

CAPITALISM LAB

Notes on how to play the Banking and Finance DLC at a minimum

Ver.6.6.12 support

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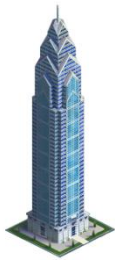
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ABOUT THE BANKING AND FINANCE DLC

The first basic operation to do is to create a headquarters and branches for a bank or insurance company.

In this PDF file, training budgets, branding, and marketing in the branch are not explained since they are not new items for the game.

FACILITY DESCRIPTION



Bank headquarters: : set up the loan; you can only make one.



Bank branches : created to increase deposits. If conditions are good, the more you build, the more deposits you will receive.



Insurance Headquarters : sets insurance premiums, etc. Only one can be created.



Insurance Branches : New insurance policies are made. If conditions are good, the more you build, the more contracts you get.

BANKS

PURPOSE OF THE BANK

The bank increases its equity capital by lending loans (loans) with interest on its equity capital and deposits. Interest on deposits is a loss for the bank, and default (failure to return loaned money) will affect the final interest rate.

Bank operations are easily affected by the economy, and the key to success is how to save during boom times and how to weather recessions.

MINIMUM ITEMS TO BE CHECKED

LOAN

- [New Loans Allocation](#) : Percentage of loans to customers by rating.
- [Maximum Loan-to-Deposit Ratio](#) : Percentage of assets allocated to loan lending.
- **Current Loans-to-Assets Ratio**

The screenshot displays the 'BANK HEADQUARTERS' interface. At the top, it shows 'Bank HQ' for 'Player Corporation' with a 'Player Chairman' icon. Key metrics include 'Bank Revenue' and 'Bank Profit' at \$1 each, both over the 'Past 36 months'. The main menu includes 'Overview', 'Deposits', 'Loans', 'Defaults', 'Competition', and 'Financial'. The 'Loans' tab is active, showing a table of loan allocation by credit rating. A red box highlights the 'New Loans Allocation' column, which shows 20.00% for each rating from AAA to C, totaling 100.00%. Another red box highlights the 'Maximum Loans-to-Assets Ratio' (70%) and 'Current Loans-to-Assets Ratio' (0.00%). At the bottom, a summary table shows 'Total Loan Interest Incomes (Annual)' at \$0 (100.00%), 'Total Deposit Interest Expenses' at \$0 (1%), and 'Total Net Interest Incomes' at \$0 (1%). The 'Net Interest Margin' is 0.00%. The bottom status bar indicates 'Player Co. Bank Headquarters 001 (Mascotte)'.

Credit Rating	Loan Interest	Existing Loans	As % of Total Loans	Annual Interest Incomes	New Loans Allocation
AAA	3.20%	\$0	0.00%	\$0	20.00%
A	4.60%	\$0	0.00%	\$0	20.00%
BB	6.00%	\$0	0.00%	\$0	20.00%
CCC	7.40%	\$0	0.00%	\$0	20.00%
C	10.05%	\$0	0.00%	\$0	20.00%
Total	1%	\$0		\$0	100.00%

Metric	Value	Percentage
Total Loan Interest Incomes (Annual)	\$0	100.00%
Total Deposit Interest Expenses	\$0	1%
Total Net Interest Incomes	\$0	1%
Net Interest Margin		0.00%

FINANCIALS - BALANCE SHEET

- **Bank Capital Ratio** : Capitalize or reduce the maximum loan-to-value ratio so that it does not fall below the required bank capital ratio.



Bank HQ
Player Corporation
Player Chairman

Bank Revenue: \$1
Past 36 months: \$0

Bank Profit: \$1
Past 36 months: \$0

BANK HEADQUARTERS

Overview Deposits Loans Defaults Competition Financial

Income Statement Balance Sheet Fund Transfer Transfer Log

ASSETS	Total 0 year	% of Total Assets	YTD Changes	Last Year Changes
Cash	\$18,750,000	100.00%	\$0	\$0
Loans to Customers	\$0	0.00%	\$0	\$0
TOTAL	\$18,750,000		\$0	\$0

LIABILITIES	Total 0 year	YTD Changes	Last Year Changes
Deposits by Customers	\$0	\$0	\$0
TOTAL	\$0	\$0	\$0

NET ASSETS	Total 0 year	YTD Changes	Last Year Changes
Equity Capital	\$18,750,000	\$0	\$0

Must Take Action Notification Only No Notification

Bank Capital Ratio 1% ?

Required Bank Capital Ratio 7.00% ?

Player Co. Bank Headquarters 001 (Mascotte)

FINANCE - FUND TRANSFER

- **Transferable Cash** : Bank equity capital that can be transferred to the parent company.



Bank HQ
Player Corporation
Player Chairman

Bank Revenue: \$1
Past 36 months: \$0

Bank Profit: \$1
Past 36 months: \$0

BANK HEADQUARTERS

Overview Deposits Loans Defaults Competition Financial

Income Statement Balance Sheet Fund Transfer Transfer Log

Bank Cash: \$18,750,000

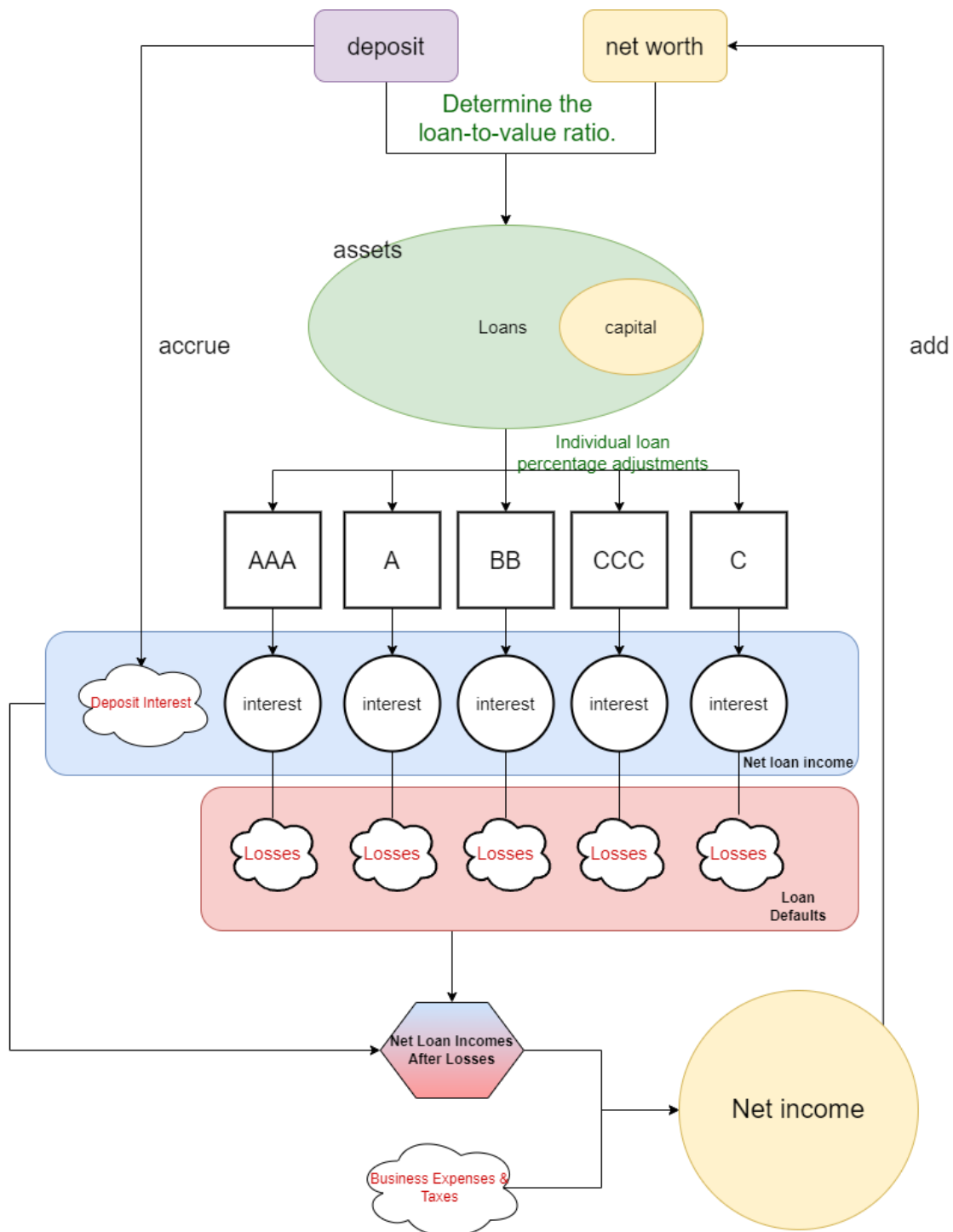
Transferable Cash ?
\$18,750,000

Corporation: Player Co. Cash: \$454,555,555

Transfer from Bank

Player Co. Bank Headquarters 001 (Mascotte)

SCHEMATIC OF BANK MANAGEMENT



<EXPLANATION OF IMPORTANT TERMS>

MAXIMUM LOAN-TO-ASSETS RATIO

※It is not the Loan-to-Deposits Ratio.

Formula: Loans to Customers / Total Assets

GLOSSARY

The percentage of assets (equity plus deposits) that determines **how much of the assets (equity plus deposits) will be invested in loans**. This is the same value as the number written in the Loans to Customers line on the balance sheet as a percentage of total assets.

FUNCTION

- Less means less profit, but less loss in case of default.
- More means more profit, but more loss in case of default, especially in a recession.
- The higher the ratio, the more capital is required to meet the bank's capital adequacy requirements. Therefore, especially in the beginning, you will be required to provide additional capital to the bank.
- It seemed to me that it would be better to lower the ratio during a recession and raise it to the fullest during a boom.

OTHER

- Turning on the DLC option Realistic Loan Demand will prevent loans from being made unless a branch office is opened. This will make the game a little more difficult as loan demand will be associated with the total GDP of the city.

NEW LOANS ALLOCATION

GLOSSARY

This item sets **the loan lending allocation for each of the five credit ratings**, with 100% of the amount you decide to invest as a percentage of the maximum loan-to-value ratio.

You can lend out 100% of the loan allocation to only one credit rating, or you can lend out 20% of the loan allocation equally.

FUNCTION

- There are five credit ratings in the game, AAA-C. Each has a different loan interest rate and default rate. Lower interest rates have lower default rates and higher interest rates have higher default rates.

If the interest **rate < default amount**, there will be no profit as a result.

Furthermore, loans to AAA only are not always good because of interest payments on deposits.

It may be better to lend in a way that allows you to save money at a firm interest rate during a booming economy. This is especially true if you are in a tight set-up.

OTHER

- Interest rates vary depending on the loan interest rate set by the central bank.

Credit rating BB appears to be loan rate +2%.

You should use this as a reference for new loan assignments.

BANK CAPITAL RATIO

Formula: Equity Capital / Loans to Customers

GLOSSARY

It is a requirement for banks set by the Central Bank and **the amount of losses that banks should be prepared for**. For the default setting, the bank is required to maintain a figure of at least 7%.

※Note that the formula is not Equity / Total Assets! The above formula seems to have been developed based on the opinions of users who seem to be knowledgeable about finance.

Reference ↓

<https://www.capitalism2.com/forum/viewtopic.php?f=52&t=7051&p=29115&hilit=Bank+Capital+Ratio#p29115>

FUNCTION

Since the final interest goes to equity capital, this % will go up if the bank makes a profit without increasing deposits.

Until a certain level of profit is achieved, this % will decrease as the bank branches out.

This is because loans to customers are made by equity capital (funds on hand) and deposits. The reason is that the higher the deposits, the lower the percentage of funds on hand.

★TO INCREASE THE BANK CAPITAL RATIO

1. Transfer funds from the player's company. → Increased equity capital
2. **Banks make a profit.** → Increased equity capital
3. **Maximum Loans-to-Assets Ratio** → Reduce Loan
4. **Reduce the number of branches** → Deposits will decrease, just as profits will decrease.

OTHER

The bank capital ratio can be set from 1 to 20%.

The higher the price, the more difficult it is to maintain.

If it is low, it may not even be noticed until the bank is in financial trouble.

TRANSFERABLE CASH

Formula: equity capital - (equity capital / loans to customers) *Limit is up to the amount of funds on assets

FUNCTION

Equity capital minus 7% of the loan (for the default bank capital ratio) will be available for transfer, but only up to the funds in the asset.

The reason for the upper limit is that there is equity capital that is being put into loans to customers and cannot be allocated as funds.

Loans to customers are managed using deposits and equity capital as the source (assets). In other words, loans that cannot be lent with deposits alone are lent out of equity capital, so it is not possible to accumulate (make transferable) equity capital that has already been used for loans.

HOW TO SEND MONEY FROM YOUR BANK

Click on the purple arrow, which will turn green, to send money from your bank.

Select the amount of money you wish to transfer using the +- buttons on the right side, then press the Transfer from Bank button. If you want to transfer the money to the bank again, click the arrow again to return to purple.



★ IF YOU WANT TO INCREASE THE AMOUNT OF CASH AVAILABLE FOR TRANSFER

The basic premise is to increase the bank's equity capital by making a profit.

- **Create branches and increase deposits to increase asset volume**

This is better in the long run, but in the short run, especially in the early years, the amount that can be transferred is temporarily reduced because increasing the volume of deposits lowers the bank's capital ratio.

- **Reduce the maximum loan-to-assets ratio and reduce loan allocations.**

In the short term, this method is quicker, but it puts pressure on interest rates, so be careful!

REALISTIC LOAN DEMAND

If you turn on the setting item [Realistic Loan Demand] in the game settings [Banking] in the Banking and Finance DLC, the loan demand will be related to the total GDP of the city.

When this setting is turned on, **loans will not be lent out unless a bank branch is established.**

INSURANCE COMPANY

PURPOSE OF THE INSURANCE COMPANY

The insurance companies in this game are supposed to use the premiums collected from customers and invest them in bonds and stocks to make a profit and run their business.

HOW TO START AN INSURANCE COMPANY

Unlike banks, it seems that even if you only build a headquarters, if you do not build branches, you will not be able to start an insurance policy.

PROFITABLE ITEM

- Insurance premium income
- Investment income (the main thing is to increase this one)

From this item, the gross profit is subtracted the money the customer pays when he or she uses the insurance ([the claim reserve](#) and the money actually claimed and paid).

<EXPLANATION OF IMPORTANT TERMS>

CLAIMS RESERVES

GLOSSARY

Insurance company money that must be set aside to pay premiums. It is like bank capital ratio money in banking. In this game it seems to exist only in life insurance.

There does not seem to be an easy formula to calculate.

It appears that a significant percentage of premiums are devoted to this. Therefore, it is becoming increasingly difficult to operate solely on premium income.

PREMIUM PRICE LEVEL

Change the value from 80 to 120. If this is low, it sells well, but the profit margin is also low.

During a recession, new contracts are easier to sell if this is lower.

The content of the new contract is set up so that the contract will last an average of 30 years.

TRANSFERABLE CASH

- The maximum amount of equity capital is assumed, but for some reason \$5 million may be deducted. [The transfer method is the same as for banks.](#)

OTHER INSURANCE FORMULAS

HOME INSURANCE

The number of subscribers increases in proportion to the size of the population.

Market Size Formula : $\text{Population} / 2.4$

EXPLANATION OF THE CONTENTS OF THE CALCULATION FORMULA

Detailed formula : $\text{Population} / \text{Number of households} * \text{Percentage of households purchasing home insurance}$

Assumption 1 : The number of households is assumed to be 3 persons per household. In other words, $\text{number of households} = \text{population} / 3$

Assumption 2 : $\text{Households purchasing home insurance} = 80\% \text{ of households}$

CAR INSURANCE

The number of subscribers increases in proportion to the real wage rate and population.

Formula: $\text{Population} \times 0.4 \times \text{real wage rate} / 100$

Assumption : If the real wage rate is 100 there are 40 cars per 100 people

BUY BONDS AND STOCKS WITH AN INSURANCE COMPANY.

On the bond market or stock exchange screen, click on the  symbol to purchase with the insurer's funds.

Player	\$1,000,000
 Player Co.	\$456,002,399
 Player Co.	\$17,250,000

BOND

DIFFERENCE BETWEEN FINANCING BY LOAN AND BOND (FOR THE SAME AMOUNT)

	Loan	Bond
Coupon	High	Low
Fund to be Raised	Few	Large
Maturity Date	Short	Long

Coupon : proportional to the length of the term and inversely proportional to the credit rating.

Fund to be Raised : For bonds, the maximum amount that can be issued at any one time is limited to the equity capital (total capital) that you currently have.

Maturity Date : This DLC also has a maturity date on the loan, and if the loan is not repaid beyond that date, the game is over.

ITEMS TO LOOK FOR WHEN BUYING BONDS

- **Years to Maturity**

- **Coupon Rate** : Percentage of profit if the bond is bought at principal, which never changes.
- **Yield** : Percentage of profit including the purchase price, varies with the time of purchase.

This item is important for bonds. [Explanation of the calculation formula](#)

- **Face Value** : original price.
- **Market Price** : The price is proportional to the issuer's credit rating. *They say that when central bank interest rates rise, prices fall. They say this is because newer, higher interest rate bonds become more popular and older, lower interest rate bonds become less popular
- **Bond Size** : Maximum amount you can buy.
- **Current Credit Rating** : Consider the rise and fall compared to the time of issuance.

YIELD FORMULA

The formula for calculating the yield is as follows.

$$\frac{\text{Face Value} * \text{Coupon Rate} + \frac{(\text{Face Value} - \text{Market Price})}{\text{Years to Maturity}}}{\text{Face Value}}$$

||

$$(\text{Face Value} * \text{Coupon Rate} + ((\text{Face Value} - \text{Market Price}) / \text{Years to Maturity})) / \text{Face Value}$$

*There are various types of formulas for calculating yield, but CAPITALISM LAB seems to use this formula. Other formulas include the denominator being the market price, or the principal price and the market price added together and divided by two.

OTHER

As with loan repayments, buying back the company's bonds reduces the interest payments on the bonds. If the company issuing the bond goes bankrupt, the bond is worthless

SOVEREIGN BONDS

You can purchase U.S. government bonds. You can buy a large number of them with 3, 5, or 10 years to maturity. You can buy at any time, but the interest is small.

GLOBAL STOCK PERFORMANCE

They have a higher volume of transactions compared to normal transactions.

SPECIAL DIVIDEND

The maximum amount of funds that you can receive is the smaller of the funds or retained earnings of [your company] or [a subsidiary in which you own **75%** or more of the shares].

You can receive as many times as you like.

- If it is from a subsidiary, it will be credited to the parent company's fund.
- If it is from the parent company, it will be credited to the player's personal funds.

SPECIAL DIVIDEND NOTES

Ordering the payment of a special dividend lowers the capital of the paying party.

Since equity is linked to the share price, the amount of payment and special conditions may cause a large drop in the share price of the party that paid.

Reference URL <https://www.capitalism2.com/forum/viewtopic.php?f=7&t=7855#p33511>

REALISTIC MONEY SUPPLY

If you add the City Economy Simulation DLC, you can handle the [Realistic Currency Supply] setting item in the [Miscellaneous] section of the game settings for the Banking and Finance DLC. (This was previously only available in Survival Mode, but is now available in Normal Mode as well.)



This is a system whereby the funds collected by Public investors (in the red box in the image below) must be saved before bonds or new shares can be offered or issued. ***Public investors are different from Independent Investor in the personnel report.**



The amount of funds is proportional to the national GDP.

The use of the funds by the company or other firms also reduces the amount of funds saved.

For bonds, the "total equity" of the company is also affected, so the smaller of 1. public investor funds and 2. total equity is the maximum amount of bonds raised.

MORE DETAILED EXPLANATION

URL of the official website with detailed explanation

<https://www.capitalismlab.com/banking-dlc/>