CHAPTER III
DIVISION OF LABOR AND THE ORIGIN OF MONEY

Let us take a long look back into history and quote from what is probably the first astute analysis of *specialization* and *division of labor* (DOL). In his book called *Cyropaedia*, written by the ancient Greek writer Xenophon (430-355 B.C.), we find the following illuminating passage:

> For just as all other arts are developed to superior excellence in *large* cities, in that same way the food at the king's palace is also elaborately prepared with superior excellence. For in *small* towns the *same* workman makes chairs and doors and ploughs and tables, and often this same artisan builds houses, and even so he is thankful if he can only find (enough) employment to support him. And it is, of course, impossible for a man of *many* trades to be proficient in *all* of them. In large cities, on the other hand, inasmuch as *many* people have demands to make upon each branch of industry, *one* trade alone, and very often even less than a whole trade, is enough to support a man: *one* man, for instance, makes shoes for men, and *another* for women; and there are places even where *one* man earns a living by *only* stitching shoes, another by cutting them out, another by sewing the uppers together, while there is another who performs none of these operations but only assembles the parts. It follows, therefore, as a matter of course, that he who devotes himself to a very *specialized* line of work is bound to do it in the *best possible* manner. Exactly the same thing holds true in reference to the kitchen. . . (bracket and underlining mine)[underlining changed to italics—ed.].[1]

Division of Labor Signifies Productivity

As far as essentials go, there is little to add: Xenophon practically said it all. He put his finger on a fundamental fact: specialization, because it enables individual improvement in skill and aptitude, tends to be the "best possible" (that is, the most productive) approach to the overall problem of production. But he also notes: the advantages of specialization accrue mainly where there are sufficiently large markets (in "large cities"). These advantages are not to be found in small markets ("small towns") where employment opportunities are barely sufficient for the Jack-of-all-trades (the "man of many trades") who simply cannot be "proficient in all of them."[2]

Twenty centuries after Xenophon, the classical economist Adam Smith celebrated the phenomena of specialization and exchange in the DOL by devoting Chapter I of his famous *The Wealth of Nations* (1776) to this subject. And he did it for essentially the same reason given by Xenophon. Says Smith: "The greatest improvement in the

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[1] Quoted in Alexander Gray, *The Development of Economic Doctrine* (London: Longmans, Green and Co., 1933), p. 32.

[2] Probably the best single work on the history and nature of the market division of labor, which traces it back to earliest recorded times, is Jane Jacobs' *The Economy of Cities* (New York: Vintage Books, 1970). Although Jacobs' main focus is on the city as the vital center of civilization throughout history, she also analyzes the impact of trade and specialization on the world division of labor.

productive powers of labor, and the greater part of the skill, dexterity, and judgment with which it is anywhere directed or applied, seem to have been the effects of the division of labor." But the illustration Smith used—the manufacture of pins—helped create the misleading impression that the DOL was strictly a modern result of the Industrial Revolution (1750-1850) and factory production. In essence, however, the principle dates back to ancient times.

How do economists explain the fact that, in time, man *increasingly* resorted to specialization and market exchange as the main principles underlying social cooperation? By and large, the economic explanation has been: the DOL tends to be *more productive* than the direct-use mode of production. And since man presumably prefers greater output and consumption to lesser (other things being equal), he will discover that specialization is more productive than being a Jack-of-all-trades. Conversely, had the DOL been less productive than the direct-use mode, man would surely have turned his back on it. Clearly, the power of the DOL to increase *productivity* must have attracted growing numbers of people to embrace it. They must have perceived the *mutual* nature of the beneficial link that formed between (a) the enhanced productivity made possible by the DOL and (b) the gains that accrued to those who participated in it by specialization and exchange in the market.

Montaigne Dogma Under Attack

However, the relentless growth of the market economy over the centuries is significant for more than the economic gains it promised. Eventually the expansion of markets threatened to shatter one of the most widespread but pernicious notions. This notion, ancient in origin, has been dubbed the *Montaigne dogma*, after the 16th century French writer. In essence, it maintains that exchange and trade in the market cannot be *mutually* beneficial; one party gains only *at the expense of* the other's loss. The Montaigne dogma has been extended to the idea that self-interest causes irreconcilable conflict or antagonism between the interests of different groups, classes and nations.[3]

However, by the 18th and 19th centuries, new winds were blowing in Western Europe, especially in England and Holland. These winds blasted away at tradition with revolutionary impact: trade and commerce exploded to open up uncharted worlds; feudal relations in agriculture were transformed by increased market orientation and commercialization; science and technology were swept radically into commercial, agricultural and industrial application; most of all, a school of Liberal thinkers emerged who, like Bernard de Mandeville, Adam Smith and Frederic Bastiat, emphasized with great confidence and persuasiveness the mutually beneficial side of market transactions and relations. Instead of the alleged conflict and antagonism imbedded in the Montaigne dogma, Liberals stressed the mutuality of interests and harmony that resulted from voluntary exchange in the market.

A note on the term "Liberal." As used in the present context, the term "Liberal" (with a capital "L") is sharply distinct from more recent usage of the term. The present-day "liberal" (with a small "l") stands for a principle totally opposite to the original

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[3] On the Montaigne dogma see Ludwig von Mises, *Human Action* (New Haven: Yale University Press, 1949), Chapter XXIV.

"classical" meaning: modern "liberal" usually means that government should increase its intervention into man's economic and social affairs. In contrast, the classical "Liberal" stood for radical opposition to and break-up of the prevailing mercantilist system—which features strong state initiatives in and paternalistic control of all human affairs—which he sought to replace with a system of *free, unhampered* trade and production based on protection of the individual's natural rights to life and property as the primary principle of social-political cooperation. As against this, the modern-day liberal tends to subordinate the individual's interests to that of the State in the name of serving "society," the "public good," or "public interest."

Self-interest as the Invisible Hand

At the core of the Liberal outlook was the premise that *self-interest*, not altruism or self-sacrifice, was man's primary motivation. (More on the concept of self-interest in Chapter V.) When self-interest is appropriately harnessed to a system of (a) production for the market and (b) exchange on a peaceful, voluntary basis, the result would redound not only to the benefit of the individual but also society as a whole. Irony of ironies: the Liberal took the traditional animus against self-interest and stood it on its head. The true fount of economic productivity, mutual benefit, and general prosperity lay in selfishness and gainseeking (not in purely altruistic service for "the good of others")—albeit only when practiced in a social-political context of *peace* and *non-violence*.

In other words, so long as man is willing to achieve gain or profit by producing useful goods for others, so long will it be feasible to *harmonize* his own self-interest with that of the rest of society. Thus, under the peculiar auspices of the free-market economy, man's social interrelations would turn away from antagonism and violence toward peace and harmony. Only in this light is it possible to appreciate the deservedly famous passage from Adam Smith's *Wealth of Nations* on the workings of the "invisible hand" of self-interest:

> (Man's) study of *his own* advantage naturally, or rather necessarily, leads him to prefer that employment which is most advantageous to *the society* ... and by directing that industry in such a manner as its produce may be of greatest value (to society) he intends only *his own* gain, and he is in this, as in many other cases, led by an *invisible hand* to promote an end which was no part of his intention . . . (i.e.) the public good. (Brackets and underlining mine.)[4]

The Liberal Social Vision

To Adam Smith and the Liberal writers who rhapsodized about the promise and achievement of the free-market society, it appeared possible that man, for the first time in history, would be able to base social existence on foundations of mutually increasing productivity—achieved by specialization and division of labor—rather than on the prevalent dogma which held that one man's gain can come only at the expense of another's loss. Such a principle of violence implied gain by fraud, theft, plunder, killing or other forms of dominion—with survival assured only to the "fittest." In place of

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[4]Adam Smith, *The Wealth of Nations* (New York: Modern Library edition, 1937), p. 423.

violence and its one-sided benefits, classical Liberalism offered the principle of peaceful social cooperation based on the fruitful division of labor, because it uniquely enabled *mutually* beneficial relations via voluntary exchange. It made no difference whether the exchange involved goods for money, or labor services for money; so long as exchange was transacted at *mutually* agreeable terms or prices, both parties would stand to benefit.

In rejecting the "dog-eat-dog" way of life, classical Liberalism was also rejecting prevalent romantic and Utopian notions of a return to a magical, blissful "state of nature" wherein man would presumably be happier than under the emerging Industrial Revolution. To those who yearned for the bygone past, Liberals were saying in effect: life in a pure state of nature would only oppress man with its scarcity of means and its fixed personal horizons, and therefore drive people toward irreconcilable conflict rather than toward an expanding social division of labor and a perception of the mutual gains made possible thereby.

What Makes the DOL Feasible?

So far, we have seen only that side of the market DOL that made it increasingly desirable or attractive—the higher standards of living made possible by specialization, mutual exchange, and increased productivity. However, there is the other, even more important side that made the elaborate market DOL *feasible* in the first place.

It stands to reason that if everyone in the world was *equally endowed* by nature—with equal personal capabilities or talents and with equal access to the world's natural riches—people would clearly have no need to seek each other out for exchange or trade. Since all persons would be equally capable of taking care of their wants or needs, person A would not need to exchange with person B, and vice versa. In reality, of course, people are *not* equally endowed by nature. At the root of man's need to engage in interpersonal social-economic transactions, in all their forms, is the universal fact of man's natural condition of personal *inequality* characterized by *differentiation* or *variation* in personal capability and geographical surrounding.

It is precisely these variegated aspects of human existence that prompts each of us to seek each other out for the twin purposes of: (a) obtaining from each other those desirable goods and services we do not produce for ourselves, or alternatively (b) providing others with the things they apparently lack and want. To put it another way: it is the universal fact of individual inadequacy in some respects ("comparative disadvantage"), or, conversely, individual superiority ("comparative advantage") in other respects. It is this personal disparity which explains why human beings are driven, sooner or later, to seek each other out in the hope of discovering opportunities for mutually satisfying interpersonal transactions—transactions in which people either (a) *exchange* goods and services, or (b) cooperate in joint efforts to *produce* goods and services for the market.

Human and Geographic Variation

Thus it is people's discovery and awareness of how they advantageously complement each other, in personal or material resources, which induces them to *specialize* in doing what they are most suited for—to "put their best foot forward," so to

speak—as the basis for their participating in the social division of labor. In this connection, we must note that specialization in human resources has its counterpart in the specialization of *geographic regions* via the development of their respectively peculiar natural resources, be they agricultural, mineral, or climatic.

Human variation in personal and material assets is reflected in the equally significant differentiation of people's *subjective tastes and preferences*. (More on this in Chapter V.) Different individuals have different preference scales—they do not attach the same subjective (personal) value to the same objects of desire. For example, one need only observe an auctioneer at work—trying to sell a set of old books, a rare landscape painting, or set of royal silverware—to see how very *different* are the values attached to the same object by different bidders.

The Basis of Exchange and Trade

It is precisely these differences in personal valuations which help explain why two parties, willing to engage in exchange (e.g., buy and sell), are actually attaching *different* (not identical) valuations to the same object. Consider a case of *barter trade* in which Mr. A exchanges two units of his product X for Mr. B's one unit of product Y. This clearly indicates that A attaches a lower value to his two units of X than to the one unit of Y (or, conversely, he attaches a greater value to one unit of Y than two units of X). Furthermore, similar reasoning applies in the case of trading *money for goods* ("indirect exchange"). For example, if Mr. C offers two dollars for Mr. D's desk lamp, he is simply revealing that he values his two dollars less than Mr. D's lamp (or, conversely, he attaches a greater value to D's lamp than to his own two dollars). From the other side of the transactions it can be said that, in the first case (barter trade), Mr. B values his one unit of Y less than two units of good X; and in the second case, Mr. D values his lamp less than the two dollars offered for it. In both cases, trade would *not* be expected to occur if both parties attached the *same* value to the objects of trade.

In summary, it is the inherent variation of human and geographic conditions, as well as the differentiation of individual tastes and valuations, that gives rise to spontaneous *interpersonal exchange* as the natural medium of social relationship. The universality of *exchange* activities, in turn, reflects the fact that individuals seek primarily to exchange less preferred (or less satisfactory) states of affairs for more preferred (or more satisfactory) ones. Thus, when people engage in exchange transactions on a voluntary basis, it is evident that *both* parties expect to benefit from the exchange. Otherwise, they would not agree to exchange. (More on the nature of exchange in Chapter V.)

The Emergence of Money

We now come to the crucial "lubricant" in the market economy based on the division of labor—the element of *money*. As desirable as the DOL may have been to those who participated in it, it could not have progressed beyond barter exchange were it not for one of man's great inventions: money. Out of the welter of commodities or goods that man produced and exchanged, there emerged repeatedly a special type of commodity—a "money" commodity—one that had acquired the widest degree of

exchangeability, convertibility or marketability. It was this special "money" commodity that induced people to eventually abandon pure barter, and for a paradoxical reason: the barter economy (*direct* exchange of goods for goods) proved to be more cumbersome than the "money" economy which eventually replaced it, even though the latter involved an *indirect* or roundabout exchange of goods-for-money-for-goods!

Curiously, in the whole field of economics, the subject of money is one of the least understood by the layman. This lack of understanding is paradoxical: practically everyone knows that money is for spending, and has had first-hand experience at using it. Yet a fundamental understanding of the nature of money beyond the familiar aspect eludes the ken of all but the specialist. How much does the average person know about the "quantity theory"—the relation between money and prices? How much does he know about the "demand for money" and its relation to the value (or purchasing power) of money? About the origins of money and its later development from gold to modern fiat paper issued by government?

Commodity Nature of Money

The mystery of money may be due simply to widespread ignorance of its origins and development. For one thing, practically nothing is taught in school about the *history* of money. For another, even textbooks on money and banking are, with few exceptions, devoid of significant historical treatment.[5] Yet it is impossible to fully understand the nature and function of money without knowledge of its origins as *commodity money*.

The forms of money we use today do not tell us enough about money—about its antecedents, its true nature. From his daily experience with money, the average person today knows only that money consists of (1) *currency* issued by government in the form of coins and paper bills, and (2) *demand deposits*, or checking accounts, which are the product of commercial banks under control and regulation by government. But it would be erroneous for him to infer from this that money was always like this, or that the government's monopoly of money has any necessary connection with the origin or nature of money. As a matter of fact, modern forms of money are unique; and the historical origins of money tell us more about its proper nature than the fact that today, throughout the world, money is a monopoly of government.

Of greatest importance is the fact that money, in its earliest forms, was essentially a *commodity* like all other commodities except, of course, in those crucial respects that *differentiated* it from all other commodities. Gold and silver are probably the most famous of the commodity moneys. But history reveals a fascinating array of other commodities that served, at various times and in various places, as money: e.g., fishhooks, nails, axes, copper and other metals, shells, beads, skins, cattle, grain, rice, salt, sugar, tea, and tobacco. Each of these commodities possessed the primary

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[5] Some notable exceptions to the historical blackout on the history of money are: Elgin Groseclose, *Money and Man* (4th ed., Norman: University of Oklahoma Press, 1976); Walter W. Haines, *Money, Prices and Policy* (2nd ed., New York: McGraw-Hill Book Co., 1966), especially Chapters 2 through 5; Murray N. Rothbard, *What Has Government Done to Our Money?* (2nd ed., Santa Ana: Rampart College Publications, 1974) and *The Mystery of Banking* (New York: Richardson & Snyder, 1983).

characteristic of money: the ability to serve as a common *medium of exchange* or means of payment.

Medium of Exchange

Out of the welter of commodities that traders exchanged in the primitive world of barter, it was the "money" commodity alone which was selected to serve in a special new role—in addition to its traditional role as a consumers' good (e.g., grain, salt) or as a producers' good (e.g., fishhooks, nails); this was the role of *medium of exchange* (MOE hereafter). That is, traders were willing to accept these special "money" commodities in direct payment for goods offered in exchange, even though these "money" goods were not necessarily desired for their usefulness as a consumers' good or producers' good.[6]

Why were the "money" goods acceptable to traders as a means of payment, even though they were *not* desired for their own usefulness? Because the trader could turn around and offer them to other traders as a means of payment for other goods which they *really* desired for their usefulness. Thus, "money" goods were not only *acceptable* to traders but were also *marketable* (i.e., exchangeable for other goods). The relevant question now is: What caused these special commodities to be singled out as the general money commodity or MOE?

The Burdens of Barter

To answer this crucial question we must take a brief look at the world of *barter trade*—the *direct exchange* of commodities for commodities. It is reasonable to conclude that in the early stages of barter there existed no special "money" commodity. Traders simply traded with each other only for those goods which they desired for their *direct usefulness* as a consumers' or producers' good—hence the name "direct exchange." And yet we know that somehow and somewhere there emerged a special commodity which acquired an additional role as MOE.

Economists have concluded that barter trade simply proved too costly a method of exchange—too cumbersome and frustrating—to serve the expanding desires of people whose appetites were being whetted by growing population and variety of tastes. What made barter so cumbersome and traders so willing to adopt alternative methods of exchange?

Double Coincidence of Wants

The primary difficulty with barter exchange was probably the elusive *double coincidence of wants*—the difficulty a given trader A would have in finding another trader B who possessed precisely both of the following attributes: (1) B wants precisely the goods that A has to offer, and (2) B possesses precisely the goods that A wants. To grasp the essence of this problem, imagine the plight of a history teacher, say, in search

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[6] See the classic article by R. A. Radford, "The Economic Organization of a P.O.W. Camp," in *Economica* (November 1945), on how cigarettes became the monetary commodity in a World War II prisoner-of-war camp.

of a dairyman, dry cleaner, or auto mechanic who is prepared to exchange his goods and services for history lessons. Equally awkward, imagine an auto worker in Detroit who gets paid in the form of Chevrolet Chevettes—or in tires, wheels, bodies, and other car parts—and then has to search out suitable trading partners (e.g., supermarkets, doctors, restaurants, etc.) willing to accept his Chevettes or car parts as payment for their goods and services. Or, how about the difficulty the Chevrolet Company would have in inducing workers to accept wages in the form of cars or car parts in the first place.

This brings us to a second major difficulty with barter trade—the problem of *divisibility* of product. This problem of divisibility arises from the peculiar technical-physical properties possessed by a "unit" of product. For example, the divisibility of a *unit* of water (the gallon) is considerably greater than that of a hammer. A unit of salt is very variable (divisible), ranging from an ounce to a pound; in any quantity salt will still retain its specific usefulness. But the *unit* of an anvil or hammer is not divisible: it cannot be divided into a fraction of itself without destroying its specific usefulness. Similarly, a unit of silver or gold (e.g., ounce) may be more easily divisible than a unit of diamonds (karat). Thus it would be easier to pay someone in salt or gold than to pay him in hammers or anvils.

Problem of Payment

The combination of these two serious drawbacks of direct exchange generated a third handicap: What would producers use as a means of paying off their hired hands? To be sure, they could make *payments in kind*— the farmer paying his hired hands in food, clothing and lodging, or the craftsman doing likewise for his apprentices. But what would the hired hand or apprentice, in turn, use to pay for the other things he might want to buy? Surely, if the hired help depended exclusively on the employer to provide all their consumption, this would restrict their mobility and the quantity and variety of goods they could consume. These restrictive working conditions would make employment unattractive to potential workers. In turn, employers would be limited in the quantities they could produce and market, and in the wealth they could invest in their farmlands or shops.

In other words, a barter economy based on a system of payments-in-kind would be feasible only if employers produced and marketed goods with the following properties: (a) employees are able to use these goods for their own *direct consumption*, and are therefore willing to accept them in lieu of any other form of payment; and (b) these goods are readily *exchangeable* or *marketable* for other goods which are available only in the market place and are valued by employees more than the payments they had received in kind.

Problems of Capital Accumulation

Payments-in-kind also must have made it difficult to *accumulate savings*. Presumably workers could not save very much, if at all, since all of their income (in kind) came in the form of goods and services for current consumption. The producer-employer might have been in a better position to save by putting some of his current output into inventories, but only if these goods were not perishable. If the variety of goods produced

and saved by the producer was too narrow to provide for all of his own needs, the producer himself would need to exchange some of his supplies for more desirable goods.

Finally, the producer would also have to *speculate* whether the *current* exchange ratio or market price commanded by his product was more or less favorable than the *future* expected price. If the current market price seemed more favorable than tomorrow's expected price, he would be induced to exchange his product now rather than wait for a lower price tomorrow. In any case, all such speculation about possible future changes in prices— which involves sophisticated guesswork about the future —is necessarily shrouded in *uncertainty*; no trader can know in advance exactly what price his goods will fetch at some future date. For instance, an egg producer may have enjoyed a market exchange ratio of one dozen eggs for one pound of sugar. Now, will this price remain the same tomorrow, or will market price change? That is, will it drop to a half pound of sugar or will it rise to two pounds of sugar?

Problems of Price Information

This brings us to still another difficulty under barter trade: How could the trader locate that one other trader who could offer him the *best price* (exchange ratio) for his goods? This involved, in essence, a search for *information*—information in the form of exchange rates or prices. Very likely, the greater the quantity and variety of goods exchanged in a given locale, that is, the more developed the market, the less readily known was the desired price. But even if all market rates of exchange were readily available, barter terms of trade would create an overwhelming *memory* problem for the trader: for every additional product that was exchangeable in the market place, the number of exchange ratios (prices) would multiply at an accelerated rate.

For example, imagine a grain producer is seeking to exchange grain for oil and wool. His search for the highest price for his grain—or, conversely, the lowest price for oil and wool—would involve a relatively simple comparison of only *three* ratios: grain for oil, grain for wool, and oil for wool. This last price ratio, apparently irrelevant (since it does not directly involve grain), must also enter into the trader's calculations if he is to be able to calculate the all-around best return for his grain. (For example, if the price of wool was relatively favorable compared to oil, he might be induced to buy more wool than he needs, in order to end up getting his oil at a lower price, than if he traded his grain directly for oil. Such three-corner exchanges are called *arbitrage*.)

Problems of Economic Calculation

But, now, imagine our farmer wants to exchange grain for six other commodities instead of only two. Now there are *seven* products that are potentially exchangeable with each other; however, the number of exchange ratios that would have to enter into his calculations would not be seven, but twenty-one! Again, if he wants to trade for *twelve* other commodities, then he would have to stuff his memory with *seventy-eight* prices! (The mathematical formula for determining the number of possible *pairs* of exchange ratios, given n number of items, is n(n-l)/2. In the last example, *n* would be 13.)

Truly, barter must have been an extremely cumbersome and inefficient—if not totally frustrating—undertaking. Lack of information on prices and quantities of specific

goods and on general conditions of demand and supply, plus ignorance of specific potential offers and bids by other traders, must have greatly limited the efficiency and profitability of exchange.

Thus, very fateful and directly related to the problem of price information was the virtual impossibility of conducting *economic calculation* in order to determine which transactions would maximize net gains or minimize net losses for the trader.

Direct vs. Indirect Exchange

At this point, it is useful to note an apparently trivial fact, but one that is nevertheless crucial to the analysis ahead. Obviously, barter exchange was by nature a *direct* or *one-step* transaction. The goods the trader desired for his own ultimate use were acquired directly and simultaneously with the exchange of his own goods; that is, it took but a single transaction to acquire the ultimately desired goods. For example, our grain trader, seeking both oil and wool, traded directly by exchanging (a) grain for oil and (b) grain for wool. Consider now an astounding turn of events: imagine that our grain trader decides not to wait until he finds his "coincident" oil trader and wool trader but seeks to make an *interim exchange* of his grain for another valuable commodity, say, salt.

Now, why would our grain farmer first trade for salt when what he really wants is oil and wool? Offhand, this roundabout or *indirect* approach seems to be an inefficient way of acquiring the ultimately desired oil and wool. Actually, this indirect method of exchange—which involved a *two-step* exchange (first, grain for salt, then salt for oil and wool)—represented a momentous stage in man's invention of *money*.

Money Enables Indirect Exchange

Reason suggests that our farmer saw fit to exchange *indirectly* for his oil and wool, by first acquiring and holding salt, because he was confident that salt would be *acceptable* as a means of payment to oil and wool producers just as it would be to producers of wood, leather, sugar, candles, and a host of other commodities, any of which he might have wanted to acquire. In other words, salt had become a *generally acceptable* commodity which people acquired not only for its usefulness as a consumers' good but also for its usefulness as a medium of exchange.

Thus it is reasonable to conclude that so long as traders were willing to accept salt as an *intermediary* product—not to be consumed but to be passed along to other traders in exchange for the goods they *ultimately* desired—the demand for salt acquired an additional dimension: a demand for it as an intermediary *medium of exchange* (that is, money) on top of the traditional demand for salt as a consumers' good.

Historically, as indicated above, a wide assortment of commodities have taken turns serving as the most exchangeable (marketable) commodity and, therefore, as the general MOE (money). Out of this motley collection it was gold and silver that eventually emerged as the most desirable money commodities.

The Qualities of Money

What specific qualities enabled these very marketable commodities to be singled out for the extra role of general MOE? Above all, these commodities were relatively *scarce goods* in great demand—either for direct consumption (food, clothing, adornment, ornament, religious purposes), or as tools or other means of production. Beyond their scarcity value, however, the money commodities possessed other special qualities that enhanced their marketability. For one thing, they were generally more *durable* than other commodities. Thus they could be held in stock and accumulated in the form of "cash balances," so to speak, until their owner preferred to exchange them—either to acquire other goods, say, or to profit from a more favorable exchange rate in the market.

These commodities were also physically divisible into fractional units without losing their essential value. Salt, for instance, could be exchanged in ounces or pounds and still retain its physical usefulness. Divisibility provided these goods the flexibility required to conduct exchange transactions involving different quantities and different exchange ratios.

Furthermore, the money commodities were usually very *transportable*, even over long distances. This made them convenient, not only for transactions small and large, but also near and far.

Finally, the money commodity was *not easily counterfeited*. On the one hand, its quantity would be difficult to duplicate or replace except by increased production. On the other hand, it possessed *cognizability*; traders and merchants could readily determine whether it was the real thing or debased (diluted with baser materials, as in the case of metallic money) and whether it possessed the stated weight (as in the case of metal bars).

Metallic Money Dominant

Of all the money commodities, it was the metals which were best endowed with monetary characteristics and therefore emerged as the dominant money commodity—first in the form of useful objects or simple bars, then later as coins. The metals most often used were iron, copper, bronze, gold, and silver—starting somewhere around 1000 B.C. Metallic *coins* made from a natural alloy of gold and silver called Electrum can be traced back to Lydia in Asia Minor, in 700 B.C.

Metal coins were the first moneys to have their exchange value marked on their face. Hitherto, metallic money bore no mark or stamp for its exchange value, retaining its currency only by virtue of its shape or weight. Thus, recipients of money had to judge its value by sight or by weight, or by measuring its purity in an *assaying* process.

The Merchant as Coiner

Those who customarily handled a great deal of money, such as the merchants, were usually involved in a lot of weighing and assaying. Thus it was the *merchant* who created the first metal coins. By stamping his identifying mark as well as the face value, he sought to spare himself the chore of reassaying coins every time they passed through his hands. Wherever the merchant was trusted by others, his coins became acceptable at face value. Thus, historically, it was the merchant who invented and developed coinage—primarily to serve his own affairs and convenience, but incidentally for the benefit of the rest of the community.

This fact is of greatest moment. It means that, contrary to hearsay or tradition, it was not *government* that gave birth to money, but the *market place*, in response to the demand for a general MOE. As one writer has put it:

> Money does not depend on government; ...[it] does not need legal sanction to perform its function...it is a natural outgrowth of the needs of the community. Nor did the government invent coinage; it was the child of private enterprise. ... In money's younger days there was never any question of legal status. What was accepted as money depended entirely upon the desire of the community. Money was simply a commodity with certain characteristics that enhanced its general acceptability. Its value was determined in precisely the same way as that of any other commodity.[7]

Governments Take Over

Nevertheless, beginning already with the cities and temples of ancient Greece, a variety of governments and states have since managed to expropriate and monopolize the coinage of money. Although private coinage was, as a consequence, suppressed, it nevertheless managed to re-emerge periodically well into the 19th Century (e.g., during the California gold rush). By and large, however, government coinage during the past two thousand years has been characterized as a "dismal recital of broken faith."[8]

For instance, governments very early accused private minters of coins of tending to debase and counterfeit their own coins, and used this claim as an excuse to nationalize the coinage. Thus, suppression of coinage by the market was ostensibly for the purpose of providing a more "uniform" and "honest" system. Yet, once governments monopolized the coinage, they themselves, despite all their well-publicized pretensions, resorted to the very debasement which they had condemned in the market—and on a massive scale to boot, since money was now totally in the hands of government.

Government Debasement of Money

By a variety of well-known devices, governments tended to reduce the metallic content of coins below their nominal (face) value, and appropriated for themselves the value of the metal thus purloined. As Haines puts it, government debasement of coins became "the normal state of affairs" mainly because governments sought to spend more than their tax revenues. Compared to the nuisance of levying new taxes, it seemed preferable to reduce the silver content of coins, substitute cheaper materials, and thereby produce more coins from a given amount of silver. On which Haines properly comments: "How easy, how common, and what a fraud!"

This is not the place to belabor this perennial tendency of government to debase the money supply, including modern government fiat paper money and commercial bank *checkbook* money.[9] Incidentally, the ease with which governments can "debase" modern

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[7] Haines, *Money, Prices and Policy*, pp. 32, 34.

[8] Haines, *Money, Prices and Policy*, p. 12.

[9] Groseclose, in *op. cit.*, devotes his entire book to this central theme.

paper money and demand (checking) deposits is explainable by the fact that, on the one hand, debasement is technically much easier to accomplish than in the case of coins, while on the other hand it is not so visible to the public eye. Nevertheless, the *effect* of debasement in modern money is the same as in coins: *depreciation* of money's purchasing power and rising price levels.

Market Production of Money

Thus far, we have merely outlined the *reason* for the emergence of money on the free market as a replacement for barter trade. To explain why commodity-money was not only desirable but *practical*, let us examine its workings in greater detail. History reveals that the money commodity originated and was exchanged in the same way as any useful, scarce commodity in the market. In the first instance, the money commodity originated and was offered to the market much like any other commodity useful for consumption (e.g., salt) or as a means of production (e.g., fishhooks). In the case of gold or silver, the original producer was the miner who invested his resources in locating, producing and transporting his valuable commodity to market. There it became available for non-monetary as well as monetary uses.

Whether or not it was worthwhile for anyone to undertake the production of a money commodity (instead of a non-money commodity) was based primarily on whether (a) the production of a money commodity, or (b) the production of other (non-money) commodities would make it easier for the producer to realize a given level of wealth or standard of living.

Once the *original* producer of the money commodity traded away some of his supply in exchange for other goods, it became possible for merchants or others to acquire the commodity-money: they acquired it simply by "purchasing" it—by *exchanging* their own commodities or services for the gold or other money commodity. They, in turn, could "sell" the newly acquired money for other goods or services that they had originally desired and for whose acquisition money had served as intermediary.

Thus, *production* of useful goods and services was the primary method of originating and acquiring money. The *non-productive* methods of acquiring money were through (a) borrowing, gift, and inheritance, or (b) force, theft, debasement, and counterfeiting.

A Speculation

At this point it is noteworthy to speculate: only the free market—not the designs or plans of kings or other rulers—could have generated and crystallized the commodity-money system. As we have already noted, the characteristic qualities required by a commodity to be crowned as "money" were scarcity, durability, divisibility, portability, and cognizability. Furthermore, commodities varied greatly in their possession of these requisites and, therefore, varied greatly in their marketability and suitability for serving as MOE.

Clearly then, a more or less evolutionary process of trial and error must have transpired until such time as one or a few commodities emerged as the *most marketable*,

thereby assuming the role of *general* MOE. Thus, it was the accumulated wisdom gained by traders from long experience in the market place, and not the decision of rulers or governing bodies, that spawned money proper.

Money as Cash Balances

Associated with the autonomous emergence of the money-commodity as general MOE was the use of this money as *cash balances*. First of all, acceptance of a general MOE implied that while, on the one hand, all other commodities retained their usefulness "just being themselves," so to speak, the monetary commodity, on the other hand, not only retained it original usefulness but was now also being demanded for its *monetary* use as a medium of exchange. That is, those commodities which became useful as money (in addition to their non-monetary usefulness) enjoyed an extra demand relative to the demand for other commodities. Money thus became that unique commodity which characteristically was no longer desired mainly *for itself*—as a directly useful consumers' or producers' good. Rather, it was desired primarily as a general MOE—as a means of acquiring those *other* goods which were directly useful for consumption or production. That is, money was desired primarily for its *exchangeabi1ity*, *marketability*, or *convertibility* into other goods.

But this was only one aspect of the cash-balance role of money—the *marketability* of the money commodity which made people willing to accept it as a general *means of payment* in the first place. That is, people began to accept money because they were confident it could be passed along to others when they wanted to exchange it for other goods. Now we must explain why people were also willing to *hold* this money for varying lengths of time as a "cash balance." Clearly, until people actually *spend* their money, they must willy-nilly *hold* it in the form of a *cash balance*—as a "temporary abode of purchasing power," so to speak. This is as true for commodity-money, such as silver and gold, as it is for modern money.

Money as Purchasing Power

Why are people willing to *hold* money as a cash balance? The answer seems to be obvious: because they prefer not to spend all their money as soon as they get it. They may wish to postpone some expenditures to some more opportune time. But this is not the whole of it: the money commodity must also possess *purchasing power* (exchange value) in order to induce people to accept it in the first place. Possession of this purchasing power is the *sine qua non* (necessary condition) for the use of money—not only as MOE, but also as cash balances.

Indeed, it is money's *purchasing power* that makes money so unique among all the world's goods: whereas all other goods are subjectively valued mainly for their physical usefulness in consumption or production—and not for their market (exchange) value— the money commodity, in its role as "money," becomes valued primarily for its *exchange value* (purchasing power). Without this command of general purchasing power in the market, money would not appeal to people as an asset worthy of holding as a cash balance, regardless of its physical utility for consumption or production.

Thus, it is precisely the exchange value or *purchasing power* of money which induces people to hold it as a cash balance in waiting, so to speak, until such time as they prefer to spend it. The holding of money as cash balances fulfills what is known as the *store of value* function of money.

The Question of Stable Money Value

Can money really serve as a true store of exchange value, maintaining constant or "stable" purchasing power in terms of other commodities? Indeed, can any commodity (even gold) serve as a fixed store of value? These questions cannot be fully discussed here. It suffices to note that the *purchasing power* function of money is derived solely from (made possible by) the primary function of money as the general MOE; that is, only because money serves as the general MOE can it also serve as a store of value or wealth.

It should also be noted that money alone is not qualified to serve as a convenient store of wealth. Numerous commodities other than gold and silver have also served as stores of value, the most familiar being jewelry, diamonds, rare paintings and antiques. Indeed, it would be fair to say that such non-monetary commodities often fared better as a store of value than government-issued moneys subject to chronic debasement. Why governments systematically alloyed and debased their moneys is the subject of political and economic history and, hence, beyond the scope of this book. (See the references in footnote 5.)

Vital Role of Cash Balances

To go one step further, it should be stressed that the use of money as a general MOE is inconceivable without its ability to serve also as a *cash balance*. At any given moment, the total money supply is necessarily being *held* by people, in varying amounts, in the form of cash balances. Even when some people are *spending* their cash balances, this money is merely being *transferred* from A's cash balance to B's. For example, after the buyer spends his money, it then becomes the seller's turn to hold this money. Indeed, the act of "spending" may be defined as a "transfer of cash balances" from A to B in exchange for other goods. (Similarly, once the saver lends his money, it becomes the debtor's turn to hold it.) Thus it is that at any given moment the total money supply is necessarily reposing in someone's cash balances.

Were this not the case, the monetary system would simply collapse. Imagine, if you will, the extreme case in which everyone spends his money *as soon as* he gets it. Such an immediate and perpetual flow of spending would result in people *never holding* any cash balances. This getting rid of money by spending it would, in turn, cause prices to skyrocket and reduce money's purchasing power. This rapid *depreciation* of money would, in turn, induce sellers to reject money as a means of payment; instead, sellers would ask for payment in *non-monetary* goods and services—which means a *reversion to barter*!

The conclusion is inescapable: in order to maintain the monetary system of indirect exchange, it is essential that people *hold* money in the form of cash balances rather than spend it immediately. Historically, extreme cases of instantaneous spending of money have occurred only in exceptional periods of *hyperinflation*. More usually,

however, people hold their money in cash hoards for various lengths of time. This is why, at any given moment, the entire money supply can be found dispersed throughout the population in the form of cash balances.

Cash Balances as Savings

Also noteworthy is the fact that the holding of cash balances can be viewed as an act of *saving*. The next chapter will explore the crucial role that saving plays in economic growth; here we merely note that savings, in the form of cash balances, are more *liquid* (cashable) than other financial assets. That is, whereas cash balances already consist of money and therefore do not need to be converted ("cashed") into money, the other types of savings must first be converted into money before they can be used for spending.

Furthermore, whereas the dollar value of a cash balance is always equivalent to the nominal or face value of the money comprising it—for example, one-hundred-dollar bills will always have a market value of $100—the same cannot be said of, say, a share of stock or a bond. In the latter case, the market value of the asset is subject to fluctuation—due to changes in demand and supply conditions in the financial markets—and will, therefore, tend to diverge from the face value stamped on the asset. Thus, susceptibility of face value to a drop in market value makes non-money types of paper assets less "liquid" than money.

In this connection we should note that a curious debate has emerged among modern economists on the basic question: "What, after all, is modern money"? How should "money" be defined? What forms of money should it include? The debate is curious because in the past there was no ambiguity of definition: money existed in its "full-bodied" commodity form, and its purchasing power was therefore intimately tied to its market value as a commodity. Thus, in their original commodity forms, cash balances obviously consisted of physical quantities of the given money commodity—say, ounces of gold and silver. In the modern world, too, cash balances consist of the money that people happen to use. Thus, today, the chief physical *forms* of cash balances are (a) government-issued currency (i.e., coins and paper bills) and (b) bank-issued demand deposits, or check money, which together comprise the "money supply."

In modern times, however, most governments have severed all connection between money and its commodity heritage. In place of commodity-money, they have substituted *token* forms of money in which the face (nominal) value of the money far exceeds the exchange value of its commodity substance. Compare, for instance, the face value of a ten-dollar paper bill with the anemic value of its paper substance, or compare the 25¢ face value of a quarter with the fractional value of its "sandwich" contents.

How this drastic transformation of money took place—especially in the last few centuries—has been analyzed by the works in reference 5. Here it is enough to note that, in the radical change from commodity-money to (a) government-sponsored paper or token money and (b) government-chartered commercial-banking money, money has become "abstract." In this process of becoming more and more abstract we can locate the root of the contemporary difficulty of defining the nature of modern money.

Money As Unit of Account

This brings us to another derivative use of money, also derived from its primary role as the general MOE; this is the *unit of account* function. In this role, a *unit* of money, such as a "dollar," is used as the element for expressing prices. That is, prices of goods and services can be quoted in terms of the U.S. dollar, British pound, French franc, Italian lira, Japanese yen, or German mark. In this respect, too, money went through radical transformation which makes it difficult for a modern person, untutored in the history of money, to know the origin of this aspect of money.

For example, under commodity-money, when a particular commodity emerged as the general MOE, prices of all other commodities would be expressed or quoted in terms of the physical *units* of that commodity, mainly in units of *weight*. In the case of silver or gold money, for example, the unit of weight was the ounce, grain, or gram. Weight units of a given metallic money were convertible into each other at a *fixed* ratio—for example, an ounce was equivalent to a fixed number of grams—enabling the "size" of any particular money unit to vary with the size of the transaction.

This historically-based *weight* nature of the money unit is probably one of the most important, yet little appreciated, facts about money. Monetary units such as the British pound, the French livre, the German mark, the Italian lira, the shekel, the talent—even the "dollar"—all originated as names for definite units of *weight* of metallic money, usually silver, but often linked (or convertible) to unit weights of gold, varying in exchange ratio according to the market values of the metals. As Haines has put it: "So closely related is the development of money to the development of weight standards that a number of currencies are named after their original weight."[10]

Modern Money Is Abstract

In contrast, today's monetary unit—for example, the dollar—has become essentially *abstract*, consisting merely of a piece of paper on which is printed a face value that has no connection with the market value of the paper, and no longer represents a weight of gold or silver. Nevertheless, this should not obscure the fact that the dollar as well as other major currencies were once related to monetary standards based on weight units of gold and silver.

Furthermore, as important as the unit-of-account function is for the quotation of prices, it too (like the store-of-value or cash-balance function) is essentially *derivative*—that is, derived from the primary function of money as the general MOE. It is important to stress this point, as will be explained in the following paragraphs. By way of review and emphasis then, it should be noted that traditional economic analysis of the functions of money lists the three functions described above: (1) medium of exchange, (2) store of value, and (3) unit of account. Not always, however, have economists agreed in this analysis. The present work regards the medium-of-exchange function as being money's *primary* function. However, the other two *derivative* functions are necessarily associated with the primary MOE function—the use of money as a store of value (cash balances) and as a unit of account. As important as the latter two must be, they are logically secondary to the MOE function, since they both presuppose the existence of money as the general MOE.

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[10] Haines, *op. cit.*, p. 31.

Primacy of MOE Role of Money

I stress the logical *priority of the MOE* function because of the modern tendency to slight it or deny it. Indeed, some writers go so far as to place the unit-of-account function above that of the MOE function! The implication is that it matters not what money consists of so long as government, with its monopoly privilege, prescribes a given unit of account as the only one sanctioned by the state.

The "dollar" is a good example of how a money-unit was gradually transformed over the centuries from a weight-unit of silver to an abstract unit—a dollar sign printed on a piece of paper. Briefly, the word "dollar" is traceable to the 16th century silver coin issued privately by Count Schlick of Joachimsthal (Joachim's Valley) in Bohemia. This coin deservedly gained renown for its fineness of content and uniformity of stamp; it was at first called a "Joachim thaler," then later simply "thaler," from which descended the word "dollar."

Today, the dollar is not convertible into anything else but another paper dollar—except, of course, if one spends it and exchanges it for other goods. Thus, one can no longer exchange a dollar for a given weight-unit of silver; in this sense the unit of money has become "abstract": It has become purely symbolic. The dollar, as a money unit, retains its acceptability and usefulness not because it represents the weight of a valuable commodity, but because it is the only game in town, so to speak: it is the only money permitted by law, hence called *legal tender*—and, being created by government decree, it is called *fiat* money. Today only government has the power to create such abstract, zero-cost dollar units and to outlaw the use of competitive forms o£ money, such as gold.

Conclusion

History demonstrates amply that a monetary system based on gold or silver would not require the legal sanction of government in order to perform its essential functions. True, it is widely believed that government alone has the responsibility and right to control the monetary system, and that the market cannot be trusted in this regard. Nevertheless, in the spontaneous evolution of commodity-money, the question of government monopoly and legal sanction of money was totally irrelevant. The substance and form of money were determined spontaneously in the market place: money emerged from those commodities that possessed the best combination of desirable characteristics and gave it the greatest acceptability and exchangeability. Furthermore, the exchange value of the money commodity was determined the same way as any other commodity, according to the law of supply and demand. The money commodity was unique only in that the demand for it contained an extra component: on top of the customary demand for the commodity for production and consumption, there was the extra demand for it as a general MOE.

Furthermore, monetary history discloses that the market not only invented coinage but also created appropriate forms of *paper money*—for example, warehouse receipts and bank notes—as a means of making the use of commodity-money more convenient. Just as coins were more convenient than metallic bars, so was paper more convenient than coins. But there was this crucial difference: Whereas metal bullion and coins were money proper, the new paper money was not so; rather, it was essentially a

money substitute used for transferring ownership claims to money from buyer to seller and from debtor to creditor.[11]

Thus, in face of these historical perspectives and the modern government monopoly of the money supply— a monopoly that restricts the market's role in determining alternative forms of money—it seems reasonable to conclude as follows: modern forms of money tend to comprise a species of pseudo-money rather than money proper, such as silver or gold.

[11] Rothbard, *What Has Government Done to Our Money?*, is exceptional for his analysis of free-market money compared with government-controlled money.