Chapter 11

Money Demand, the Equilibrium Interest Rate, & Monetary Policy

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BIZ 203

Macroeconomics

Introduction

- = The fee that borrowers pay to lenders for the use of their funds.

- = The annual interest payment on a loan expressed as a percentage of the loan. Equal to the amount of interest received per year divided by the amount of the loan.

$$\text{Interest rate} = \frac{\text{interest received per year}}{\text{amount of the loan}}\,x100$$

THE DEMAND FOR MONEY

✓ When we speak of the demand for money, we are concerned with how much of your financial assets you want to hold ? , which does not ? , versus how much you want to hold in ? securities, such as bonds.

✓What is the main reason for holding money instead of interest-bearing assets?

THE DEMAND FOR MONEY

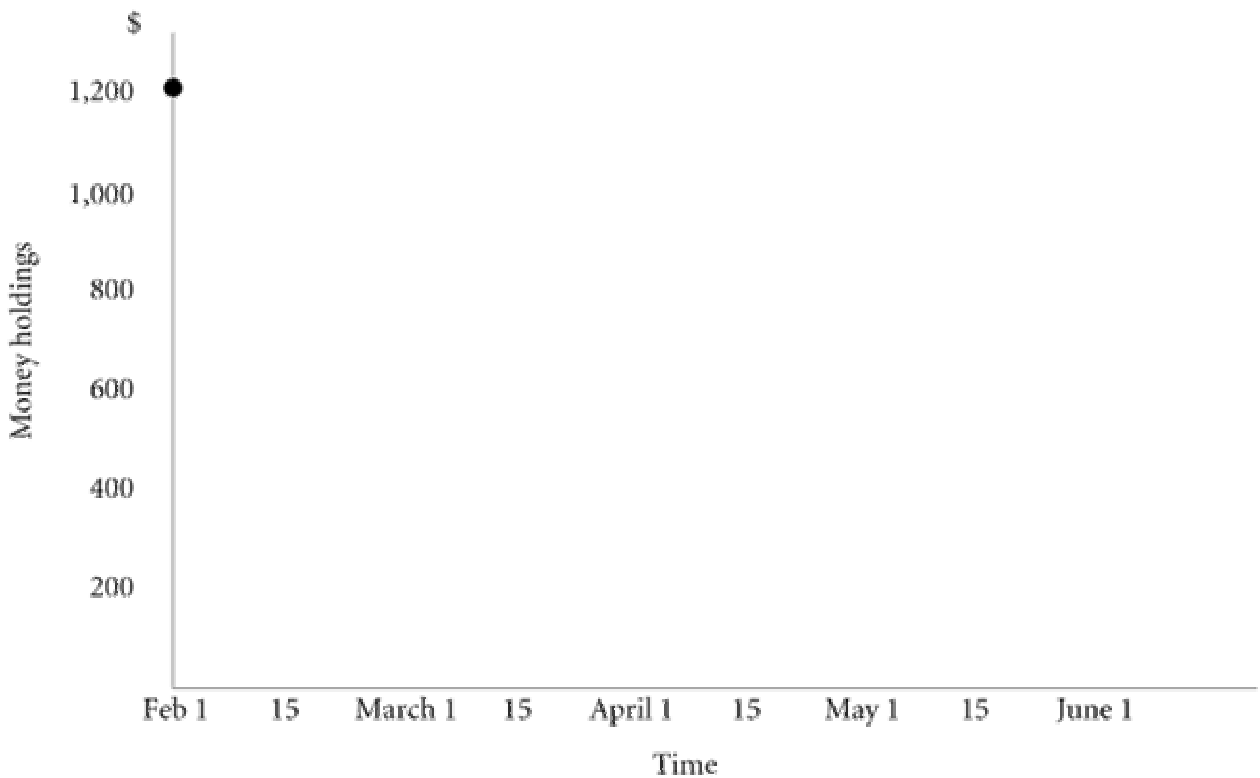
Assumptions

- There are only two kinds of assets available to households:

- The typical household's income arrives once a month, at the beginning of the month.
- Spending occurs at a completely uniform rate—the same amount is spent each day.
- Spending is exactly equal to income for the month.

THE DEMAND FOR MONEY

❖ = The mismatch between the timing of money inflow to the household and the timing of money outflow for household expenses.



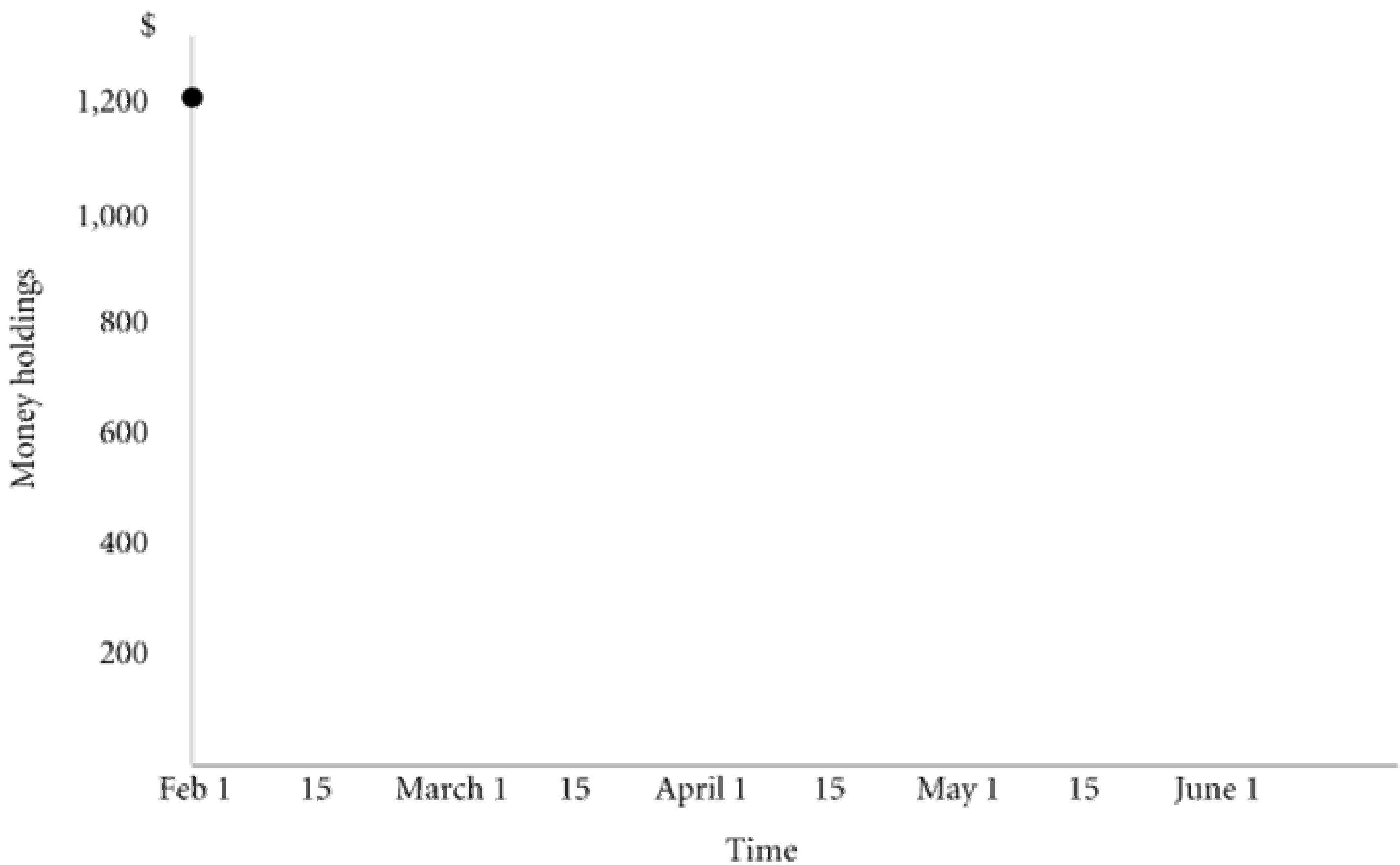
MONEY MANAGEMENT AND THE OPTIMAL BALANCE

- Given these assumptions, how much would a rational person decide how much of monthly income to hold as money and how much to hold as interest-bearing bonds?

- Matsuda earns $1,200 per month.
- Matsuda spends his money at a constant $40 per day.

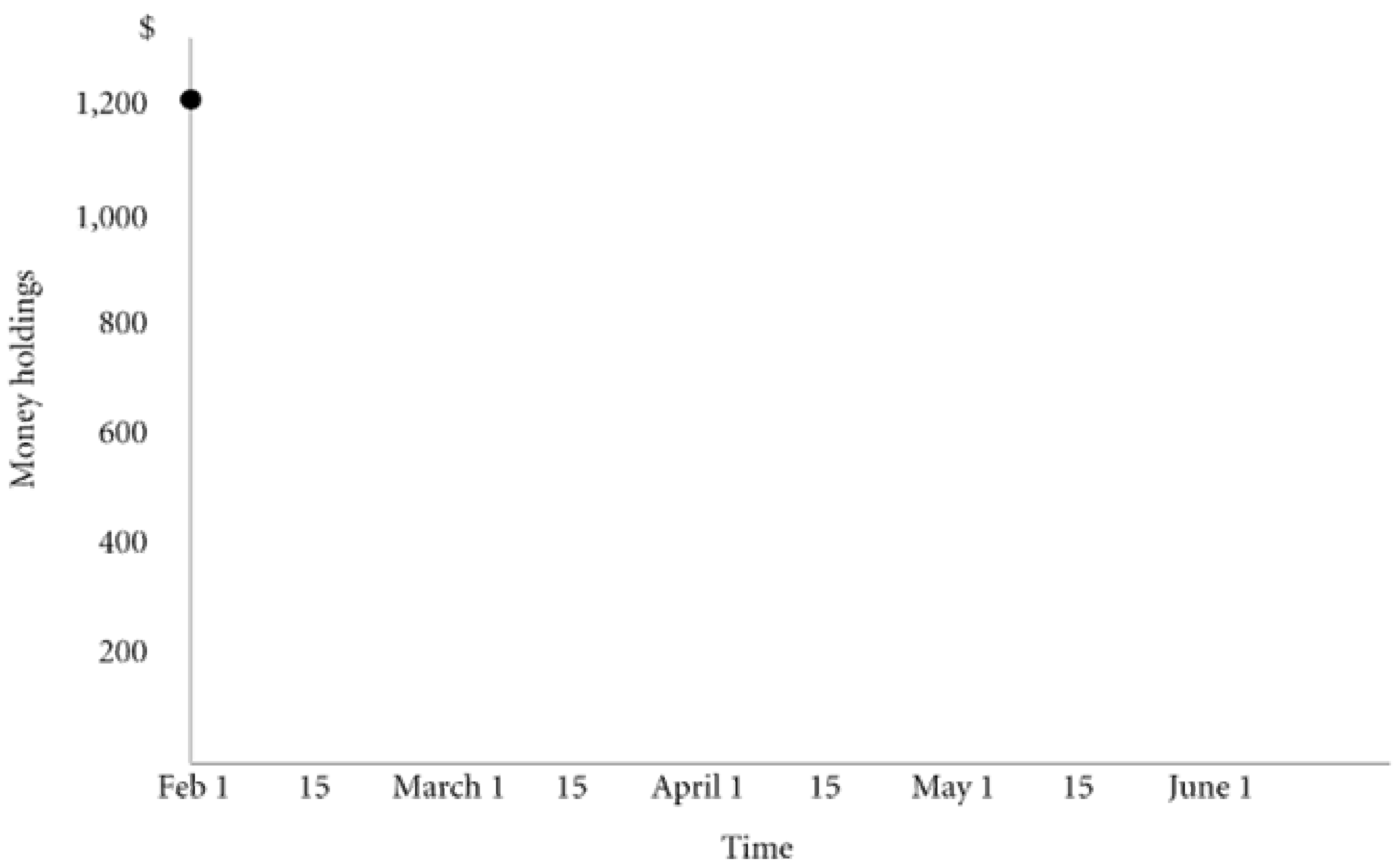
Matsuda's Monthly Checking Account Balances

- **Strategy 1:** Matsuda deposits his entire paycheck $1,200 into his checking account at the start of the month and run his balance to zero by the end of the month.
- Matsuda's average monthly holdings of money = **?**



Matsuda’s Monthly Checking Account Balances

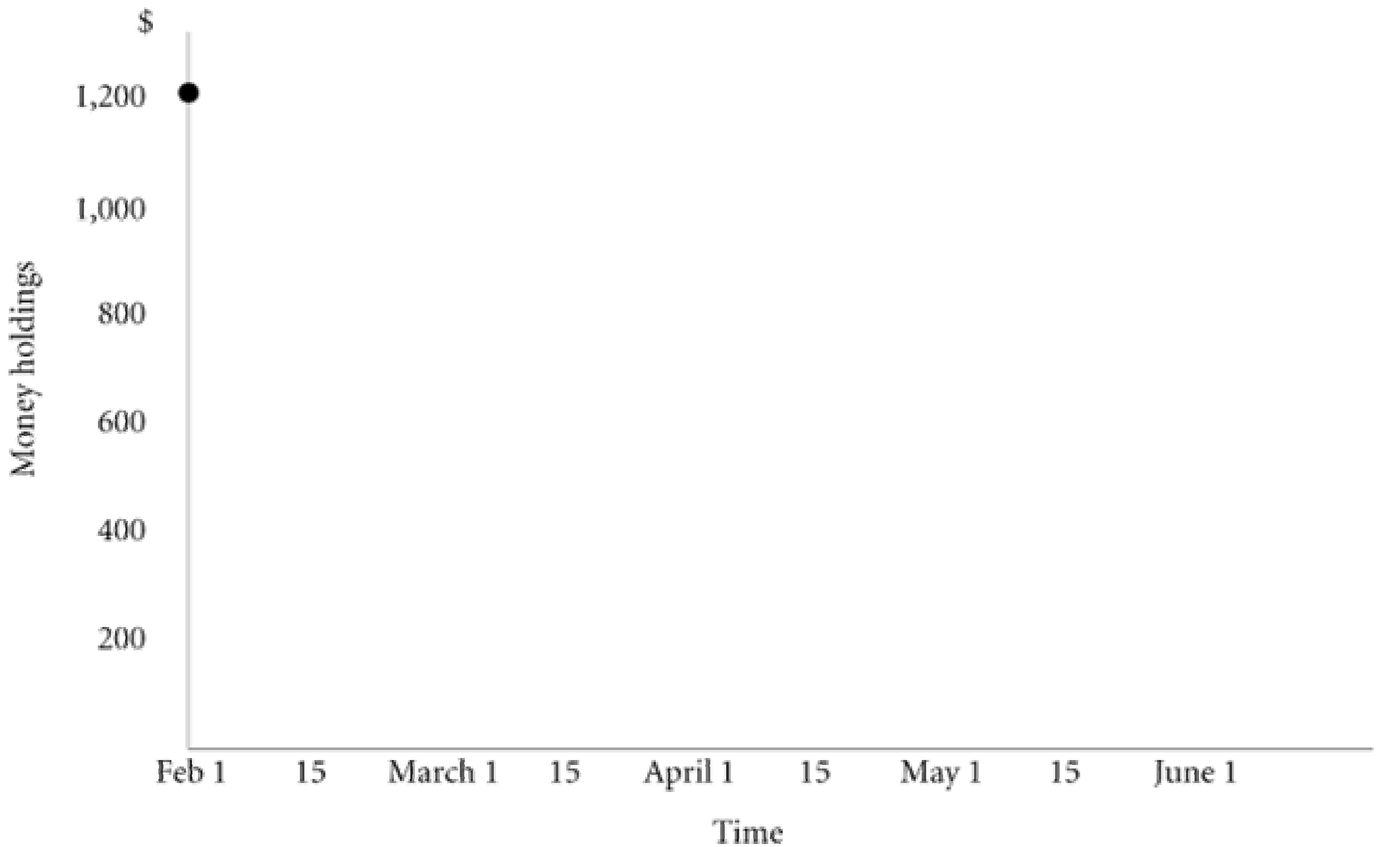
- **Strategy 2:** Matsuda deposits half his paycheck $600 into his checking account at the start of the month and buys a bond with the other half.
- Matsuda’s average monthly holdings of money = **?**



Matsuda's Monthly Checking Account Balances

- Why do you stop there?
- **Strategy 3:**

- Matsuda's average monthly holdings of money = **?**



Matsuda's Monthly Checking Account Balances

- Why do you stop there?
- Why not hold all wealth in the form of bonds and make transfers from bonds to money every time Matsuda makes a purchase?

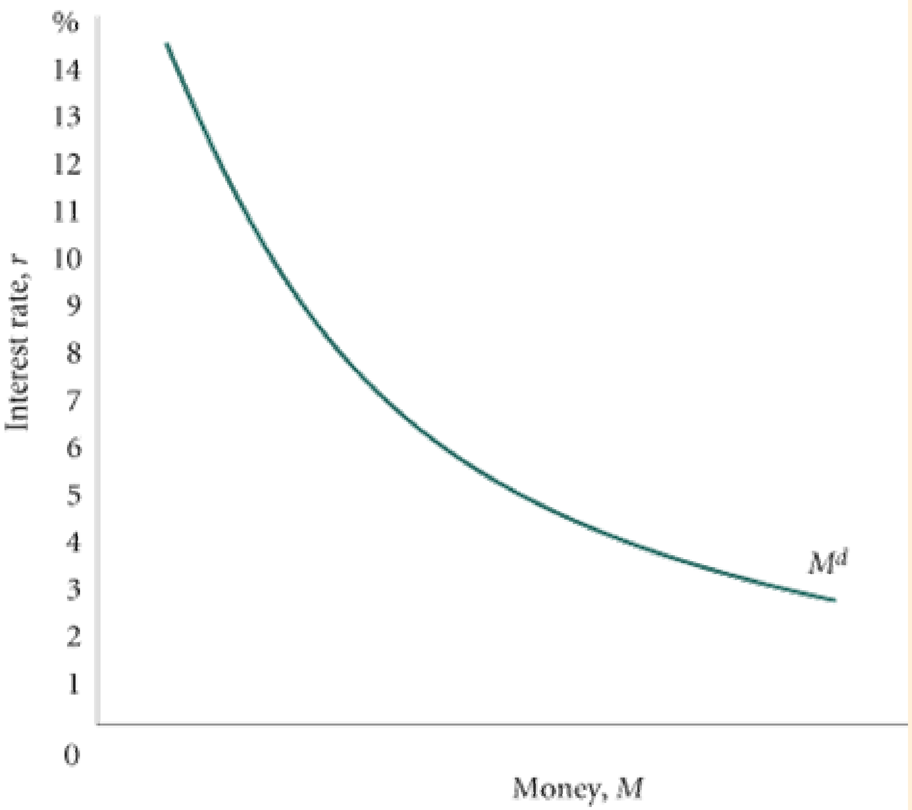
The Optimal Balance

FIGURE 11.4 The Demand Curve for Money Balances

- When interest rates are high, people want to take advantage of the ? , so they choose to hold ? .

Demand Shifter for Money Demand Curve

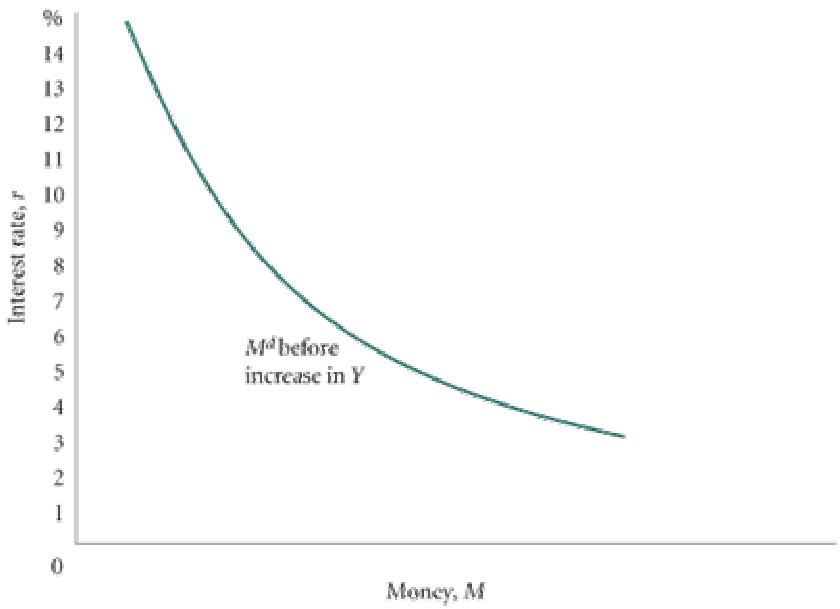
[1]TRANSACTIONS VOLUME



- For a given interest rate, a higher level of output means a(an) ? in the *number* of transactions and ? demand for money. The money demand curve shifts to the ? when *Y* rises.

Similarly, a decrease in *Y* means a in the number of transactions and a ? demand for money. The money demand curve shifts to the ? when *Y* falls.

Demand Shifter for Money Demand Curve
[2]Price Level

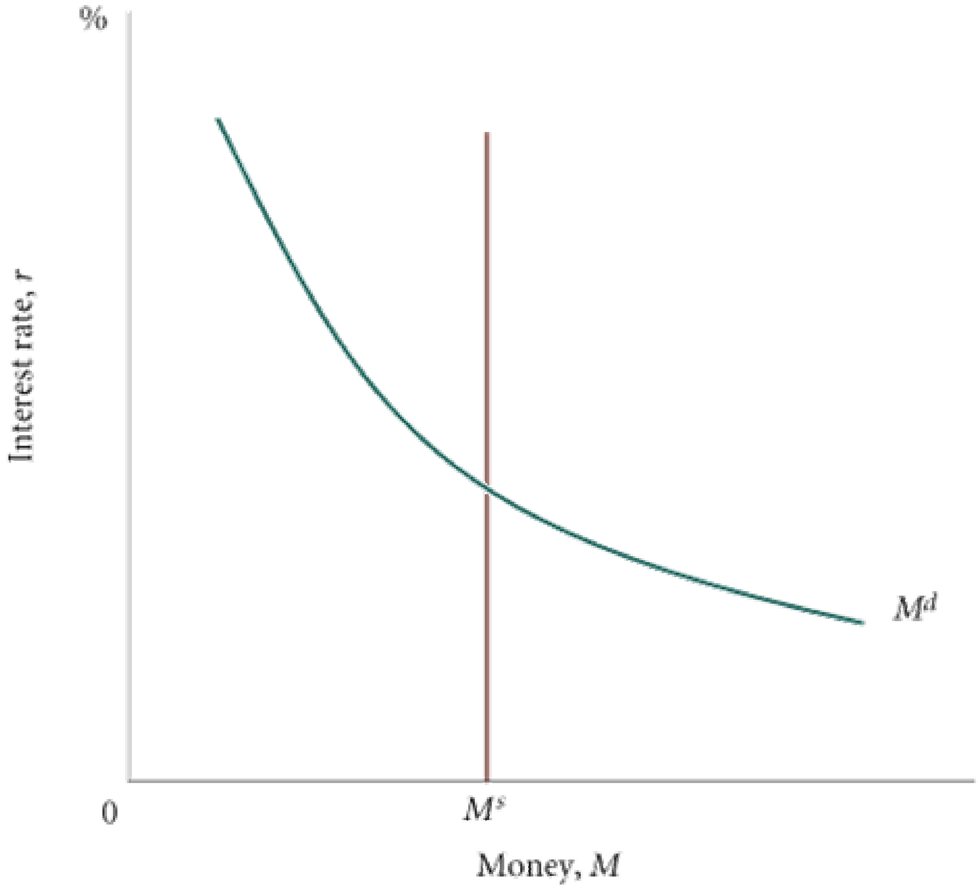


✓ Increases in the price level shift the money demand curve to the **?** , and decreases in the price level shift the money demand curve to the **?** .

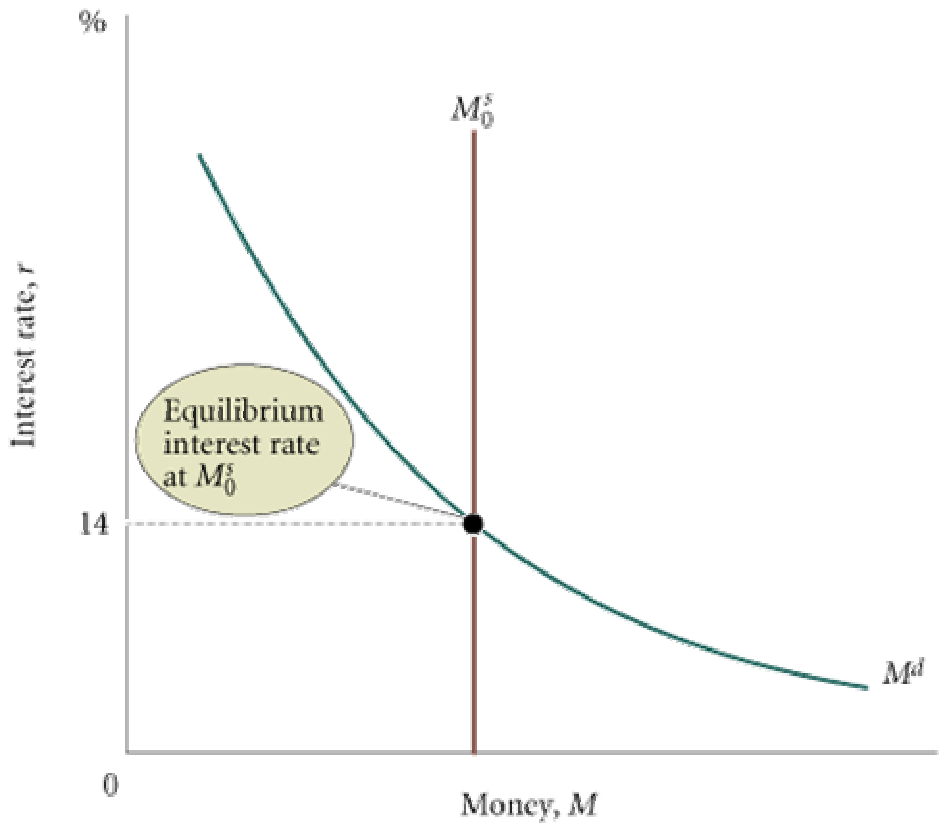
✓ Even though the number of transactions may not have changed, the quantity of money needed to engage in them has.

THE EQUILIBRIUM INTEREST RATE

SUPPLY AND DEMAND IN THE MONEY MARKET

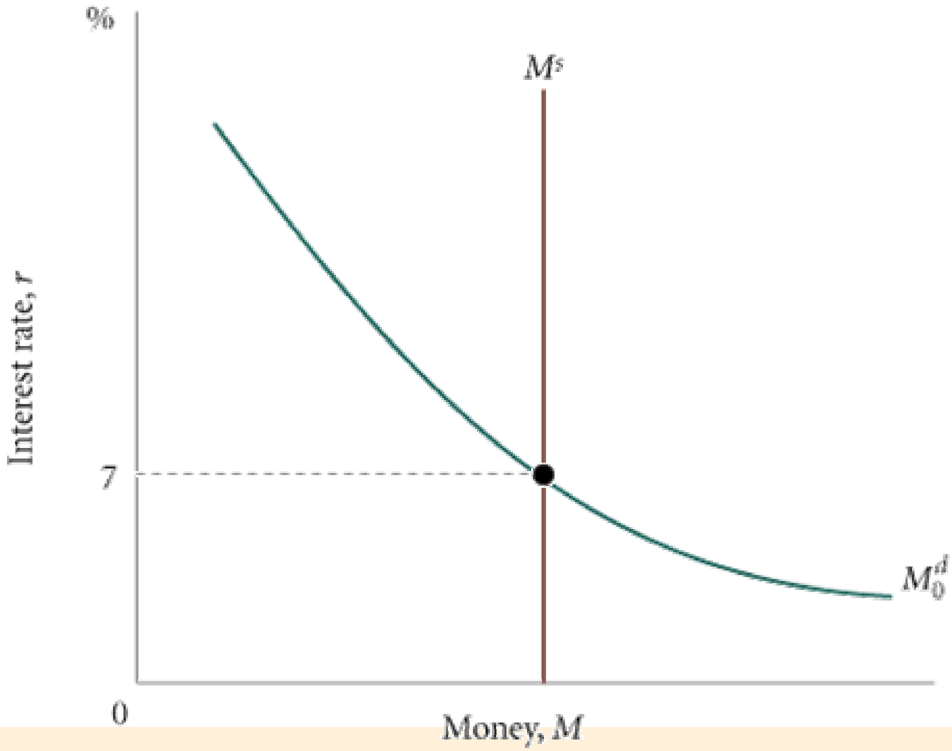


CHANGING THE MONEY SUPPLY TO AFFECT THE INTEREST RATE



INCREASES IN *Y* AND SHIFTS IN THE MONEY DEMAND CURVE

• An increase in *Y* shifts the money demand curve to the **?** .



✓ An increase in the price level is like an increase in *Y* in that both events increase the demand for money. The result is an **?** in the equilibrium interest rate.

LOOKING AHEAD: THE FEDERAL RESERVE AND MONETARY POLICY

- **monetary policy =** Fed policies that contract the money supply in an effort to restrain the economy.

- **monetary policy =** Fed policies that expand the money supply in an effort to stimulate the economy.