

Week 9 Recitation

This week we are going to investigate the role of banks in the financial system, what are the basic mechanisms that allow a bank to operate with financial health, and how can banks as a whole create money in an economy.

- 1) What are the four functions of money? Can you name some item that is a store of value, but does not serve the other functions of money?
- 2) How do we measure how much money is in our economy? Is a debit card money?
- 3) Imagine that you are in the position of buying loans in the secondary market (that is, buying the right to collect the payments on loans) for a bank or other financial services company. Explain why you would be willing to pay more or less for a given loan if:
 - a. The borrower has been late on a number of loan payments
 - b. Interest rates in the economy as a whole have risen since the bank made the loan
 - c. The borrower is a firm that has just declared a high level of profits
 - d. Interest rates in the economy as a whole have fallen since the bank made the loan
- 4) The table below represents the T-account for the KRS Bank. First, describe each component of the assets and the components of the liabilities. Then, calculate the net worth and briefly describe the financial health of the KRS Bank. If there's a run on banks and all clients decide to cash their deposits, would the KRS Bank be able to honor their responsibilities with their clients?

Assets		Liabilities + Net Worth	
Loans	\$8 million	Deposits	\$12 million
Government Securities	\$3 million		
Reserves – mandatory (Federal Reserve)	\$0.6 million		
Reserves – voluntary (own premises)	\$0.4 million	Net Worth	?

- 5) How could the KRS Bank increase their financial health? List at least two suggestions.
- 6) Suppose that a client who took \$1 million in loans from the KRS Bank deposited that money at her checking account at Mila Bank. Mila Bank kept the mandatory reserves and lent the rest to other clients. Supposing that the face value and the market value of those loans are exactly the same, and that this is the only operation of Mila Bank, what does the T-account of Mila Bank look like? Calculate the money multiplier and the potential total change in the M1 money supply after this deposit, supposing that there are multiple banks operating in this economy (and they all hold only the mandatory minimum reserves), and interpret your result.
- 7) Why is the change in M1 calculated on the previous questions a possible, rather than guaranteed, increase in money supply?

- 8) [Discussion question] During the 2008 crisis, the investment bank Lehman Brothers bankruptcy became the largest bankruptcy filing in history, which intensified the financial crisis and contributed to the erosion of almost \$10 trillion in market capitalization from global capital markets. At the time, their latest published T-account showed \$639 billion as assets and \$619 billion as liabilities, indicating a relatively good standing regarding their financial health. However, they were tricking the public by using a procedure called Repo 105, that allowed Lehman to receive cash in exchange for their assets which was used to pay down their liabilities and temporarily show less leverage (assets/net worth). Immediately after the publication of their quarterly financial statements and armed with this favorable financial picture of their balance sheet, Lehman went into the open market and secured loans. The proceeds would then be used to repurchase the assets at 105 percent of the cash amount received. For that, three chief executives of Lehman Brothers were sued. Based on your knowledge of banking, do you think they were rightfully accused of wrongdoing? In your opinion, should banks be able to perform such risky operations? How can this bankruptcy affect the whole banking system and the economy as a whole?