187	50187	50187	50187	50187
PROFIT AND LOSS ACCOUNT (MEUR)								
Income from interests	3716	3716	3716	3716	3716	3716	3716	3716
Interest payments	-2610	-2610	-2610	-2610	-2610	-2610	-2610	-2610
Earnings from securities	152	152	152	152	152	152	152	152
Earnings from participations	0	0	0	0	0	0	0	0
Commission proceeds	674	674	674	674	674	674	674	674
Commission expenses	-67	-67	-67	-67	-67	-67	-67	-67
Personnel costs	-399	-399	-399	-399	-399	-399	-399	-399
Materiel costs	-565	-565	-565	-565	-565	-565	-565	-565
Allow. for depreciation on claims	-281	-281	-281	-281	-281	-281	-281	-281
Allow. for depreciation on securities	-63	-63	-63	-63	-63	-63	-63	-63
Appreciation on securities	0	0	0	0	0	0	0	0
Allow. for depreciation on particip.	0	0	0	0	0	0	0	0
Appreciation on participants	0	0	0	0	0	0	0	0
Extraordinary result	0	0	0	0	0	0	0	0
Taxes	-182	-182	-182	-182	-182	-182	-182	-182
INTEREST CONDITIONS (%)								
Receivables - Current account cr. from customers	10,50	10,50	10,50	10,50	10,50	10,50	10,50	10,50
- Cr. repay. by inst.	13,25	13,25	13,25	13,25	13,25	13,25	13,25	13,25
- Loans to loc. aut.	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00
- Other loans	9,00	9,00	9,00	9,00	9,00	9,00	9,00	9,00
- Mortgage loans	8,50	8,50	8,50	8,50	8,50	8,50	8,50	8,50
Liabilities - due daily	8,50	8,50	8,50	8,50	8,50	8,50	8,50	8,50
towards cr.inst.- with a fixed term	7,75	7,75	7,75	7,75	7,75	7,75	7,75	7,75
Savings deposits	4,75	4,75	4,75	4,75	4,75	4,75	4,75	4,75
Demand deposits	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50
Fixed term deposits (short-term)	7,50	7,50	7,50	7,50	7,50	7,50	7,50	7,50
Fixed term deposits (medium-term)	6,75	6,75	6,75	6,75	6,75	6,75	6,75	6,75
Debenture bonds (medium-term)	6,25	6,25	6,25	6,25	6,25	6,25	6,25	6,25

3. Module B: Personnel / Logistics

3.1. Decision form IV (Part I)

With the Decision form IV - Part I: Personnel – you determine the **additional personnel costs**, the **number of personnel**, the **training measures**, and the **personnel assigned** per area. In addition, **investments in automation** can be made, which lower personnel costs by saving on personnel (see 3.5 Logistics).

Decision form IV						
TOPSIM - Banking						
PERSONNEL						
Additional personnel costs		P0	P1	P2	P3	P4
	%	37.0				
Hirings/dismissals		P0	P1	P2	P3	P4
Credit transactions	No. of employees	0				
Deposit transactions	No. of employees	0				
Investment management	No. of employees	0				
Borrowing transactions	No. of employees	0				
Payment transactions	No. of employees	0				
Training		P0	P1	P2	P3	P4
Credit transactions	Days per empl.	0				
Deposit transactions	Days per empl.	0				
Investment management	Days per empl.	0				
Borrowing transactions	Days per empl.	0				
Payment transactions	Days per empl.	0				
Personnel assigned		P0	P1	P2	P3	P4
Credit transactions	Acquisition %	0				
Deposit transactions	%	0				
Investment management	%	0				
Personnel assigned		P0	P1	P2	P3	P4
Credit transactions	Maintenance %	0				
Deposit transactions	%	0				
Investment management	%	0				
Borrowing transactions	%	0				
Payment transactions	%	0				

3.1.1. Additional personnel costs (%)

The additional personnel costs include the bank contributions toward personnel benefits, personnel privileges, special payments, or bonuses and are based on the wages. The **minimum rate** for the additional personnel costs is **37 %**. This can be raised as desired.

3.1.2. Hirings / dismissals

In the personnel area, you decide on the number of **hirings** and **dismissals** of your employees in the appropriate areas. Hirings and dismissals result in costs that can be seen in the following table.

Personnel data for the Period 0

(The wages appear for each period in the market research report II, page 2)

	Credit transact.	Securities transactions		Borrowing transact.	Payment transact.	Other
		Deposit	Investment managem.			
Salaries, wages (€uro)	45,000.00	39,000.00	51,000.00	42,000.00	33,000.00	40,800.00
Hiring costs (€uro)	12,000.00	7,000.00	17,000.00	10,000.00	7,000.00	
Dismissal costs (€uro)	3,500.00	2,500.00	5,000.00	2,500.00	2,000.00	
Orientation period (hours)	600	400	600	300	200	
Additional personnel costs: 37% Minimum						
Temporary personnel: €uro 36.00 per hour						
Cost for each day of training: €uro 500.00						

3.1.3. Training

You improve the performance of your employees in selling services depending upon the **scope of the training days per employee and per period**. The education level of the employee is evaluated (👉 see report COMPANY DATA).

3.1.4. Acquisition and maintenance

You can use a maximum of **20 %** of your employees for acquisition and maintenance tasks.

Assignment and training of employees have a positive effect on the respective business areas. You should take into account that the capacity may not be sufficient for business dealings if training, acquisition, and maintenance efforts are too great. If the arising volume in the individual business areas cannot be covered by full-time employees and overtime hours (**max. 10 %** of the normal work time), the system automatically recruits temporary personnel. **The quality of your services is reduced by too much temporary personnel and can lead to the migration of customers to the competition.**

3.1.5. Fluctuation

When hiring and dismissing employees, bear in mind that a certain number of employees will leave your bank in each period. You can find the expected fluctuation rate by percentage (resigning employees in percentage of the personnel) for the **next** period in the report "COMPANY DATA".

The **amount of additional personnel costs**, the **training measures**, **overtime**, and the **number of temporary personnel** have an effect on the **fluctuation rate**.

3.2. Decision form IV (Part II)

LOGISTICS					
	P0	P1	P2	P3	P4
Investments in automation (Mio. €)	0.0				

Productivity can be increased by investments in automation. The investments reduce the number of work hours necessary for business transactions (see report COMPANY DATA) in the individual departments and thus lead to less personnel or a reduction of personnel expenses.

The investments are entered on the assets side in the balance sheet under the item "Other assets" and are written off for each period with 20 % on the net book value.

The amount of automation (see report COMPANY DATA – automation index), which depends upon the investments made, has approximately the following effects according to company studies:

Cumulative investments ./. Depreciation (million €uro)	State of automation (Index)	Change in hours needed for Business transactions
600	50	+ 10 %
850	80	+ 5 %
900	85	0 %
925	90	- 5 %
975	95	- 10 %
1075	100	- 13 %
1150	105	- 15 %

3.3. Report module B: Personnel / Logistics

3.3.1. Operating data

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 Period 0 V8.2 Date 9.10.2003				
O P E R A T I N G D A T A						
COMPANY DATA						
PERSONNEL AREA	Credit transactions	Securities transactions Deposit transactions	Investment management	Borrowing transactions	Payment transactions	Others
Beginning no. of personnel	2050	1140	200	1650	1150	
Hirings/dismissals	0	0	0	0	0	
Fluctuation	0	0	0	0	0	
Final number of personnel	2050	1140	200	1650	1150	900
Fluctuation next period	267	148	26	215	150	
Fluct. rate next period	13,0	13,0	13,0	13,0	13,0	
Available hours (in 1000)	3362,0	1869,6	328,0	2706,0	1886,0	1476,0
Deployment of personnel						
- Acquisition	0,0	0,0	0,0		0,0	
- Maintenance	0,0	0,0	0,0	0,0	0,0	
Available for business	3362,0	1869,6	328,0	2706,0	1886,0	1476,0
Necessary hours for busin.	3348,7	1840,3	318,0	2660,1	1720,0	1273,4
Overtime	0,0	0,0	0,0	0,0	0,0	0,0
Temporary personnel	0,0	0,0	0,0	0,0	0,0	0,0
State of training	deficient	deficient	deficient	deficient	deficient	
Level of job satisfaction	dissatisfied	dissatisfied	dissatisfied	dissatisfied	dissatisfied	
LOGISTICS AREA						
		Period	cumul.	Index		
Investments in automation (MEUR)		0,0	640	54,8	(after depreciation)	

3.3.2. Explanation of the operating data

3.3.2.1. Personnel area

The data of the personnel situation in the individual business areas is portrayed under the operating data of the personnel area. The final number of personnel multiplied by 1640 hours per employee and period (minus orientation period for new employees and minus absence for training measures) results in the **hours available for business**. Hours for acquisition and maintenance are subtracted from the available hours.

If the need for business transactions is greater than the available hours for business, the lacking hours are initially covered by **overtime** for the personnel in the respective business area (up to a maximum amount of **10 % overtime**). After this, temporary personnel are hired from temporary personnel providers on an hourly basis. Too many temporary personnel have a detrimental effect on the quality of the services of your Bank in the respective business area.

3.3.2.2. Fluctuation

Fluctuation refers to employees that leave the employment of your bank. The fluctuation of the ongoing period is calculated in the individual lines of business as follows:

$$\text{Fluctuation rate (\% of the previous period} \times \text{final number of personnel for the previous period} = \text{fluctuation}$$

The fluctuation rate changes due to the personnel policy of your bank. With overtime and many temporary personnel, for example, the satisfaction of the employees of your bank sinks (see level of satisfaction of the employees) and the fluctuation rate increases. On the other hand, an increase in the additional personnel costs or the training measures can improve the motivation of the employees accordingly. The satisfaction index has the following levels:

miserable / dissatisfied / satisfied / motivated

3.3.2.3. Level of training

The employees of the individual business areas are evaluated by independent experts and selected customers regarding their level of training in each period. The possible ratings are:

deficient / sufficient / good / excellent

The level of training is greatly affected by the expenditures for employee training.

3.3.2.4. Logistics

The automation of your own bank in all business areas can be promoted by investments made with decision form IV. The respective savings have an immediate effect on the number of hours needed for business transactions (see report COMPANY DATA). The **automation index** can be between **50** and **105**.

4. Module C: Marketing

4.1. Decision form III

With the decision form III, you determine the marketing strategy, meaning which customer group is to be served with what products / services.

Decision form III		Bank:						
TOPSIM - Banking								
MARKETING								
STRATEGY	Priorities (0,1,2,3)	Households < 45	Households >45	Households > 65	Small companies	Mid-sized companies	Large companies	Public law corporat.
Credit transactions	Acquisition							
	Maintenance							
Securities transactions	Acquisition							
	Maintenance							
Borrowing transactions	Maintenance							
SOLICITING CUSTOMERS								
Period 0	Mio €	0	0	0	0	0	0	0
Period 1	Mio €							
Period 2	Mio €							
Period 3	Mio €							
Period 4	Mio €							
Period 5	Mio €							
Period 6	Mio €							
LINE OF BUSINESS ADVERT.		P0	P1	P2	P3	P4	P5	P6
Credit transactions	Mio €	0						
Deposit transactions	Mio €	0						
Investment management	Mio €	0						
Borrowing transactions	Mio €	0						
Payment transactions	Mio €	0						

4.1.1. Customer groups

The customer groups are divided into **seven** segments:

Customer groups	
Private households < 45 years	(HH<45)
Private households > 45 years	(HH>45)
Private households > 65 years	(HH>65)
Small companies	(SC)
Mid-sized companies	(MC)
Large companies	(LC)
Public-law corporations	(PLC)

4.1.2. Strategy

By **assigning priorities**, you decide how you want to process the individual customer groups with the personnel use for acquisition and maintenance in the decision form IV in the following business areas:

Business areas
Credit area
Securities area (deposit transactions)
Liabilities area

You can assign whole number values of **0 to 3** (0,1,2,3) for the priorities in the decision form. Here, the same values can be used several times within the same row.

Priorities
0 = no priority
1 = low priority
2 = medium priority
3 = high priority

With credit and securities transactions, you can differentiate between acquisition and maintenance. With borrowing transactions, only the priority for the maintenance is determined.

- **Acquisition** stands for the **acquisition of new customers** (growth in this area)
- **Maintenance** stands for the **maintenance of existing customers** (preventing migration to the competition)

4.1.3. Soliciting customers / line of business advertising

You can also influence customer behavior with deliberate advertising efforts. You decide on the **amount of advertising expenditures** and the **type of advertising** (customer segmented advertising and line of business advertising).

In the given competition situation, a minimum amount of advertising should be constantly carried out. Increasing the advertising expenditures will initially have a big impact on turnover and market shares, but will reach a point of saturation with further increase.

4.2.2. Explanation of the market data

Customers / market area (values in million €uro)

The upper half of the table shows the values of the individual balance sheet items divided according to customer groups. The lower part divides up the data according to the number of accounts kept and average value per account. This allows you to see the number of accounts and their average value for each target group and balance sheet item. This makes a detailed analysis of the influx and outflow within the individual customer groups possible.

5. Module D: Financial management

5.1. Decision form V - Part I: Financial management

Decision form V		Bank:			
TOPSIM - Banking					
FINANCIAL MANAGEMENT					
	P0	P1	P2	P3	P4
Dividend (% of nominal value)	0.0				
Increase in stock capital (Mio. €)	0				

In TOPSIM – Banking, financial management means decisions in the areas of **distribution of a dividend** and **planning for the bank's own funds** (increase in stock capital).

5.1.1. Distribution of a dividend

The **profits of the previous period can be distributed** with the **dividend decision**. Enter the appropriate distribution by **percentage of the stock capital** in the respective entry field. The dividend may not exceed the profit. The dividend payment will be debited in the period of the decision.

Undistributed dividends will be allocated to the retained income account and thus increase the bank's own funds (👉 see STRUCTURE INFORMATION: utilization of the bank's own funds according to Rule I Paragraph 10 KWG)

5.1.2. Example of a distribution of a dividend

Profit from the previous period: 223 million Euro

Planned dividend: 8 %

Stock capital 800 million Euro

Profit of the previous period:	223.0 million Euro
./. dividend 8 % of 800 million Euro stock capital	64.0 million Euro
Assignment to retained income	<u>151.0 million Euro</u>

The dividend policy applied by the bank should be pro-stockholder, but also security-oriented. The dividend policy has an effect on the market rate of the individual banks.

5.1.3. Increase in stock capital

Every bank can issue new stocks by means of an increase in stock capital. The **issuing price** is always **60 %** of the market rate of the stock calculated from the model in the previous period (see market and competition report). The **maximum increase in stock capital** is **50 %** of the **stock capital** of the previous period.

Increase in stock capital calculation example

**Increase in stock capital: 100 million Euro by issuing 2,000.000 stocks
@ Euro 50.00 nominal**

Market price: Euro 240.00 (previous period)
Issuing price: Euro 144.00 (60 % of Euro 240.00)

Accrual of the bank's own funds due to the increase in stock capital

Increase in stock capital (2,000.000 x 50.00)	100 million Euro
+ contribution for the issue of securities (2,000.000 x 94.00)	<u>188 million Euro</u>
Total increase in bank's own funds	<u>288 million Euro</u>

The contribution is assigned to the capital reserve.

An increase in stock capital can be carried out at any time. An increase in stock capital is absolutely necessary if the funds of the bank are no longer sufficient to cover the risks. (see STRUCTURE INFORMATION: utilization of the bank's own funds according to Rule I Paragraph 10 KWG). **If the increase in stock capital exceeds the operational need, this will have a detrimental effect on the equity capital profitability**, which will then have a negative influence on the market rate of the bank stock.

5.2. Reports module D: Financial management

5.2.1. Report Structure statistics according to Rule I (KWG)

Tertia Edusoft GmbH		Copyright (c) 2002 by TERTIA Edusoft	
TOPSIM - Banking		Bank 1	Period 0
BANK PLANNING SIMULATION		V8.2	Date 9.10.2003
S T R U C T U R E S T A T I S T I C S according to Rule I			
Rule I: Liable equity capital in accordance with Par. 10 KWG			
	Book value (MEUR)	Factor (%)	Credit (MEUR)
ATTRIBUTION PROPERTY LEDGER			
Currency reserves	3084	0,0	0
Treasury bonds	3000	0,0	0
Receivables from - due daily	600	20,0	120
credit institutes - with a fixed term	8000	20,0	1600
Receivables from customers:			
- Current account credits	2788	100,0	2788
- Credits repayable by installments	3734	100,0	3734
- Loans granted to local authorities	3921	0,0	0
- Other loans	6014	100,0	6014
- Mortgage loans	13905	50,0	6952
Participations	0	100,0	0
Material assets	1900	100,0	1900
Bank's own stocks	100	100,0	100
Other assets	640	100,0	640
TOTAL CREDIT AMOUNT			23849
ATTRIBUTION TOTAL CURRENCY ITEM			
Foreign currency item	0	100,0	0
ATTRIBUTION BOOK OF ACCOUNT			
Stocks: general price risk	500	100,0	500
Stocks: special price risk	500	50,0	250
Debenture bonds: general price risk			
- Remaining term 6 - 7 years	0	3,25	0
- Remaining term 8 - 10 years	0	3,75	0
- Remaining term 11 - 15 years	2000	4,50	90
Total debenture bonds general price risk	2000	4,50	90
Debenture bonds special price risk	2000	20,0	400
NECESSARY OWN FUNDS			
Property ledger	1908	Attrib. rate (%)	
Total currency item	0	8,0	
Book of account			
- Stocks general price risk	40	8,0	
- Stocks special price risk	10	4,0	
- Debenture bonds general price risk	90	100,0	
- Debenture bonds special price risk	32	8,0	
TOTAL NECESSARY OWN FUNDS	2080		
CORE CAPITAL			
Paid-in share capital	800		
Capital reserve	400		
Retained income	1215		
SUPPLEMENTARY CAPITAL (2nd class)			
Subordinate liabilities	0	Credit up to max. 50 % of core capital	
SUM OF LIABLE EQUITY CAPITAL			
	2415		
SURPLUS / DEFICIT EQUITY CAPITAL			
	335		
UTILIZATION OF THE EQUITY CAPITAL			
	10,77	max. 12,5 x	

5.2.2. Report Structure statistics according to Rule II (KWG)

Tertia Edusoft GmbH TOPSIM - Banking BANK PLANNING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 Period 0 Version B Date 9.10.2003		
S T R U C T U R E S T A T I S T I C S				
according to Rule II KWG				
Currency and financial obligations	Basis of assessment (MEUR)	Evaluation rate (%)	Due daily up to 1 month	> than 1 month up to 12 months
A. CURRENCY				
Currency reserves	3084	100	3084	
Securities listed on the stock exch.	5500		320	2950
incl. stocks	500	100	0	50
incl. debenture bonds	2000	100	20	200
incl. money-market papers	3000	100	300	2700
Receivables from credit institutes	8600	100	1400	7200
Receivables from customers	30362		1658	5126
incl. current account credits	2788	100	279	1394
incl. credits rep. by installments	3734	100	187	747
incl. loans granted to local auth.	3921	100	196	392
incl. other loans	6014	100	301	1203
incl. mortgage loans	13905	100	695	1390
A. Summe of currency	47547		6462	15276
B. FINANCIAL OBLIGATIONS				
Liabilities due daily	6142		802	
incl. towards credit institutes	625	40	250	
incl. towards customers	5517	10	552	
Liab. tow. credit inst. with fix. t.	6500	100	650	5850
Liab. tow. custom. with a fixed term	15170	100	970	11155
Savings deposits	9358	10	936	
Certified liabilities (incl. subord.)	9980	100	100	1464
Other liabilities	400	100	40	160
B. Sum of financial obligations	47549		3497	18629
Calculation of the liquidity statistics and the monitoring statistics			due daily up to 1 month	> than 1 month up to 12 m.
A. Sum of currency			6462	15276
B. Sum of financial obligations			3497	18629
C. Maturity mismatches (A - B)			2965	-3353
D. Item maturity mismatches (A > B)			2965	
E. Adjusted maturity mismatches				18241
F. Liquidity statistics (A / B)			1,85	
G. Monitoring statistics (E / B)				0,98

5.2.3. Explanation of the structure statistics

5.2.3.1. Utilization of the equity capital according to Rule I (Paragraph 10 KWG)

§ 10 KWG: "The credit institutes must have appropriate liable equity capital in the interest of fulfilling their obligations toward their creditors..."

Rule I (equity capital rule) states that the total credit amount from the assets listed above may not be more than **12.5 x** of the equity capital of a bank.

5.2.3.2. Structure statistics according to Rule II (Paragraph 11 KWG)

§ 11 KWG: "The credit institutes must invest their funds so that a sufficient ability to pay is guaranteed at any time ...".

Rule II states that an institute must maintain a sufficient amount of currency to fulfill its short-term financial obligations. Sufficient currency exists when there is a liquidity surplus. This means that the available currency covers or exceeds the financial obligations that can be called in over the short term. The liquidity is sufficient when the currency that is available to the bank in the next month at least covers the financial obligations of the bank during this month. This means that the liquidity statistics may not exceed the value of 1.

No minimum value to be complied with is set for the monitoring statistics. It is only for information purposes.

5.2.3.3. Noncompliance with the structure statistics

If rules I and II are not complied with, the bank in question will be penalized by the deduction of minus points on the market price. If the minimum reserves are not complied with, the bank must take out a bridging loan in the amount of the shortage.

6. Module E: Issuing business

6.1. Decision form II (Part II): Issuing business

ISSUING BUSINESS						
		P0	P1	P2	P3	P4
Issue A, acceptance prices	%	0.0				
Issue B, acceptance prices	%	0.0				
Issue C, acceptance prices	%	0.0				

In each period, you can accept up to three loans. In the economic situation, you have the following information about the loans offered for issuing:

- Name: A
- Interest rate: %
- Term: Period X – Period Y
- Rating: AAA, AA, A, BBB, BB, B
- Minimum acceptance price: %

6.1.1. Acceptance price (%)

In the decision form, you determine the price for the acceptance of the entire loan. The bank with the highest bid is awarded the loan. If several banks have bid the same price, the loan is divided up among them.

6.1.2. Rating

The rating gives information about the solvency of the issuer. The worse the rating is, the higher the risk that the loan will not be fully subscribed to by the customers.

Rating	Explanation
AAA	Best quality. The ability of the issuer to pay interest and to make repayment is very solid. The papers are actually gilt-edged.
AA	The issuer is very able to pay interest and to make repayment. Together with the first category, these bonds are the highest quality group.
A	The bonds have high solvency attributes, which however can be affected by external political or economic factors.
BBB	The chances of timely repayment of the debt are good. A change in the economic conditions or the branch structure can adversely affect the ability of the debtor to repay the debt.
BB	These bonds have speculative elements. Interest payments and the repayment of the debt is only ensured if the economic situation remains stable.
B	The chances of repayment of the debt over a long period are not good.

6.1.3. Handling of the issuing business

The loans you take over will be immediately placed with your customers. The issuing price is always 100 %. Whether the loan is completely subscribed for by the customers depends upon the interest rate of the bond in comparison to the current interest rate (bond interest in accordance with the economic situation) and the debtor rating.

If the loan is under-subscribed (subscription rate < 100 %), the unsubscribed amount is immediately sold with a cut rate (Difference between the issuing price and the lower stock market buying price).

6.1.4. Costs of the issuing business

The acceptance of a loan results in fixed and variable costs. The fixed costs are 10 million €uro and are independent of the issue volume or the number of assigned loans. The variable costs are 1 % of the assigned issue amount.

Example:

5 % loan, Period 0 – Period 12, Rating: BBB

Current interest rate: 5 ½ %

Issue amount:	2000 million €uro
Acceptance price:	96 %
Subscription rate:	90 %
Cut rate:	8 %

Since the loan has a lower interest rate than the current interest rate and the rating is very bad, it will not be fully subscribed to by the public.

Acceptance commission:	80 million €uro	(4 % of 2000 million €uro)
- Cut rate	<u>16 million €uro</u>	(8 % of 200 million €uro)
= Total returns from issuing business	<u>64 million €uro</u>	(see P & L commission returns)
Fixed costs	10 million €uro	
+ Variable costs	<u>20 million €uro</u>	(1 % of 2000 million €uro)
= Total costs	<u>30 million €uro</u>	(see P & L material expenses)

6.2. Report module E: Issuing business

6.2.1. Report Indifferent transactions (part issuing business)

Tertia Edusoft GmbH T O P S I M - Banking BANK PLANNING GAME	Copyright (c) 2002 by TERTIA Edusoft Bank 1 V 8.2	Period 0 Date 9.10.2003
I N D I F F E R E N T T R A N S A C T I O N S		

ISSUING BUSINESS		
6.00 % Bonds A, P0 - P12, Rating AAA	Issue amount (million EUR)	
	Subscription rate (%)	
Acceptance of the issue by bank(s)	acceptance price (%)	
Issue proceeds (million EUR):	Cut rate (%)	
5.75 % Bonds B, P0 - P6, Rating A	Issue amount (million EUR)	
	Subscription rate (%)	
Acceptance of the issue by bank(s)	Acceptance price (%)	
Issue proceeds (million EUR):	Cut rate (%)	
6.50 % Bonds C, P0 - P12, Rating BBB	Issue amount (million EUR)	
	Subscription rate (%)	
Acceptance of the issue by bank(s)	Acceptance price (%)	
Issue proceeds (million EUR):	Cut rate (%)	

6.2.2. Explanation of the issuing business

Listing of the most important data regarding the bonds to be opened for subscription.

- **Acceptance issue by** Bank(s) with the highest acceptance price
- **Proceeds of an issue (M€uro)** Commission earnings for the placed bonds
- **Issue amount (M€uro)** Loan amount accepted by the issuer.
- **Subscription rate (%)** What percentage of the issue amount the customers have subscribed to.
- **Acceptance price (%)** Price at which the bank(s) accepted the loan.
- **Cut rate (%)** Cut rate, at which the bank on the stock exchange must sell unsubscribed bonds.

7. Module F: Securities Business / Investments

7.1. Decision form II (Part I): Investments

With the decision form II, you determine the investment strategy for the customer money (deposit-B) managed by your bank with management authorization and the **business done for your own account (nostro)** (bank's own funds - deposit-A).

Decision form II		Bank:									
TOPSIM - Banking											
INVESTMENTS											
	P0		P1		P2		P3		P4		
DEPOSIT B/DEPOSIT A	Depos.-B %	Depos.-A Mio € (+/-)	Depos.-B %	Depos.-A Mio € (+/-)	Depos.-B %	Depos.-A Mio € (+/-)	Depos.-B %	Depos.-A Mio € (+/-)	Depos.-B %	Depos.-A Mio € (+/-)	
Domestic treasury bonds	10	1500									
Foreign treasury bonds (\$)	10	1500									
Domestic stocks	20	250									
Foreign stocks (\$)	20	250									
Domestic debenture bond	20	1000									
Foreign debenture bond (\$)	20	1000									
COVERAGE AGAINST RISKS (☒Y/☐N)	PUT rates	PUT FE	PUT rates	PUT FE	PUT rates	PUT FE	PUT rates	PUT FE	PUT rates	PUT FE	
Foreign treasury bonds (\$)		☒		☐		☐		☐		☐	
Domestic stocks	☐		☐		☐		☐		☐		
Foreign stocks (\$)	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	
Domestic debenture bond	☐		☐		☐		☐		☐		
Foreign debenture bond (\$)	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐	
Rate of commission (%)	1.00										
Conversion of savings into investment management (max. 20 %)	0.00										

You have the following investment possibilities:

- Domestic treasury bonds
- Foreign treasury bonds (\$)
- Domestic stocks
- Foreign stocks (\$)
- Domestic debenture bonds
- Foreign debenture bonds (\$)

7.1.1. Deposit-B (Investment management)

In the **column Deposit-B (%)** of the decision form II, you divide up the customer money managed by your bank into percents for the individual investment possibilities.

Frequent shifting from one investment possibility to another does bring additional **commission profits** to your bank (brokerage earnings), but reduce the yields of the customers.

7.1.2. Deposit-A (bank's own funds - Nostro)

The investment of liquid assets in treasury bonds, stocks, or debenture bonds makes it possible to improve the profitability of your bank.

You make decisions for the bank's own funds in absolute amounts. **The entered amount for the treasury bonds is absolute**, meaning that it is not added to the balance sheet value of the previous period. The maximum possible volume is 5,000 million Euro per period. For the stocks and debenture bonds, you only list the change in regard to the previous period (purchases with +, sales with -). **Purchases and sales are always made using the new rates at the end of the period.**

7.1.3. Coverage against risks (/)

You decide whether you want to **cover** the managed customer money or the bank's own securities against **loss on the stock exchange** (column PUT rates) and/or against **foreign currency risks** (column PUT FE) by selecting **Yes/No**,

Coverage is provided for the resources at the end of the period. Coverage protects the investments in the **subsequent** period against any and all foreign currency and stock exchange losses. The **coverage costs**, which are billed based on the volume of the previous period, can be taken from the economic situation of the respective periods.

7.1.4. Rate of commission (%)

You determine the rate of commission in effect for your bank (in percent) with this decision, which you will charge for your services in securities transactions.

The amount of the rate of commission in comparison to the competition banks also has a positive or negative effect on the customer behavior (turnover) in the areas of **investment management** and **deposit transaction**

7.1.5. Conversion of savings into investment management (max. 20 %)

With this decision, you can transfer customers with large savings deposits to investment management. This will prevent the migration of savings customers, who feel they are not receiving enough attention in this area, to the competition. It is also possible that your bank will gain additional savings funds through this decision.

GENERAL OVERVIEW EVALUATION PROCEEDS SECURITIES PROCEEDS	Mio.EUR	Profit/ loss (rate)	Profit/ loss (FOREX)	Profit hedging rate PP	Profit hedging FOREX PP	Costs of hedging	Total	Yield
Domestic treasury bonds			0		0	-30	-30	105
Foreign treasury bonds						0	0	101
Domestic shares		0		0				8
Foreign shares		0	0	0	0	-13	-13	9
Domestic debenture bonds		0		0		0	0	68
Foreign debenture bonds		0	0	0	0	-20	-20	68
INCOME FROM TRADING		0	0	0	0	-63	-63	
INCOME FROM TREASURY BONDS INTERESTS								206
EARNINGS FROM SECURITIES								152

7.2.2. Report – Overall View Administration Of Assets

Tertia Edusoft GmbH TOPSIM - Banking BANKING SIMULATION		Copyright (c) 2002 by TERTIA Edusoft Bank 1 V8.2						Period 0 Date 30. 9.2003	
OVERALL VIEW ADMINISTRATION OF ASSETS									
ASSET ALLOCATION VALUATION SUCCESS RATINGS / INCOME FROM SECURITIES		MONEY MARKET		SHARES		BONDS		TOTAL	
		DOMESTIC	FOREIGN	DOMESTIC	FOREIGN	DOMESTIC	FOREIGN		
Decisions previous period	%								
Decisions actual period	%	10.0	10.0	20.0	20.0	20.0	20.0	100.0	
Variation (absolute)	%								
Rates previous period	Index								
Rates actual period	Index	100.0	100.0	100.0	200.0	100.0	100.0		
Foreign exchange previous period	CHF/EUR								
Foreign exchange actual period	CHF/EUR		0.95		0.95		0.95		
Holdings begin of period	Mio.CHF	0	0	0	0	0	0	0	
New valuation	Mio.CHF	0	0	0	0	0	0	0	
± Buyings/Sellings	Mio.CHF	1120	1120	2240	2240	2240	2240	11200	
HOLDINGS END OF PERIOD	Mio.CHF	1120	1120	2240	2240	2240	2240	11200	
Share	%	10.0	10.0	20.0	20.0	20.0	20.0	100.0	
Hedging (rate)	Yes/No			N	Y	N	N		
Hedging (forex exchange)	Yes/No		Y		Y		Y		
Profits/losses	Mio.CHF			0	0	0	0	0	
Profits/losses foreign exchange	Mio.CHF		0		0		0	0	
Profits from hedging (rate) pp	Mio.CHF			0	0	0	0	0	
Profits from hedging (FOREX) pp	Mio.CHF		0		0		0	0	
Costs of hedging	Mio.CHF		-22	0	-112	0	-45	-179	
Fees	Mio.CHF	0	0	0	0	0	0	0	
Interest and dividend income	Mio.CHF	76	73	67	78	152	152	599	
TOTAL SUCCESS	Mio.CHF	76	50	67	-34	152	108	419	
Performance-Index (PI)	%	Period :		2.7		Average :		2.7	
COMMISSION INCOME SECURITIES BUSINESS		ASSET ADMINISTRATION		CUSTODIANSHIP BUSIN.		TOTAL			
		Prev. per.	Period	Prev. per.	Period	Period	±% PP		
Volume	Mio.CHF		11200		56175	67375			
Commission rate	%		1.00		1.00				
Income from commission *)	Mio.CHF		112		562	674			

*) incl. fees

7.2.3. Explanation of the securities business / investments reports

The report overall view securities – trading shows a detailed overview about the bank funds (nostro).

The second report shows you the same for the deposits managed by your bank with management authorizations.

In the upper part, you see the investment decisions you made for the management deposits and the changes over the previous period. **Reapportionment of the deposits result in fees, which you receive as commission earnings in the profit and loss accounting, but also have a negative effect on the performance of the customer deposits.** You can find these costs in the table further down.

The you can also find the Deposit Performance-Index (DPI) for the current period and the cumulative Index (average) of all previous periods. The **volume of the management deposits** mainly depends upon your **performance in the previous periods** and your **decisions in the personnel and marketing area**. The DPI is calculated as follows:

Deposit performance-Index (DPI)	
	Interest treasury bonds
+	Interest debenture bonds
+	Dividend stocks
- / +	Stock price losses / profits debenture bonds
- / +	Stock price losses / profits stocks
- / +	Currency losses / profits \$
-	Coverage costs
-	<u>Reapportionment fees (brokerage)</u>
=	<u>Total earnings from investment management</u>
DPI	= $\frac{\text{Total earnings from investment management} \times 100}{\text{Volume Investment management}}$

8. Module G: FOREX transactions

8.1. Decision form I (Part II): FOREX Transactions

FOREIGN EXCHANGE TRANSACTIONS					
Share of foreign currency		P0	P1	P2	P3
Receiv. from credit inst. with a fixed term	Share %	51.00			
Liab. towards credit inst. with a fixed term	Share %	25.00			
Coverage of open foreign exchange items	%	100.00			

The additional decisions in the decision form I - addition for foreign exchange transactions: share of foreign currency makes it possible to reduce or allow for all surpluses in foreign exchange by increasing the share of the receivables from credit institutes with a fixed term or liabilities towards credit institutes with a fixed term within the scope of the preliminary calculation.

However, open foreign exchange items for assets or liabilities can also be partially or completely covered. The costs for coverage is 2 % (see economic situation) on the covered amount.

8.2. Foreign exchange

FOREIGN EXCHANGE					
FOREIGN EXCHANGE ASSETS	in %	MUSD	FOREIGN EXCHANGE LIABILITIES	in %	MUSD
Receivables from credit inst. with a fixed term	51,00	4295	Liabilities tow. credit inst. with a fixed term	25,00	1711
Treasury bonds	50,00	1579			
Receivables from customers			Liabilities towards customers		
Current account credits	23,00	675			
Credits rep. by installments	0,00	0	Savings deposits	0,00	0
Loans grant. to local auth.	0,00	0	Demand deposits	16,00	929
Other loans	31,00	1963			
Mortgage loans	0,00	0	Fixed term dep. (short-term)	29,00	3392
			Fixed term dep. (long-term)	21,00	897
Securities					
Foreign stocks	100,0	263			
Foreign debenture bonds	100,0	1053			
TOTAL OPEN ITEMS	21,91	9827	TOTAL LIABILITIES FOR EXCHANGE	18,01	6929
SURPLUS ASSETS		2898	SURPLUS LIABILITIES		
not hedged	0,0	0	not hedged		
in % of the bank's own funds		0,0	in % of the bank's own funds		
EXCHANGE RATE PROFITS / LOSSES FROM FOREIGN EXCHANGE POSITIONS					
Surplus assets prev. period	MUSD	1024,9			
not hedged	0,0%	MUSD	0,0		
Eval. of the ex. rate of	0,95	MEUR	0,0		
Reev. of the ex. rate of	0,95	MEUR	0,0		
Exchange rate profit (+)/loss (-)	MEUR	0,0			
- Hedging costs (-)	MEUR	55,1			
Eff. exch. rate profit (+)/loss (-)	MEUR	-55,1	(hedging incl.)		

8.2.1. Explanation of the FOREX transactions

The shares that are kept in a foreign currency are listed in the first part of the report. Open foreign currency items that are too high have a negative effect on the market price.

The open foreign currency items from the previous period are reevaluated in the lower part. The resulting loss or profit including all coverage costs is listed in the profit & loss accounting in the item appreciation securities/foreign currency profit or allowance for depreciation securities/foreign exchange losses.

9. Module H: Participations

Participations can be purchased with the module participations. Participations can be high-risk, but also high-return. Special economic situations give information about the type of participations and their development.

9.1.1. Decision form V (Part II): Participations

PARTICIPATIONS					
		P0	P1	P2	P3
Type A:	+ / - Mio. €	0,0			
Type B:	+ / - Mio. €	0,0			
Type C:	+ / - Mio. €	0,0			
Type D:	+ / - Mio. €	0,0			
Type E:	+ / - Mio. €	0,0			
Type F:	+ / - Mio. €	0,0			

You get information regarding the maximum amount in individual participations through the decision form or the preliminary calculation in the simulation. The volume within the individual types of participations depends upon the purchases and sales of the other banks. If too many banks want to participate in a participation type, the system divides the participation pro rata based on the demand at the individual banks.

9.1.2. Report on participations

PARTICIPATIONS - HOLDINGS AND VALUES									
	Balance MEUR	Number of stock Thousand	Purch/ Sales MEUR	prev.p EUR	RATES act.p. EUR	av.co. EUR	Evaluation since b MEUR	act.per MEUR	Divid. MEUR
A:									
B:									
C:									
D:									
E:									
F:									
Total participations	0		0				0	0	0

*) D-EP = average original cost

9.1.3. Explanation on the participations

With this report, you get an overview of the individual participations, that your bank has. Earnings (dividend) and stock price gains or losses are listed in the profit and loss account. Please note that the participations also have an effect on the structure statistics.