

CHAPTER 3 — THE PATTERN OF INDIRECT EXCHANGE

CHAPTER SUMMARY

Although beneficial to all participants, the scope of direct exchange is very limited. Unless there is a “coincidence of wants”—where Paul wants to obtain and use *X* and is willing to give up *Y* for it, while Mary wants to obtain and use *Y* and is willing to give up *X* for it—direct exchange cannot occur. Under direct exchange, there is little room for the division of labor and capitalistic production processes.

Indirect exchange occurs when at least one of the parties obtains a good that he does *not* intend to directly use in consumption or production, but rather that he intends to eventually trade away to someone else. This good would then be a *medium of exchange*. In principle, there can be many different types of media of exchange in an economy, each of which is used as a medium only by a few people. However, if a particular good is a medium of exchange that is *commonly accepted* (i.e. everyone is willing to accept this good in the hope of trading it away again in the future), then that good is a *money*.

The emergence of money is a market phenomenon, resulting from the actions of self-interested individuals. Even in an initial state of *barter*, commodities will have different degrees of *marketability*, or *saleability*. Consequently, sellers of relatively unmarketable commodities may often find it advantageous to proceed “indirectly” by selling their wares, not against the commodities they ultimately desire (and for which they can find no owners who at the same time desire the unmarketable wares), but in exchange for commodities that they can’t use personally, but which are at least more marketable than the initial commodities being sold. This indirect route will put these sellers in a much better position to obtain the commodities that they ultimately desire for personal use (in consumption or production).

Because relatively more marketable commodities will be demanded, not merely on account of their intrinsic usefulness, but also because people will desire them as media of exchange, such commodities will become acceptable by ever more people, and hence they will grow even *more* marketable. The process builds on itself, until eventually one or more commodities become generally accepted media of exchange, i.e. money. A money commodity tends to be highly divisible, easy to transport, durable, and has a convenient exchange value per unit weight. Historically, gold and silver have often served as money.

The unit of money is typically expressed as a weight, as in *pounds* of silver or *ounces* of gold. The particular unit used is a matter of convenience, however.

The emergence of money allows for a fuller division of labor and extension of roundabout processes. Economic calculation becomes possible, as all goods are now traded against the money good and can hence be reduced to a common denominator. Businesspeople can now compare money revenues with money expenditures and obtain a quantitative appraisal of their operations. Profit and loss calculations allow businesses to evaluate the successfulness of various departments or projects.

Catallactics is the branch of praxeology that deals with monetary exchange ratios.

CHAPTER OUTLINE

1. *The Limitations of Direct Exchange*

Although direct exchange allows all participants to achieve greater satisfaction than would be possible in autarky, it is nonetheless quite limited. Recall that in direct exchange, each party gives up goods in order to receive goods that he or she can *personally* use (either in consumption or production). Therefore, unless there is a “coincidence of wants”—where Paul wants to obtain and use *X* and is willing to give up *Y* for it, while Mary wants to obtain and use *Y* and is willing to give up *X* for it—two people cannot engage in direct exchange.

This fact poses a serious limitation on the scope of direct exchange, and would greatly hamper the division of labor. For example, someone couldn’t specialize and become a full-time dentist, unless he were confident that, whenever he desired apples or water or a horse, he would be able to (quickly) find an owner of apples, water, or horses who *at that time* desired dental services. For a different example, consider the owner of an indivisible but very valuable good, such as a famous work of art. It is unlikely that the owner would ever sell this item, because she would need to find someone who had a combination of various other goods (such as steaks, a motorcycle, china) that the art owner desired, *and* who wanted to trade this package of goods for that particular piece of art. What are the chances of finding such a person?

Finally, consider the limitations on extended production. How could the builder of houses possibly operate using only direct exchange? Unless he happened to find himself in possession of a giant stockpile of just the right assortment of various goods to pay workers and the owners of lumber, shingles, nails, etc., he would not even be able to construct a house in the first place. (Remember that it would be impermissible for the builder to go out on the market and *accumulate* such a stockpile. Since the builder would be acquiring these various goods with the intention of trading them away to workers and other factor owners, this would already constitute an example of *indirect* exchange.) After the house were completed, the builder would then be in the same unfortunate position as the owner of a famous piece of art: he would have to find a buyer who had an acceptable stockpile of goods that the *builder* desired, and who at the same time wanted to trade them for the house. Clearly, an economy characterized only by direct exchange would have an extremely limited scope for specialization and capitalistic production.

2. *The Emergence of Indirect Exchange*

Different goods have differing degrees of *marketability*. This is an attribute distinct from a good’s value. For example, an oil well is more valuable (to most people) than a gold coin, but it is not nearly as marketable.

The possibility of indirect exchange gives individuals much more flexibility. Someone who wishes to trade eggs for shoes doesn’t need to find a corresponding person who wishes to trade shoes for eggs (which would be the case in direct exchange). Rather, the egg seller has the option of achieving his desired goal *indirectly*, by first trading the eggs for butter (say) and then finding someone who wishes to trade shoes for butter.

Even if a seller doesn't have an actual third party in mind, he or she will still find it advantageous to trade away goods of lower marketability in exchange for goods of higher marketability. This will put the seller in a much more advantageous position when he or she enters the market looking for sellers of whatever commodities the seller wishes to purchase for direct use.

Over time, goods that were initially more marketable (in a state of direct exchange) will become even more so. For example, wheat and butter would likely be more marketable (in barter) than telescopes, because virtually everyone would wish to purchase some quantities of wheat and butter, while the market for telescopes would be much narrower. But this means that even people who did *not* want wheat or butter for direct use would be likely to accept them as *media of exchange*, because they would know that it would be quite easy to trade away the very marketable wheat and butter for whatever goods they ultimately desired. Hence, the marketability of wheat and butter would be enhanced with the possibility of indirect exchange.

Eventually, a few (or one) commodities would outstrip all rivals and become *commonly accepted* media of exchange, i.e. *money*. Attributes that contribute to the suitability of a good for becoming money are its divisibility, durability, ease of transport, and convenient exchange value per unit. Historically, gold and silver have proved to be excellent money goods. (In contrast, one would need to deliver huge amounts of wheat in order to buy a house or car, and butter spoils very quickly. Hence these goods, though more marketable than telescopes, would not likely become money.)

3. *Some Implications of the Emergence of Money*

Money allows for specialization in the stages of production. Entrepreneurs can use money to hire workers and purchase natural resources and capital goods, and then sell the enhanced capital goods (for money) to an entrepreneur in a lower order of production. The money proceeds can then be used to buy consumption goods for the entrepreneur. Money also allows for economic calculation, because entrepreneurs can compare money expenditures with money receipts to determine if they are efficiently using scarce resources.

4. *The Monetary Unit*

As it emerges on a free market, the money commodity will be traded in terms of weight (ounces, pounds, grams, etc.). The specific unit of weight in which prices are quoted is a matter of convenience; platinum trades in terms of ounces, while iron in terms of tons. The actual *form* in which the money commodity is traded is also a matter of convenience. Gold in the form of bars may be used for expensive transactions, while gold coins are used for smaller purchases.

5. *Money Income and Money Expenditures*

For a specified interval of time, an individual can keep track of his total money income and money expenditures in order to record his *balance of payments*. An individual can "purchase" money by selling goods and services in exchange for money.

Another way to acquire units of money is to directly produce them (as in mining for gold).

The stock of money that an individual possesses is his or her *cash balance*. Note that there is no such thing as money “in circulation”; at any given time, every unit of money is owned by someone. For a specified time interval, we can write the following equation:

$$\text{Money Income} = \text{Money Expenditures} + \text{Net Additions to Cash Balance}$$

6. *Producers' Expenditures*

People can spend their money not only on consumer goods but also goods of higher orders. The *capitalists* are those who invest money in factors of production.

7. *Maximizing Income and Allocating Resources*

Other things equal, people will strive for the highest possible money incomes. But “other things” are not always equal. A person may work at a job for a lower money wage because he enjoys the hours, or an investor may settle for a lower rate of return because he is fond of the company in question.

As the cash balance increases, the marginal utility of money declines. On the other hand, as the amount of leisure decreases, its marginal utility rises. A worker will continue to supply additional units of labor for money, until the utility of the next unit of leisure is higher than the utility of the money that could be earned by working for an additional unit of time.

Entrepreneurs can reap a monetary gain by “buying cheap and selling dear.” This behavior will tend to correct inefficient allocations of resources.

Every actor must allocate his money resources among consumption spending, investment expenditure, and additions to his cash balance. The next chapter will explore the actual determination of money prices.

NOTABLE CONTRIBUTIONS

- Carl Menger’s explanation of the origins of money (and his critique of the State theory) was the most thorough and rigorous of its time.
- Rothbard’s Figures 30 and 31 (pp. 190-191) are very useful to visualize the pattern of indirect exchange.
- As Rothbard points out (pp. 193-194), modern mainstream economics tends to analyze the economy in terms of direct exchange, and then add on money as an afterthought. Indeed, under the assumptions of typical mathematical models,

goods would not have differing degrees of marketability and there would be no need for money at all.

- Contrast Figure 32 (p. 208) with the typical “circular flow” diagram of mainstream macro textbooks. Only Rothbard’s figure can capture the idea of a structure of production.

TECHNICAL MATTERS

- Rothbard uses the terms *barter* and *direct exchange* interchangeably (p. 187). However, some economists use the term *barter economy* to refer to any economy without money. Technically, then, if we had an economy with media of exchange but not a *commonly accepted* medium, these economists would call it a barter economy while Rothbard would not.
- In the discussion above, we used the example of building a house to illustrate the immense drawbacks of direct exchange. However, even if all of the listed obstacles were overcome, it is not clear whether the situation would even then be an example of direct exchange. By hypothesis, such a builder would have traded his goods away to workers, lumber owners, etc., *with the intention of trading away the product of their surrendered goods to another party*, i.e. the future home buyer. Thus, our hypothetical builder would still be engaging in *indirect* exchange. Indeed, the emergence of indirect exchange is so natural that it is hard to even imagine an economy of purely direct exchange.
- In discussing marketability (or “saleability”), Menger says that a marketable good is one that can be quickly sold at an “economic” price. This is an important point, because often people think that an “unmarketable” good is one that cannot be sold. But if the asking price is low enough, virtually *any* good can be sold. Even so, there is certainly a sense in which a telescope (say) is much less marketable than wheat: the person selling the telescope (in barter) can get a much better price if he is willing to spend weeks looking for prospective buyers, whereas the seller of wheat will probably find his best offer within hours.
- Although in general it is certainly true that a neoclassical model has no role for a medium of exchange (because of perfect foresight and limited types of goods), there have been a few attempts to model the process captured by Menger’s verbal description. In particular, Kiyotaki and Wright (“On Money as a Medium of Exchange,” *JPE* 1989) devise a model with goods of varying marketability and actually cite Menger’s pioneering work.
- On page 204, Rothbard writes that money income equals money expenditures plus net additions to the cash balance *minus* net subtractions from the cash balance. This is somewhat confusing, because normally the term *net* would mean that the different episodes of adding and subtracting to the cash balance had already been

compiled into one total figure. This is why, in the summary above, we have dropped the last term from the equation.

STUDY QUESTIONS

- (1) Name two *different* problems with direct exchange. (pp. 187-188)
- (2) Explain the term *medium of exchange*. (p. 189)
- (3) Why are some goods more marketable than others? (p. 190)
- (4) In what sense is a telescope relatively unmarketable (i.e. difficult to sell)?
Couldn't the owner lower its price until he found a buyer?
- (5) What does it mean to purchase money? (p. 194)
- (6) What is the price of money?
- (7) Rothbard says that the unit of money is a weight. How does this apply to the U.S. dollar? (p. 197)
- (8) Why does the marginal utility of money decline as its supply increases? (p. 218)
- (9) How does a person decide whether to work for himself or an employer? (pp. 221-222)
- (10) How does the owner of a durable good decide whether to rent or sell it? (pp. 225-227)