

Core Economics: Concepts and Applications

By Subodh Mathur, Ph.D. MIT <http://www.profmathur.com>

Chapter 4: Money Matters

Table of Contents

Money Matters	1
Chapter flow	1
Money is not what you think it is	1
Core role of money	2
Money vs. wealth	2
Money supply	3
Central banks are major players in the economy	3
Many central banks have adopted inflation targets	4
Central banks also focus on economic growth	4
Comparison of monetary policy with fiscal policy	6
Impact of fiscal and monetary policies was slow in coming in 2008	6
Central banks should be independent of governments	7
Central bank independence	7
How do we measure the money supply?	8
M1 measure of money supply	9
M2 measure of money supply	9
Let's look at currencies	11
Are currencies backed by gold?	11
Moving to cashless economies	12
M-Pesa in Africa	12
Other countries moving to cashless payments	13
The US exception	13
Let's look at commercial banks	15
Deposit reserve ratio	17
Capital requirements	18
Risk-Weighted Assets (RWA) - another way of taking account of the riskiness of loans	19
Capital requirement ratio	21
Economic downturns increase a bank's RWA and can make it insolvent.	21
Some of China's and India's banks are in trouble	23

Let's look at money market retail funds	23
MMM funds have some risk	23
Some general financial principles from the workings of MMM funds	24
Key Takeaways	25
Money is not what you think it is	25
Central banks are major players in the economy	25
How do we measure the money supply?	26
Let's look at currencies	26
Let's look at commercial banks	27
Let's look at money market retail funds	27

Chapter 4

Money Matters

Money. It makes the world go around. But financial markets can also create economic problems.

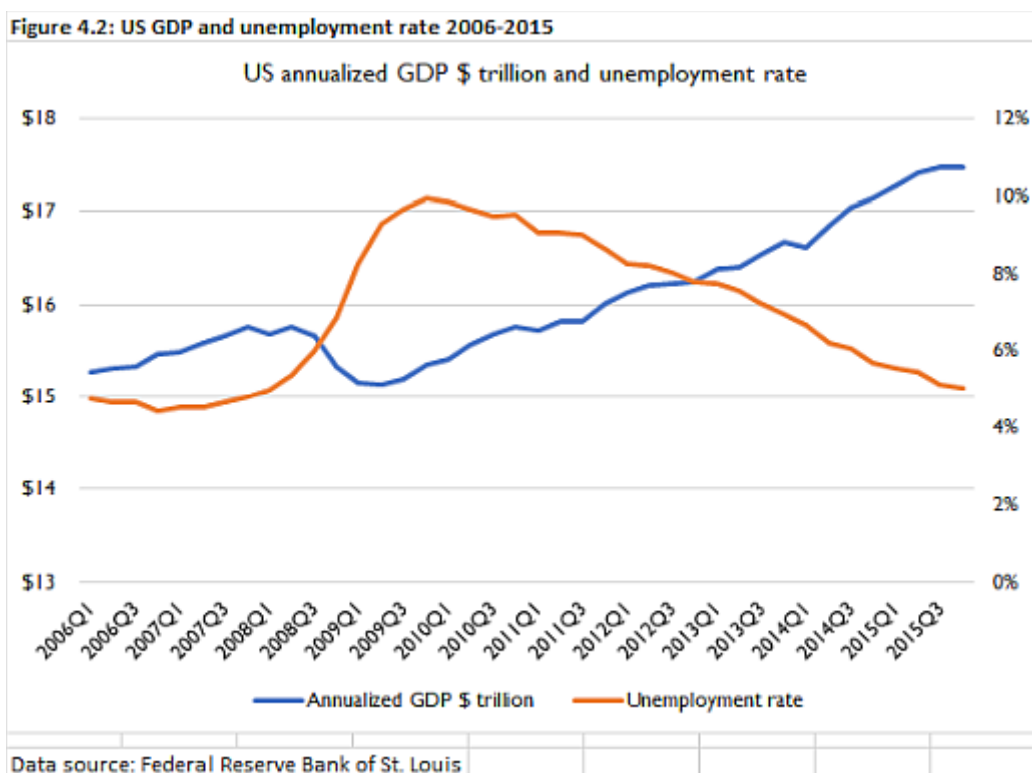
Many economists and other observers think that the US financial markets were partly responsible for the 2008 economic crisis. Before this crisis, many people ignored the financial sector. A common attitude was to leave the financial sector to the specialists. That changed quickly soon after the crisis began to hurt economic growth and create unemployment in the US and many other countries.

Chapter flow

This chapter has six parts. To begin with, we define the term money as economists use it in their analysis. In the second part, we look at central banks, which control money in modern economies. Next, we look at how the money supply is measured. In the fourth part, we look at currencies, followed by commercial banks. Finally, in the sixth part, we look at one fund offered by investment banks.

Money is not what you think it is

We all know what money is. We have several nicknames for it. We call it bread, dough, moolah, bucks, dinero, and perhaps some more. However, if we want to understand how the economy's financial markets work, we have to define money more formally.



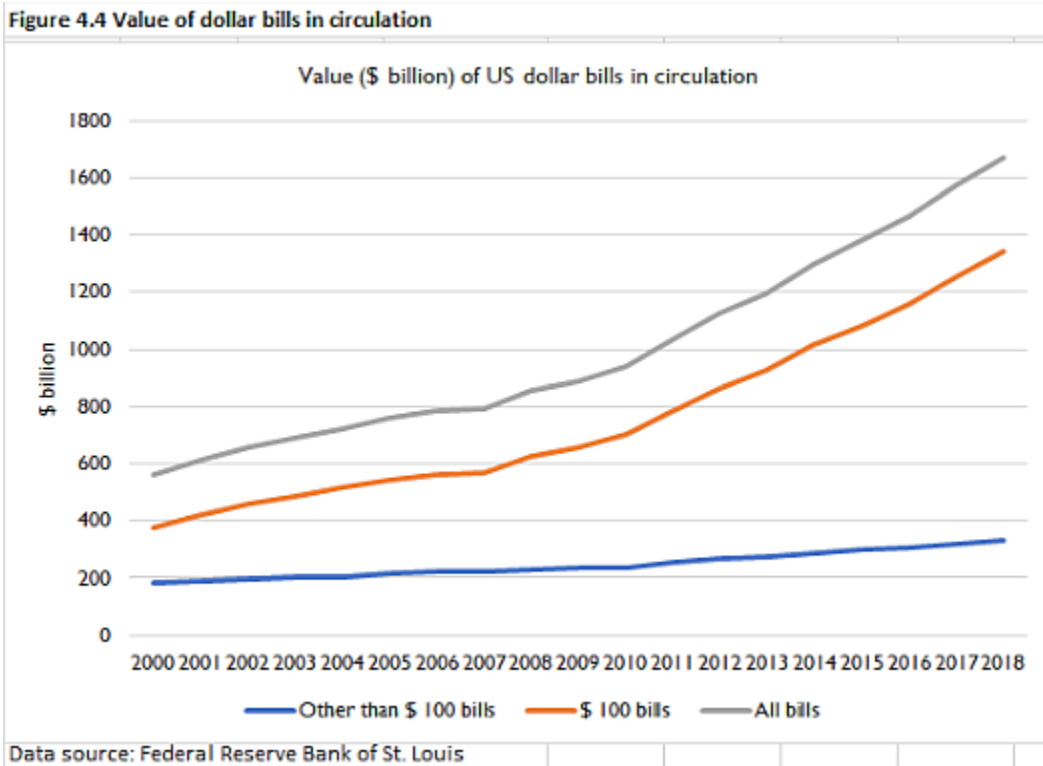
Central banks should be independent of governments

As seen above, central banks have a major role in determining what happens in an economy. In addition, in many countries, central banks supervise and regulate commercial banks. In the US, the regulatory system for commercial banks is complex. It includes institutions other than the Fed, but the Fed still has significant control over commercial banks. For example, for large banks, the Fed runs the so-called stress tests designed to determine whether the banks will be able to handle shocks such as the 2008 economic meltdown. **In short, the managers of the central banks are quite powerful in financial markets.**

Central bank independence

How should central bank managers conduct their operations? Under the control of the government? In coordination with the government? Or, independently of the government?

The consensus among economists is that the central bank should be independent of the government. This consensus does not come from economic



One reason for the continued use of dollar bills in the US is that several million people don't have bank accounts. Some don't use banks because they are poor and not a part of the formal workforce. Others don't have valid work permits and may also be poor. For these people, cash is perhaps the only realistic option for making payments.

Another reason is that some people want to be paid in cash even though they have bank accounts. They probably want to avoid paying income tax on these earnings. Or, it could be that they are making some money on the side, which they don't want anyone else to come to know officially.

However, these off-the-books transactions are usually small in value. They cannot explain the increase in the value of \$ 100 bills. **In Figure 4.4, we see that the increase in the value of the dollar bills in circulation is mainly due to the rise in \$ 100 bills.** Why this increase in the \$ 100 bills? Who needs \$ 100 bills for buying and selling anything? It's a lot of money for everyday transactions - which anyhow are increasingly electronic. And most people and companies make large payments electronically or by check – not in \$ 100 bills.