Chapter 7 Review
Money and Inflation

Readings
Chap. 7: all

Outline
I. What is Money?
II. Types of Money
III. Measuring the Money Supply Today
IV. What Makes Our Money Valuable?
V. The Equation of Exchange
   A. The first equation (based on transactions)
   B. The equation we will use (based on GDP or income)
   C. Examples
   D. So what?
   E. The quantity theory of money
VI. The Demand for Money (our first visit)
   A. What do we mean by money?
   B. The simplest money demand function
   C. What else determines our demand for money?
VII. Inflation and Interest Rates
   A. Real and Nominal Interest Rates
   B. The Fisher effect
   C. Two real interest rates
VIII. Back To the Demand for Money
IX. The Costs of Inflation
   A. Borrowers and lenders
   B. Hyperinflation
XI. The Classical Dichotemy

Problems to Study (not graded)
1. p 188: Questions For Review # 1.
2. p 188: Questions For Review # 2.
3. p 188: Questions For Review # 3.
5. p 188: Questions For Review # 5.
10. p 189: Problems and Applications # 2.
11. p 189: Problems and Applications # 3.
12. p 189: Problems and Applications # 4. This is pretty similar to # 21 below.
13. p 189: Problems and Applications # 5.
15. p 189: Problems and Applications # 7.
16. What backs the U.S. dollar today?
17. Consider the following conversation from a particularly exciting episode of “The Simpsons”:
   Homer: (Looking under the couch for food) “Doh! Its twenty dollars! I wanted a peanut.”
   Homer’s Brain: “You can get lots of peanuts with $20.”
   Homer: “Explain.”
   Homer’s Brain: “Money can be exchanged for goods and services.”
   • Which function of money is Homer’s Brain referring to? ____________________________
18. Rank the following from most liquid (1) to least liquid (5)
   _____ A twenty dollar bill   _____ a house worth $120,000
   _____ $20 in your savings account   _____ $20 in your checking account
   _____ a government bond that will pay $1000 in 20 days.
19. Given the following information (some of which you may not need) calculate M1 and M2.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casino Chips</td>
<td>$ 3 Billion</td>
</tr>
<tr>
<td>Savings Accts. (&amp; etc)</td>
<td>$ 1,600 Billion</td>
</tr>
<tr>
<td>Retail Money Market Mutual Funds</td>
<td>$ 460 Billion</td>
</tr>
<tr>
<td>Currency in bank vault or at Fed</td>
<td>$ 140 Billion</td>
</tr>
<tr>
<td>Currency in Circulation</td>
<td>$ 390 Billion</td>
</tr>
<tr>
<td>Commercial Paper</td>
<td>$ 180 Billion</td>
</tr>
<tr>
<td>Euro Dollars</td>
<td>$ 260 Billion</td>
</tr>
<tr>
<td>Demand Deposits</td>
<td>$ 840 Billion</td>
</tr>
<tr>
<td>Travelers’ Checks</td>
<td>$ 11 Billion</td>
</tr>
<tr>
<td>Small Time Deposits (CD’s &lt; $100,000)</td>
<td>$ 810 Billion</td>
</tr>
<tr>
<td>Institution only Money Market Accounts</td>
<td>$ 260 Billion</td>
</tr>
<tr>
<td>Inventories of Chewing Tobacco in Retail Stores</td>
<td>$ 19 Billion</td>
</tr>
<tr>
<td>Short-term (less than 6 mo) Govt. T-Bills</td>
<td>$ 720 Billion</td>
</tr>
</tbody>
</table>

M1 = _____________

M2 = _____________

20. In chapter 7, we discussed the main method the Fed has for changing the money supply. Fill in the blanks below with the name and description of this policy instruments of the FED and how the Fed should change it.

<table>
<thead>
<tr>
<th>Name and Through Description of Policy</th>
<th>How the Fed attempts to increase the money supply</th>
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</table>
21. • The price (or inflationary) effects of an increase in the money supply effect is generally considered bad for the economy. However, this effect usually takes a while (several years) to kick in. **Are there any effects of increasing the money supply (not emphasized in this chapter) which are good for an economy in the short-run?**

• Central banks are considered politically independent if they do not have to cater to public opinion or political pressure when making decisions. Central banks are considered to be politically dependent if their directors are directly appointed by the legislature (ex. both houses off Congress) and have short, but renewable terms. The central bank’s directors have to worry about short-term political desires if they want to get and keep their jobs. Central banks are considered politically independent if their directors are appointed by the executive (ex. President) and serve long terms. **Which type of central bank, politically dependent or politically independent, would you expect to increase the money supply more? Explain your answer.**

• *Australia recently changed its central bank to make it more politically independent. How, if at all, would you expect this to affect the inflation rate of the Australian dollar in the long-run? Why did you give the answer you did?*

22. List one group that is harmed by higher than expected inflation. List one group that gains from higher than expected inflation.

23. Boris wants to borrow $10,000 for one year for his business. He is willing to pay up to a 6% real interest rate to get the money. Linda is a potential lender. She is willing to lend out $10,000 for one year to Boris as long as she gets a 6% or greater real rate of return.¹ Both Boris and Linda (and the rest of the economy) expect a 5% inflation rate.

• Assume Linda loans Boris money. What is the nominal interest rate on this loan? _______

• After the loan is made (but before it is paid back), the actual inflation is rate is 1%. What is the actual real interest rate on this loan? _______

• Who gains from this lower than expected inflation rate? _______________

• Who loses from this lower than expected inflation rate? _______________

24. You decide to date a younger man/woman/hermaphrodite/all of the above. The only drawback is that he/she/it/them has younger brothers/sisters/hermaphroditic Siamese twins/all of the above who really get on your nerves. For one thing, almost every time you visit your sweetie(s), his/her/its/their siblings are watching the *Wizard of Oz* and singing the songs in shrill, munchkin voices, and worst of all, bad mouthing economics. See if you can spoil their fun. Explain the original story behind the *Wizard of Oz*.

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**Partial Answer to # 20**

<table>
<thead>
<tr>
<th>Name and Through Description of Policy</th>
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</thead>
<tbody>
<tr>
<td><strong>Open Market Operations:</strong> The U.S. Federal Reserve’s buying &amp; selling of govt. bonds from and to the private sector.</td>
</tr>
</tbody>
</table>

¹ This includes a risk premium. i.e. a 6% real rate of return is high enough to compensate her for putting off her use of the cash, and to compensate for any risk that Boris might default.