The Meanings of Money

A View From Economics

DANIEL RUSH FINN
Saint John's University

If any group should have something worthwhile to say about the theme for this symposium, "the meanings of money," it ought to be economists. In fact, economics as a discipline[1] comes very close to making a truly interesting and comprehensive statement about the theme, a statement that most economists believe to be true but which the canons of evidence of the discipline will not support. Before getting into that, however, we should begin by noting that the present wording of the theme is a mistake: Money is not really the topic at all.

Because this symposium intends to relate such topics as marriage, family, financial planning, and crime to a common theme, the intention, it would seem, is to address not the meaning of money (at least not as economists define it) but the meaning of wealth or perhaps the meaning of material prosperity. For economists, money is a particular commodity that comes to be used as a dependable medium of exchange. Whether shells, gold bars, or paper printed with green ink, money is something anyone is willing to receive in exchange for a commodity because they know they can turn around and trade it for something else they really want. From a literal economic point of view, the question of the meaning of money would have to investigate issues like the difference between a currency backed by a commodity such as gold and a fiduciary currency such as our own, backed only by the "good faith" of the federal government and the credulity of all of us citizens.

So, if money is not our true theme, let us for now presume that "wealth" is. The meaning of wealth, however, for economists is no simple matter either, as a bit of history will indicate.

Among the many reasons why the Scottish philosopher Adam Smith is recognized as the father of modern economics is the clarity of his insistence

AMERICAN BEHAVIORAL SCIENTIST, Vol 35 No. 6, July 1992 658-668

that wealth and money are quite different things. At one level, this was well known from Aristotle onward. Still, the wealthy always *had money* and, more important, wealthy nations always seemed to amass gold and silver, the money of the time. This seemed so obviously true in the 17th century that the dominant school of economics, known as "mercantilism," taught that the way to national wealth lay down the road of a positive balance of payments. As one of the great mercantilists, Thomas Mun (1664/1949), put it, "The ordinary means therefore to encrease our wealth and treasure is by *Forraign Trade*, wherein wee must ever observe this rule; to sell more to strangers yearly than wee consume of theirs in value" (p. 5, emphasis in original). That is, if a nation exported more goods than it imported it would then be receiving more precious metals ("specie," in the language of the day) than it was paying out and could use this money to further invest and grow. Mercantilists knew that specie was not everything, but their continual emphasis on the flow of precious metals across national boundaries left the impression that it was.

In opposition to all of this, Adam Smith argued that wealth consisted in what a nation produced and had very little to do with whether specie flowed into or out of the country. His best known book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, influenced all subsequent economic writings when it defined the nation's wealth as the sum total of the production from the land, labor and capital of the country. As Smith (1776/1937) saw it, confusing wealth with money was a widespread error: "That wealth consists in money, or in gold and silver, is a popular notion which naturally arises from the double function of money, as the instrument of commerce, and as the measure of value" (p. 398). The misunderstanding arose because, from the individual's point of view, "the great affair, we always find, is to get money" (p. 398). Smith's fundamental principle was that wealth consisted in the useful things the nation produces, whether that is machinery in an industrial age or livestock among the nomadic Tartars: "Wealth, therefore, according to the Tartars, consisted in cattle, as according to the Spaniards it consisted in gold and silver. Of the two, the Tartar notion, perhaps, was the nearest to the truth" (p. 399).

For the next century and a half, mainstream economists pretty well agreed that their discipline specialized in the study of wealth. Wealth can be held in the form of money (dollars in your pocket or in your checking account in the bank) or in other forms (your house, corporate stock, a Picasso on your wall).[2] Money is simply one of the possible forms of wealth, though the one most readily exchangeable for other goods. Now and then (say, when you lose your wallet), not having money will alter your behavior. Most of the time, however, the amount of wealth you own is far more influential in your choices than is the amount of money you have. As a result, economists agree that, from the point of view of the nation as well as the individual, it is wealth, not money, that we want.

Still, there was something missing here, namely, the "meaning" of wealth for people. The great classical economists such as Smith could say what a nation ought to do to increase wealth, but they lacked any clear model of or theory about how individual persons understood wealth. They simply presumed that people wanted the goods that the nation produced and that in their own self-interest they acted in ways to get them.

The difficulty, of course, was that everyone knew that people seek not only wealth but many other goals in life, goals that at times conflict with the acquisition of wealth—goals such as love, or service, or eternal salvation. The British philosopher/economist John Stuart Mill (1874/1968) proposed what was the dominant solution of his day: Economics was the science that dealt with only one of many human motives: the desire to maximize wealth. According to Mill, it is the role of economists to analyze the results of the wealth-maximizing intentions of people as if that were everyone's only motive; other human motives are left for the examination by other social sciences (p. 138). Focusing on one cause, Mill argued, is how economics must operate, for unlike the simpler physical sciences, inductions from experience are bound to fail due to the greater complexity of the social world.

This approach simplifies economics but transfers the intricacies of human life out of the discipline and into the realm of public policy. Policy, for Mill, is an art, one that must use the various sciences in proportion to their relevance to any particular problem and must devise policies that will bring about the policymakers' intended effects (see Mill, 1875). The price that economists must pay for the simplicity of focusing only on the motive of maximization is disciplinary humility. Economists, in their role as economists, cannot say "what ought to happen" in any concrete situation precisely because they start with the admittedly unrealistic presumption that people are attempting solely to maximize their wealth.

This official deference of economists to the values of policymakers is still the view of mainstream economics. However, the second principal element of Mill's position has since been eliminated altogether. Because Mill's economist takes an explicitly unrealistic view of the world (namely, that people intend only to maximize their wealth), Mill's discipline of economics also has to admit that it cannot, on its own, dependably predict the outcome of policies in the real world. Rather, its predictions will be true only in situations where people really do act on wealth maximization as their sole or at least their dominant motive. The policymaker must supply not only the values to be accomplished but the knowledge to judge when the predictions of economists should be counterbalanced by predictions of other social scientists (who focus on other motivations).

Karl Marx was scathingly critical of Mill and the rest of classical political economy for these unrealistic assumptions and for the ulterior interests of the capitalist class that it served. By presuming that *everyone* was trying to maximize wealth, Marx argued, economists hid the fact that "Mr. Moneybags," Marx's target capitalist, was actually doing it at the expense of vast numbers of working people and their families.

Later orthodox economists shared little of Marx's social perspective but still resisted the unrealistic wealth-maximization assumption with which Mill began. The transition in economics came in two stages, each of which will be to some degree familiar to behavioral social scientists in any discipline.

The first stage was the development of the marginal utility theory, proposed in England in 1871 by William Stanley Jevons.[3] When people consume goods, they receive some sort of increase in their welfare or satisfaction or happiness or, in the preferred terminology, "utility." The more of a good a person consumes, the greater the total utility received from consumption. However, as more and more of a good is consumed during any time period, there is a drop in the additional utility provided by consuming additional units. Putting it concretely, if I have regularly been eating two dinners per month at my favorite restaurant and then increase that to three per month, the third dinner during a month may bring me extra enjoyment but probably not as much as the second brought. That is, the utility of the last (or "marginal") dinner consumed during each month falls as the number of such dinners consumed in the time period increases. In shorthand, this is "diminishing marginal utility."

If we then take into consideration the amount of money that people have to spend on consumption, we can move from talking about the amount of utility gained per dinner (or per unit of bread or gasoline) consumed each month to the amount of utility gained per dollar spent on dinners (or on bread, gas, or any other possible purchase) in any time period. Employing differential calculus, Jevons developed a mathematical model based on the presumption that people spend their money to buy just the appropriate amount of each good per month that maximizes the total utility they receive from all goods as a group. As Jevons (1931) put it, "the object of Economy is to maximize happiness by producing pleasure, as it were, at the lowest cost of pain" (p. 27). Here, then, we have the most fundamental answer that modern economists give to the question of the meaning of money or wealth: Whatever amount of money you have to spend, you will spend it to maximize your utility or satisfaction. Of course, the more wealth you have, the more satisfaction you will achieve, but the key presumption was and still is that people want wealth because of the welfare (or satisfaction or utility) provided by what wealth can buy.

Although eventually economists came to take the utility theory as a comprehensive view of all human decision making, Jevons himself clearly asserted that it applied only to *most* of one's decisions, not all of them: "A higher calculus of moral right and wrong would be needed to show how he may best employ that wealth for the good of others as well as himself. But when the higher calculus gives no prohibition, we need the lower calculus to gain us the utmost good in the matters of moral indifference" (p. 32). It was a relatively small (though fateful) step for later economists to include moral convictions *within* the utility analysis. Just as individual differences of taste determine how much utility any one person gets from a hamburger or a Chevrolet, so, too, eventually similar individual differences were taken to explain how much utility people gain from being honest or from contributing to the United Way.

This phase of the development of modern mainstream economic theory culminated in a general mathematical model for the activities of both producers and consumers. Where Jevons's model began with a presumed income for each consumer, the development of marginal productivity theory included in the model the *earning* of income by individuals through their labor or the productive use of assets they own. The result was a system of equations describing a "general equilibrium," within which both people's incomes and the prices of goods and services are determined by the interaction of millions of individuals' maximizing decisions as producers and consumers. Market outcomes could be traced back (at least in theory) to the values of individuals, leaving all individuals to decide for themselves on the meaning of money, wealth, kindness, or any other possible human value. Although the meaning of human welfare was now individualized, the importance of wealth in achieving nearly all of those goals led to an increased conviction by mainstream economists that the free market would produce not only greater wealth but greater human welfare. Rendering the whole interactive system mathematically tractable greatly increased the self-confidence of the discipline.

There were, however, many critics of this mainstream paradigm. Among the best known of these was Thorstein Veblen, founder of that American school of economics known as "institutionalism." Orthodox economics tended to see society's welfare as the sum of the welfare of all individuals, and as a result, an increasing national wealth meant increasing national well-being. Veblen, however, was sharply critical both of economic theory and of contemporary culture, particularly that of the wealthy. In his well-known *Theory of the Leisure Class*, he argued that "conspicuous consumption," "ostentatious display," and "pecuniary emulation" so typified modern consumption patterns that only the naive would correlate increased wealth with any true increase in human welfare. He attacked orthodox economic theory as naively abstract and ahistorical, completely out of touch with "evolutionary science," meaning both that the world itself is changing and that any discipline deserving to be called a science will have to change along with it.

Criticism from Veblen and a host of others, as well as developments in the logical positivist philosophy of science, pushed mainstream economics into a second critical phase: deepening the discipline's commitment to empiricism.

The issues in the philosophy of social science here are involved and the diversity of perspectives even among mainstream economists is considerable. As a result, some necessary simplifications must suffice for our current purposes. Fundamentally, the mainstream of the discipline came to the conclusion early in the 20th century that economics should become a science in the mold of the very successful physical sciences. Two elements were crucial. First, scientific statements of economics had to be phrased in empirically testable hypotheses about the world. Second, such statements should be tested, by comparing their predictions with actual outcomes, and be rejected if they failed the test. There is much debate about how such testing should occur and much criticism from both mainstream and heterodox economists that the mainstream goal of empirical testing has been largely ignored in practice out of an unscientific deference to preconceived theories. The important point here, however, is that the discipline felt the need to become more empiricist.

In principle, this meant that the economist could not support scientifically any view of the human psyche or its mode of decision making. Officially, the utility theory and its presumptions that each person has a set of goals, including the attainment of wealth, had no scientific basis within economics itself. Unofficially, however, most mainstream economists continued to believe in this maximizing model of human decision making. One might ask, however, if half a century ago the discipline of economics rejected on scientific principle its primary model of utility maximization, why is it that a typical economist today is perhaps best known as a firm believer in "economic man," the utility maximizer? There are three dominant reasons for this.

The first is that the shift in mainstream theory required by the move to empiricism really affected the overall paradigm very little. In place of the untestable theory that people have utility functions, British economist John Hicks proposed the revealed preference theory, based on a hypothetical experiment where any consumer would be asked to choose between any two goods. This model simply presumes that the consumer will either express a preference for one good over the other or will express indifference between the two, meaning that each is equally attractive to that particular consumer. As long as the consumer can make such a judgment between any two conceivable goods (or any two bundles of various goods) and as long as the pattern of choices fulfills a few basic conditions such as transitivity (if A is preferred to B and B preferred to C, then A is preferred to C), the revealed preference theory can replace the scientifically objectionable utility theory in mainstream economics. This de facto ordering of preferences provides the basis for the economist's presumption that people choose rationally among goods based on their relative prices. This, then, secures once again the all-important connection between the general equilibrium theory (about the determination of wages and prices in the market) and the choices of consumers (even though there is only an implicit and scientifically unspeakable connection to the meaning of these choices and values of consumers that lay behind them).

The second reason why utility theory has survived is the presumption, advocated by Milton Friedman (1953), that although utility theory has no scientific basis within economics, it can be retained heuristically as an aid in generating testable hypotheses.[4] For example, the presumption that even criminals are rational maximizers leads the economist to propose the hypothesis that the number of crimes will decrease if the price of criminal activity rises, namely, if society increases either the *cost* of being caught (harsher sentences) or the *likelihood of being apprehended* (more police investigators).[5] More relevant to our theme is Friedman's well-respected "permanent income hypothesis": that people make consumption decisions not on the basis of their current income or wealth but on the basis of the pattern of income and wealth they expect throughout the rest of their lives. Each individual is assumed to be maximizing utility based on a life time rather than on a single year. Thus the same individual would in some years be predicted to spend more than he or she earns, based on the expectation that in other years more will be earned than spent. It is, then, no surprise that younger people tend to go into debt (for education, purchase of house, and so on) and retired persons live on money they saved earlier in life. People in their prime pay off debts incurred earlier and save for retirement. Thus the wealth that an individual "has" to spend at any one time in life may be more dependent on an estimate of lifetime wealth than on current assets.[6]

Stepping back, we can see that this approach leaves it scientifically respectable to talk about the utility theory while acknowledging that it is "unrealistic," a euphemism for "scientifically indemonstrable." The economist tests, instead, the permanent income hypothesis itself. This solution of Friedman's, of course, leaves totally unexplained (and unsupported) the fact that most economists really do believe in the utility theory as a model of human choice.

The third explanation for the survival of the utility theory is one provided by the critics of the mainstream. The more benign form comes from within the mainstream and argues that neoclassical economists have been overly enamored of their conceptual models and have not (yet) done sufficient falsification tests.[7] Harsher criticism comes from the outside and sees the neoclassical paradigm of the past half century as largely a hoax. Not only do economists "really believe" the maximizing assumptions about individuals in their decision making, they steadfastly refuse to give up the paradigm even though it is scientifically untenable.

For the question of the meaning of wealth in economics, however, we can sidestep most of these controversies. Most practicing economists employ the maximizing model of individual decision making because they believe it is true, at least within limits, even if it is unsupportable within an empiricist philosophy of social science. This says as much about the philosophical innocence of economists as it does about the inadequacy of the dominant philosophy of social science within academic economics today. Oversimplifying, we might note both a strong and a weak version of this conviction about the truth of such self-interested and maximizing behavior, with the latter providing the most compelling view of the meaning of wealth within economics.

The strong view of maximizing self-interest argues that people will in every situation choose that course of action whose estimated impact on their personal wealth is the most positive. This is a view that many outsiders would likely attribute to economists, but, frankly, very few economists hold it. However, if we substitute the notion of the individual's self-defined welfare for that of the individual's wealth, many economists will endorse it. This approach led economist Lester Telser (1980) to propose a theory of "self-enforcing" agreements. Here it is presumed that unless a contract is self-enforcing neither side will adhere to it. Telser argued that when a contract is drawn up, each side asks not simply that the other side assert that it will hold up its end of the bargain but each side integrates into the contract penalties for breach of contract, which make it likely that the other side will freely choose to comply. In Telser's words, "A person is reliable if and only if it is more advantageous to him than being unreliable" (p. 28). Of course, many people uphold their agreements out of principle, even sometimes at a cost of great loss to themselves.[8] The strong view of maximizing self-interest that focuses on wealth cannot explain this, and even that form that widens wealth to the individual personal definition of welfare can only explain this by attributing large "psychic income" to living up to principles. People do give anonymously to charities, and waitresses at restaurants on the interstate do receive tips from persons they will never see again. For all these reasons and others, this strong version of the maximizing model is not very attractive outside of economics.

A weak version of the maximizing self-interest model, however, has more to recommend it. The weak version describes not the behavior of any individual but aggregate behavior of large groups. It recognizes that among the diverse moral positions held by people in society, very few seek only wealth, and many do not even have wealth at the top of their list of life goals. Nonetheless, each person is currently allocating his or her time, energy, and other assets in a variety of ways given their values and the opportunities they face. The weak form of the maximizing assumption asserts that if one of those opportunity sets changes (say, due to an increase in the price of gasoline or in income tax rates), in the aggregate, people's behavior will change so as to improve their wealth position compared to what it would be if they made no adjustments in response to the new situation. In addition, this weak version predicts that this behavior will occur at the individual level in the vast majority of cases. A thief and a saint may have different attitudes about protecting the environment, but a carbon tax that raises the price of gasoline will cause each of them to reduce the negative impact on their wealth's purchasing power by consuming less gas. And if cold fusion ever leads to cheaper electricity, people will have greater wealth due to savings in the cost of their electric bills and will predictably spend that increase on more electricity and other things as well. The key to public policy, then, is to analyze the wealth effects of any policy and to explicitly count on them as that policy's most powerful results.

In sum, economists believe that most of the people most of the time will respond positively when they have a chance to increase their wealth because people believe that increased wealth will lead to increased welfare. Similarly, people will change their behavior to reduce the loss of wealth when any loss is inevitable. Even though the canons of evidence in the discipline do not allow for a scientifically respectable interpretation of the *meaning* of wealth for individuals, economists proceed with the matter-of-fact point of view that more of nearly every good thing is better than less, and there are very few good things that more wealth is not helpful in attaining.

NOTES

1. By "economics" and "economist" I mean mainstream or orthodox economics, that school of economics represented in business, government, and the academy, which makes up the vast

majority of the American Economics Association. It includes conservatives and liberals, monetarists and Keynesians, and nearly every economist who ever has or ever will sit on the President's Council of Economic Advisors. Among others, it excludes Marxian and other forms of radical political economy, institutionalism, and Austrian economics, each of which has its own perspective and telling critique of the orthodox position.

2. The astute reader will note that there is not much difference between a check for $1,000 and a corporate stock certificate worth $1,000. The dividing line between money and nonmoney assets is based on their "liquidity," a measure of how easy it is to use any particular asset in an exchange to buy something else. The stock certificate will have to be sold (with a cost in time and broker's fees) before that wealth can be used to buy something. The line between money and nonmoney assets is thus an arbitrary one, indicated by the fact that the Federal Reserve Board has several different definitions of the money supply and keeps close track of each of them The most often reported definition, "M1," includes the currency and coins you have as well as those assets you hold in a checking account.

3. Besides Jevons, two other economists, Karl Menger in Vienna, and Leon Walras in Lausanne, each developed the notion of marginal utility independently and published the results almost simultaneously. This makes the discovery of the marginal utility theory one of those rare events in the history of science: It was so destined to occur that it was discovered three times.

4. In addition, because of Friedman's methodological position that allows for "unrealistic" assumptions if a theory makes accurate predictions, he has further grounds for retaining the assumptions about psychic maximization.

5. In fact, the increase in the application of economic analysis to a wide diversity of "noneconomic" issues (including crime, divorce, and even suicide) is directly attributable to the use of the maximizing hypothesis in these various areas. A seminal work here is Becker's (1976) *The Economic Approach to Human Behavior*.

6. The permanent income hypothesis might also provide a research focus for a psychologist interested in the meaning of wealth in ways that Friedman himself does not reflect on. If the general pattern of life for younger people (particularly that great majority expecting to have higher incomes in subsequent years) entails a rational spending beyond their means, the formation of character in younger people (something about which economists say almost nothing) at a critical time in an individual's development as an adult might lead such individuals to a preoccupation with their future income that could have life-long effects.

7. A prime example here is Blaug (1980, esp. chap. 15).

8. For an interesting discussion of trust, including Partha Dasgupta's critique of the usual economic neglect of trust, see Gambetta (1988). See also Robert H. Frank's (1990) helpful review of Gambetta.

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