25.2 SMITH, MARX, KEYNES, CHARTALISM AND MODERN MONEY THEORY

LEARNING OBJECTIVES

By the end of this section, you will be able to:

- Explain and compare the two views of money's origin and its value

The answers to the questions of value raised in the previous section can be found by examining the following two quotes, from arguably the two most significant characters in the history of political economy. The first comes from Adam Smith's *The Wealth of Nations*:

> A prince, who should enact a certain proportion of his taxes be paid in a paper money of a certain kind, might thereby give a certain value to this paper money.[1]

The second quote, similar in theme, comes from Karl Marx's *Capital Vol. I*, and reads:

> The only part of the so-called national wealth that actually enters into the collective possessions of modern peoples is–their national debt. Hence as a necessary consequence, the modern doctrine that a nation becomes the richer the more deeply it is in debt. Public credit becomes the credo of capital. And with the rise of national debt-making, want of faith in the national debt takes the place of the blasphemy against the Holy Ghost, which may not be forgiven.[2]

From these two quotes, the primary difference between the Metallists and Chartalists approaches to understanding money is revealed. Money is not a commodity. Money is, in the words of the legal scholar Friedrich Knapp, a creature of the state.

What may seem to be a subtle difference is in reality substantial. The reorientation of money as a state phenomenon, rather than a market solution to the double coincidence of wants requires a completely different framework for analyzing the economy. The economy can no longer be modeled as a barter system. Real analysis fails to capture the complexity of money, and thus even the existence of general equilibrium itself is called into question. Returning to Schumpeter, if the *modus operandi* of money is not simply a facilitator role, then we must conduct **monetary analysis**. Simply put, this requires the abandonment "of the idea that all essential features of economic life can be represented by a barter-economy model" (Schumpeter 1954).

We can begin to appreciate the difference between the analysis of a barter system and a money econ-

omy by applying Marx's notation and modeling of the **circuit of money capital**.This notation is simple and straightforward (see also Chapter Y: "The Megacorp").

where the first stage M – C is termed purchase and is followed by the production process P culminating with C' – M' sale. This analysis of the economy is a monetary analysis. Returning to the barter notation, from above, the transaction would look like this.

Note, there is no C' in this exchange. This is because the value is generated, not by production or labor, but through the act of exchange. Remember, in the barter economy of the neoclassical school, trade does not occur unless both parties benefit. Value is created through the exchange process and relative prices become the measure of those values (this is also described in Chapter 3 On Values). Where in Marx's model, value is created through the production process and comes from labor.

As you can see, the interpretation of how the economy operates is very different. The predictions of outcomes from market activity are also at odds. In the real analysis of neoclassical economics, markets trend towards equilibrium. Real analysis predicts a stable solution where quantity demanded is equal to the quantity supplied. However, if the economy is investigated from the monetary analysis perspective, simple solutions do not immediately present themselves, as conflict, business cycles, and crisis are all consistently observed in capitalist economies and central topics of analysis in Marx's theoretical framework.

This is one reason why John Maynard Keynes considered his approach to understanding the economy as *The General Theory of Employment, Interest, and Money*. Similar to Marx, although Keynes denies any Marxian influence, Keynes moves his analysis of the economy beyond the barter system and real analysis and attempts to understand the dynamics of a **monetary production economy**. For Keynes, in a monetary production economy, there is no reason to assume the economy will trend towards full employment equilibrium in the labor market. In fact, given the special properties of money, the economy is more than capable of coming to rest, for long periods of time, at a level of output far below what is necessary to achieve full employment.

Keynes argues that money has two special properties that differentiate it from all other commodities in the economy. The first is that money has a near zero elasticity of production. This means that, while it might be reasonable to argue that a problem in our local economy is that there is a shortage of money, we cannot go into the business of selling money. So unlike wheat, milk, cars, tables, or any other good or service, as entrepreneurs, we cannot address the unmet demand for money by producing it ourselves. The second of these properties is a near zero elasticity of substitution. This property relates to the use of money as a means of payment. The state and most private vendors will only accept dollars (in the United States) as means of payment to satisfy debt obligations. Wow, that is a mouthful, but it simply means that there are very few substitutes for money as a method of payment.

The IRS will not take your laptop as a payment for your taxes. The gas company is not interested in your tee shirts to satisfy your bill, they will only accept one thing: cash. As the Wu-Tang Clan so succinctly puts it, C.R.E.A.M. cash rules everything around me…. dollar dollar bill y'all.

Figure 1. $1 Federal Reserve Note

Image from the Federal Reserve Bank of Philadelphia, https://www.philadelphiafed.org/education/teachers/publications/symbols-on-american-money

These two special characteristics of money influence a monetary production economy, by incorporating two missing pieces from the real analysis approach of neoclassical economics, uncertainty and the state. Hence, it is a more "general theory." Let's discuss the state first and then provide a brief discussion of uncertainty. Why can't we produce dollars? Well this is against the law. By law, the Treasury Department is the only producer of new U.S. dollars. We will elaborate on this in detail in the next section. Second, why won't the state take my laptop? For this let's take a moment to look at the dollar (Figure 1 above). Up in the upper left corner it says "THIS NOTE IS LEGAL TENDER FOR ALL DEBTS, PUBLIC AND PRIVATE". This means that there is no reason for the state to accept anything else in payment. If you believe that your laptop is of sufficient value to cover your tax obligation, then you must first convert it into cash to pay your tax bill, and this introduces an important concept in Keynes's monetary framework, **liquidity**.

Liquidity is a measure of the costs associated with converting an asset into cash. For example, your savings account is an asset. It is very liquid, but to convert it into cash you need to go to the bank and withdraw the funds. This time and effort is a cost, but these costs are relatively low. An example of an asset that is not generally described as being liquid is a home. The sale and conversion of a home into cash is a time consuming and often-expensive process. An asset's liquidity is of great importance for understanding economic volatility and how risk and uncertainty differ.

To describe the value of assets in a monetary production economy, Keynes uses what he describes as the own rate. The own rate is a measure of an asset's economic value and is composed of three parts,

the expected return on the asset (q), its carrying costs (c), and the liquidity premium (l). This is displayed mathematically as,

own rate = q − c + l.

Returning to the example of a home, the expected return, pre-housing crisis, was strong, based on historical data. A home's carrying costs are not cheap. Maintenance, mortgage payments, property taxes, etc. all push up the carrying costs, but you get to live there and conventional wisdom said that a homes value always increases. The final component is its liquidity premium, which is also related to the expected return. A house in a sellers' market in a good neighborhood might sell quickly, whereas a home next to a newly constructed slaughterhouse might not be so easy to unload.

Thus, people's view towards the future plays a critical role in determining the own rate. If the housing market is strong, then it is easy to sell because the expected return is positive and the future seller does not think selling in the future has much risk either. On the other hand, if the market is doing poorly, then expected return is going down, carrying costs might be increasing, as pickier buyers are demanding more and more repairs, and the liquidity premium is disappearing, as a buyer cannot be found.

This equation can be applied to all sorts of commodities. Give it a try in the exercise section below. Think about a car, stocks and bonds, or a record collection. These assets all change in own rate based on expectations of the future and how quickly they can be converted into cash. Because it is more difficult to convert assets into cash when markets are unstable and uncertain, people tend to hold onto the one asset that is not negatively impacted. You guessed it: money.

The saving money by individual in times of uncertainty is problematic for the economy. Keynes argues that this virtuous behavior, from the classical economic perspective, aggregates to difficulties for the macro economy as a whole. If you are saving, then, yes, this practice can be beneficial for you, but if we are all saving, then we are not spending and this sends negative signals to investors and business owners. So while individual savings is good, the aggregation of this positive behavior generates adverse economic conditions as a whole. This problem is known as the Paradox of Thrift. This paradox creates difficulties for the neoclassical argument that the aggregation of optimal decisions aggregates to a stable and harmonious society or equilibrium conditions.

If we return to Adam Smith's comments above, we can add the contributions by Marx and Keynes to complete the basic framework for understanding money, not as a commodity in a barter system, but as a social relation in a modern capitalist economy. Remember, the value of money in the Metallist's story is derived intrinsically by a precious metal, but Adam Smith seems to be suggesting that value can be generated by the actions of the Prince. This is a prescient observation by Smith, as modern fiat currencies maintain the value by generating demand through the implementation of a tax or other obligation to the money issuing authority. Therefore, an historical and institutional approach to investigating money reveals fundamentally different dynamics and explanations of the operations of the modern economy. From this interdisciplinary perspective: all economic activity is observed to begin and end with money, money plays this central role because it has special properties, and an authority, such as the state, is responsible for maintaining their currency's value.

By breaking free from the methodological constraints of real analysis, Modern Money Theory (MMT) is able to provide insights into economic activity where money serves as more than a contributor to the *modus operandi* in support of barter. In the next section, money is investigated as a social relation.

This social relation can be described as a two-sided balance sheet operation. These relations of credits and debits are ordered in the modern economy by a hierarchical structure. As this institutional structure is outlined below, the coordinating function of money and its role in determining value becomes clear.

[1] For those looking for an accessible way to introduce themselves to Adam Smith's vast opus, Robert Heilbroner's The Essential Adam Smith is an excellent resource. Some may be already familiar with his text *The Worldly Philosophers*.

[2] This insight is drawn from *Capital Vol. I*.

25.3 THE MONEY HIERARCHY AND THE FALSE DUALITY OF THE STATE AND MARKET

LEARNING OBJECTIVES

By the end of this section, you will be able to:

- Apply the vocabulary and conceptions framework developed in the previous section to the Hierarchy of Money
- Explain where money comes from in a monetary production economy

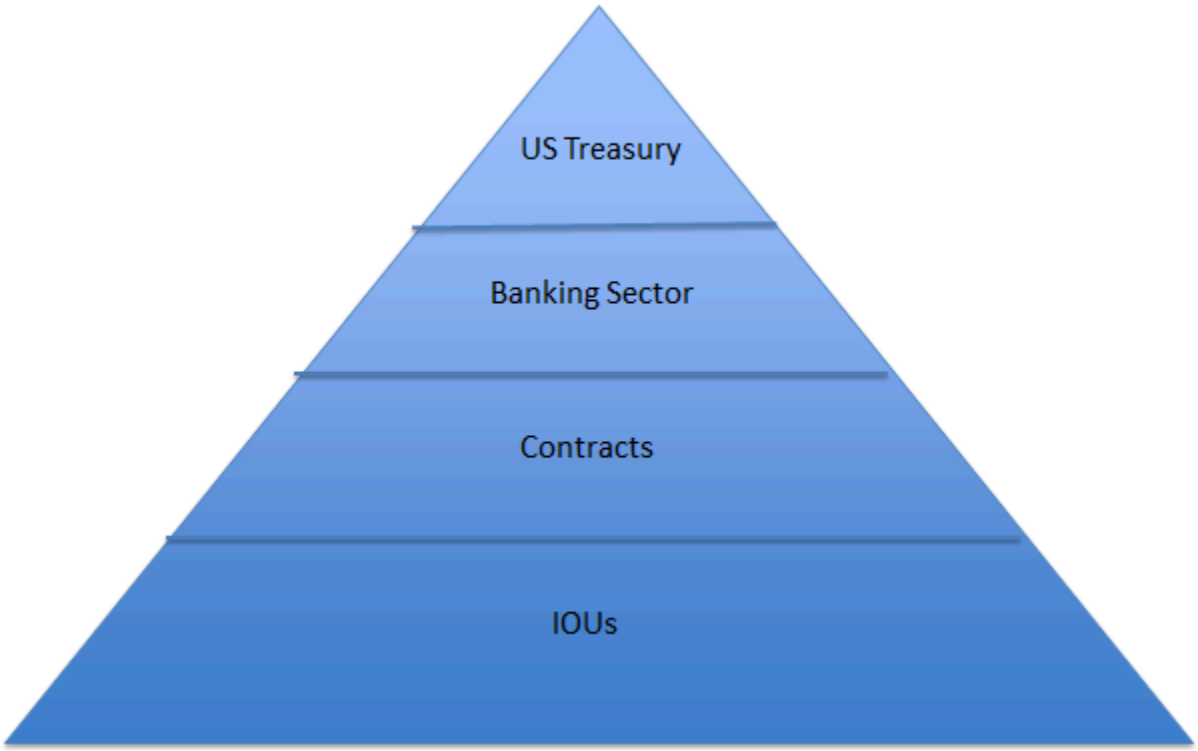
Hyman Minsky once argued that anyone can make money; the real trick is getting people to accept it.[1] For the Metallists, gold or a precious metal's intrinsic value insured money's acceptance as a facilitator of exchange. While simplicity is often a strong characteristic, when it comes to money, a more thorough understanding of money's source of value transforms the relationship between the market and the state. We often think of these two concepts as opposing forces struggling to direct economic activity. From this perspective, one might imagine the market as the strong lead character in pursuit of efficient solutions, and the state as a pesky nemesis taking resources from the market to achieve its own objectives. This plot, however, takes an unexpected twist in Modern Money Theory, as these two characters are revealed to be the same person. The real analysis claims of duality between the state and the market are the product of methodology. The "trick" is not that we accept dollars, but that the true source of their value continues to be largely ignored by economists, policy makers, and the general public.

In 2011, renowned London School of Economics anthropologist David Graeber published a comprehensive examination of the historical origins and development of money, titled *Debt:The First 5000 Years.* While all 5000 years are interesting, and students are encouraged to explore this exemplary work of scholarship, our focus is limited to the current economic system. This narrow focus will allow us to build upon the above ideas of Marx and Keynes and to develop an understanding of key concepts from MMT. The first of these concepts is the hierarchy of money. From this conceptual framework, we will explore the **technostructure** of money (see Chapter 16 The Megacorp). The collection of institutions that regulate money's issuance or production, are similar to the **market governance** (see Chapter 16 The Megacorp) of business enterprises in that stability is a primary objective. Given the central role of money in economic activity and its origins with the state, the clear delineation between where the market begins and state ends is all but erased.

We begin our analysis with MMT's hierarchy of money. As a social relation, not all money is created equal. For example, by definition as a social relation, you borrowing a shirt from your roommate is a money transaction, as long as you *promise* to give it back. We call this an IOU. I had a friend in high school that literally carried around a notebook listing all of the people that owed him money (he now works in finance). These records represented promises to pay. For some of those entries repayment was completed and their name removed, for others, I'm sure they are still in that notebook somewhere in Ol' Johnny Cocktail's archives.

These promises to pay were money transactions. They are two-sided balance sheet operations. Johnny extends credit to his friend; the friend takes on a debt to Johnny. When repayment occurs Johnny's asset and his friend's liability are terminated. Going back to Hyman Minsky's comment, if one regularly borrows and repays Johnny rapidly, then both parties are willing to accept the terms of the social relation. However, if one does not repay, then future credit extension will not occur. Thus, it takes two to tango. This type of transaction between friends and family are so common, we would not generally describe them as money, because that seems odd. Similarly, borrowing a cup of sugar from your neighbor to make cookies and promising to give some of the cookies in exchange is an informal arrangement, but is still one of credit and debt and thus money. The informality of these transactions makes them difficult to enforce, hence they represent the money social relations at the base of our money hierarchy (Figure 2).

Figure 2. The Money Hierarchy



What differentiates the common and largely unregulated IOU transactions from those that are described as we move up the hierarchy is the institutional formality and enforceability of those social

relations. So the second level, contracts, might be promises to pay businesses, such as your network services provider. They promise to provide a service for a year, and you promise to pay a dollar amount for that service. They credit you with service and you pay back your debt. This contract, unlike Johnny's notebook, is legally enforceable in dollars. If you or the network provider breaks your promise legal recourse is available.

Moving on up the hierarchy we have the financial sector and then the U.S. Treasury at the very top. The formality and institutional structure of the social relations generated by these organizations are what place them at higher levels of this hierarchy. The financial sector is similar to the contracts created below it on the hierarchy, so we will focus our attention on the U.S. Treasury. The U.S. Treasury is unique, because by Constitutional Law it is the sole source of new U.S. dollar issue. This institutional reality is one of the most significant aspects of MMT, because in stark contrast to the Metallist's story money comes from the state not the market.

Figure 3.

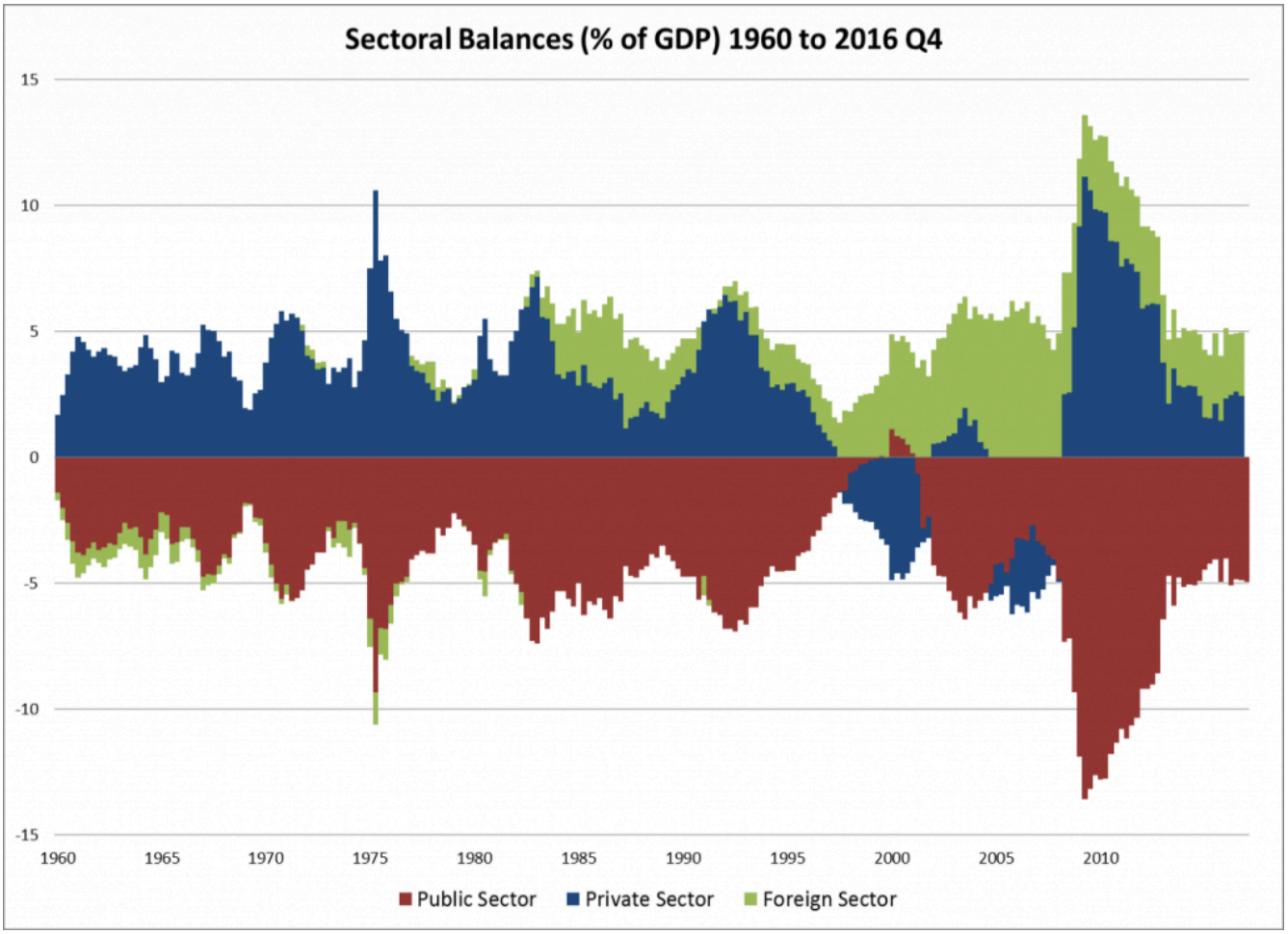


Figure (3) vividly displays the hierarchy in action. As you can see, as the red line goes into the negative (government deficit), the green line increases (private sector wealth), at a nearly 1:1 ratio. This relationship between public and private spending is described by the accounting identity equation know as **sectoral balances**.

$0 = (I - S) + (G - T) + (\text{net exports})$

This equation states that the balance sheets of the private, public and international current accounts sectors of the economy sum to zero. If we were to close the economy and only have the public and private sector, then when the private sector spends more than it takes in (deficit spends), the public sector, by accounting identity runs a surplus. This situation rarely occurs. If we examine Figure 3, we see that in the early 2000's a very brief period of government budget surplus took place, only to be followed by recession and a movement back to state deficits and private surpluses.

Before pressing forward, let's take a moment to summarize the hierarchy of money. Money is a social relation. It is a two-sided balance sheet operation or an IOU. It consists of at least two parties whom agree to a credit debit relationship. The hierarchy of money is characterized by the institutional constraints and enforcement of these social relations. At the top of the hierarchy is the issuer of the currency. The currency issued in the United States is the dollar. Rather than the dollar emerging in the market to solve the double coincidence of wants, the dollar comes from the state. This leaves us with the question of value. If there is not a precious metal or intrinsic value to the dollar, then where does its value come from?

Value comes from a promise from the state to accept U.S. dollars as payment for taxes. This promise creates demand for dollars in the United States. The demand for dollars is what maintains the dollar's value. Thus, MMT argues that taxes drive money. An important question that this raises is how does this impact the value of goods and services produced? Remember in the orthodox approach the prices of goods and services are measures of their relative values as they are traded in a barter system, but if we have a monetary production economy, then how are these activity's values determined? Much of this was clearly outlined at the enterprise level in the Costs and Prices chapter and further analyzed in the Megacorp. Here we ask the question, how does our perspective on value change when we approach money as an industry with the United States as the monopoly producer?

As the monopoly producer of the dollar, the Unites States government is not the pesky nemesis taking money from the market to fund its spending. Instead private markets and the financial industry are provided with the legal authority to create dollar denominated assets. This process greatly limits what is viewed to have value to activities that generate profits. This mode of utilizing money-issuing authority makes it very difficult for many in the economic system to participate in the dollar economy. Orthodox economics and the Metallist story argues that value creation is best handled by markets, rather than direct state spending. As the monopoly producer of the currency, it is a political decision about how money enters the system and assigns value. Many MMT theorists argue that the values of the community would be better met through a universal program for full employment. This would mean the monopoly producer would take more control over value creation to meet the needs of the public, than it currently does.

The sectoral balances relationship between the public and private sector, suggests that there is an intimate relationship between state and market activities. The approach taken by neoclassical economics suggests an antagonistic relationship based on real analysis. The foundation for this position is that the state must take money from the private sector to spend. The history and an institutional analysis of where money comes from debunk this foundation. If, as Keynes suggests, we live in a monetary production economy and all new issue comes from the state, then continuing to approach the market and state as hard duals is likely to continue to leave many outside of the dollar economy in states of unemployment and poverty.

To further examine money's ability to activate value, we will now turn to an examination of local currency systems. Local currency systems are experiments. These experiments are attempting to build understanding about the power of our most important social technology. Remember, we have defined technology as the application of scientific or organized knowledge of practical tasks. What could be more practical a task than to understand money?

[1] Stephanie [Bell] Kelton's 2001 *Cambridge Journal of Economics* article "The Role of the State and the Hierarchy of Money" is widely considered to be a seminal piece in the development of Modern Money Theory.