ECON 317 - Money, Banking, and Financial Institutions

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Money and Banking System

Exercise 1

(a) How do we calculate the monetary base (MB)? The money supply (M1)?

(b) Starting from a situation where the bank holds deposits but does not make loans, calculate the changes in coins and banknotes (M_0), bank deposits (D), reserves (R), monetary base (MB), and money supply (M_1) associated with each of the following actions:

- Carey Price withdraws $400 from Desprairie Bank and gives it to PK Subban.
- PK Subban buys a stick from Markov for $200.
- Markov deposits $100 at HBCS Bank and gives $100 to Pacioretty.
- HBCS lends $90 to Beaulieu, who withdraws it immediately.

Table 1: Effect of transactions on money aggregates

	M_0	D	R	MB	M_1
Carey withdraws and gives $400 to Subban					
PK buys a stick					
Markov deposits $100					
Markov gives $100					
HBCS lends $90					

Exercise 2

(a) Define the money multiplier (MM) in terms of aggregate reserves (R), aggregate deposits (D), and coins and banknotes (M_0).

(b) Express it in terms of the "reserves/deposits" ratio and the "coins and banknotes/deposits" ratio.

(c) What happens to the money multiplier (increase/decrease) if the central bank imposes a higher reserves/deposits ratio?

Exercise 4

Record the following transactions in the balance sheet of the Bank of Canada.

(a) The Bank of Canada lends 100,000 dollars to Desjardins Bank.

(b) The Bank of Canada sells 2 million dollars of bonds to commercial banks.

(c) Desjardins Bank lends 1 million dollars to RBC Bank.