Reference to the Web Exercise

Monetary Finance

September 5, 2016

1 Page106.1

a.

Percent change at seasonally adjusted annual rates	M1	M2
3 Months from Jan. 2016 TO Apr. 2016	11.4	7.0
6 Months from Oct. 2015 TO Apr. 2016	9.5	7.7
12 Months from Apr. 2015 TO Apr. 2016	6.3	6.4

According to the table above which is reported by the Federal Reserve, the growth rate in M1 and M2 over the past twelve months is 6.3% and 6.4%.[1]

b.

There are many methods to judge whether the monetary policy is expansionary or restrictive. Here we offer one approach based on the comparison between the growth rate of GDP and money supply.

According to the data from the U.S. Bureau of Economic Analysis, the GDP growth rate in the first quarter of 2016 is 1.4%, which is smaller than the relative money supply growth rate. Therefore, it implies that the Fed expanded the money supply and the monetary policy is expansionary.

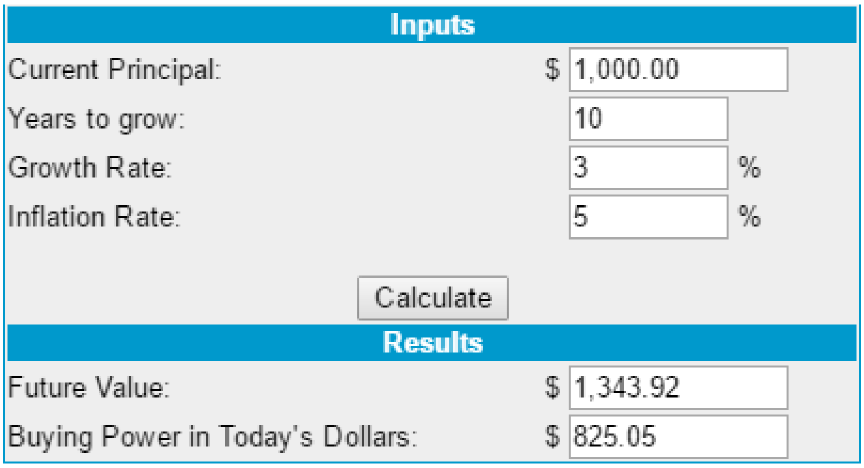
2 Page106.2

This is an open-ended question and you can select any topic that you are interested in. You can write a summary of such policy and briefly analyze the effect of this policy.

3 Page159.3

You can use the calculator(2) on Moneychimp website to calculate your buying power in today's dollars. For example:

[1] Some students asked about the "seasonally adjusted" mentioned in the table on the website.Seasonal adjustment is a statistical method for removing the seasonal component of a time series that exhibits a seasonal pattern. It is usually done when wanting to analyse the trend of a time series independently of the seasonal components. You will learn more about it in your future econometric classes.



Now you can see that 1343.92$ in the future only equals 825.05$ in today's dollars, which means inflation erodes investment returns.

a.

If inflation increases, the inflation-adjusted value of an investment will decrease while its adjusted value will not change. Therefore, the difference between them will become larger.

b.

If the investment horizon lengthens, the adjusted value will increase while the change of its inflation-adjusted value is uncertain. It depends on the yield and inflation rate. Therefore, the difference between them is uncertain.

c.

If expected returns increase, both the adjusted value and its inflation-adjusted value will increase.

4 Page182.3

This is an open-ended question and you can select a bond fund which is worth investing and state the reason why you choose such a fund as a recommendation. Vanguard provides some advice on selecting bond funds.

a.

You can select the fund that has a higher interest rate in the short term.

b.

You can select the funt that has a higher interest rate in the long term.

As for the tolerance for risk, you can compare the fluctuation of the different funds. For example, you can calculate the variance of the interest rate. The larger variance implies the lower tolerance for risk.

When you click a the name of a certain bond fund on the website, you will obtain the detailed information of this fund, including performance, risk potential, portfolio composition etc.

5 Page226.1

- Paper: The Market for Lemons: Quality Uncertainty and the Market Mechanism (Akerlof, 1970)[2]

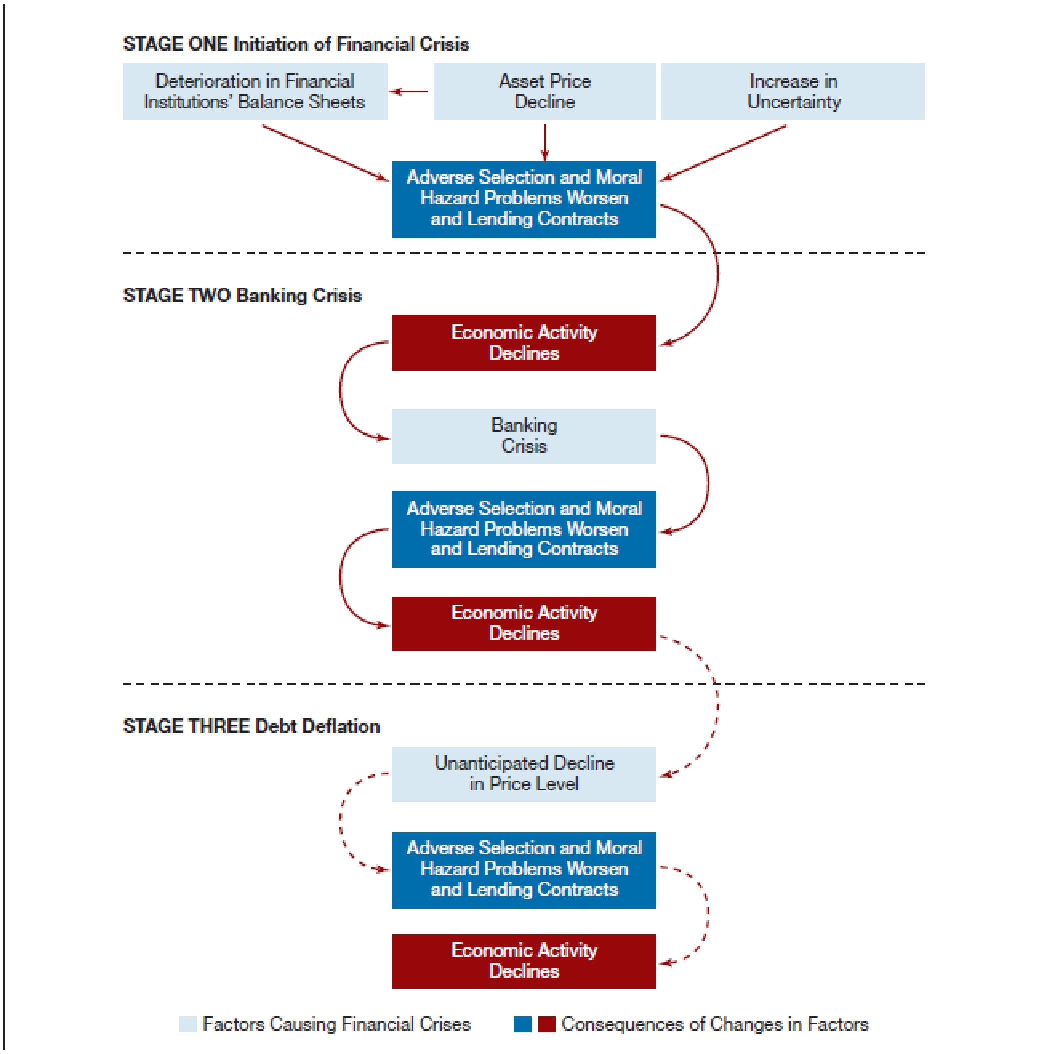
Here are some contributions made by George Akerlof:

- demonstrated how a market where sellers have more information than buyers about product quality can contract into an adverse selection of low-quality products
- pointed out that informational problems are commonplace and important
- showed how asymmetric information of borrowers and lenders may explain skyrocketing borrowing rates on local Third World markets

[2] If you are interested in this model and want to know more about it, you can read this paper. You will learn more about the theories of asymmetric information in your future advanced-microeconomics classes.

6 Page244.1

You can read the materials on the given website and summarize the cause of the Great Depression. In the process of analysis, you can refer to the figure below from your book.



7 Page407.1

The latest report of the Federal Reserve is released on February 10, 2016. What you should do is just to read the first section of the report and make a summary of it. You can summarize its main points and write something on the basis of your own understanding.

8 Page407.2

Date	M1		M2	
	Amount	Growth Rate	Amount	Growth Rate
2013.04	2508.3	-	10546.9	-
2014.04	2770.9	10.47%	11213.8	6.32%
2015.04	2995.6	8.11%	11889.4	6.02%
2016.04	3183.3	6.27%	12651.4	6.41%

The amount here is seasonally adjusted and represents billions of dollars.

According to the table above, we can find that the Fed has been decreasing the rate of growth of the money supply.

9 Page550.1

Table 1: Velocity

Date	GDP	M1	Velocity
2002	11103.8	1219.9	9.102221
2003	11816.8	1305.8	9.049472
2004	12562.2	1375.8	9.130833
2005	13381.6	1374.9	9.732781
2006	14066.4	1368.2	10.28095
2007	14685.3	1376.5	10.66858
2008	14549.9	1606.9	9.054639
2009	14566.5	1698.7	8.575087
2010	15230.2	1842.6	8.265603
2011	15785.3	2170	7.274332
2012	16297.3	2461.5	6.620882
2013	16957.6	2660.5	6.37384
2014	17615.9	2927.3	6.017798
2015	18164.8	3087.2	5.883908

From the table, we can find that the velocity of money has fallen since 2002 due to the high grow rate of GDP and the decreasing growth rate of money supply.

10 Page581.2

Just search on the website for the latest FOMC meeting related to monetary policy, analyze the goals of such policy and explain why these are consistent with the Taylor principle.