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GOLD STANDARD UNIVERSITY

Winter Semester, 2004

Monetary Economics 102: Gold and Interest

Lecture 4

THE PRINCIPLE OF CAPITALIZATION OF INCOMES

¶ Optimizing provision for deferred consumption ¶ Teleology *versus* causality ¶ No usury is involved in the exchange of income and wealth ¶ The triple contract ¶ Turning the stone into bread and water into wine? ¶ Inflationary and deflationary spirals ¶ Double entry book- keeping ¶ Oriental hoarding — Occidental dishoarding ¶ Interest and the Reformation

Optimizing Provision for Deferred Consumption

We have seen that whenever provision for deferred consumption is made, it is done through converting income into wealth as the initial step, later to be followed by the conversion of wealth back into income as the concluding step. The question of optimizing the conversion arises naturally. In the last Lecture we discussed how the selection of the most hoardable good provides an answer to the problem of optimization on condition that we are confined to direct conversion, that is, hoarding and dishoarding. However, further optimization will be possible as soon as indirect conversion becomes available to augment direct conversion. Recall that indirect conversion means the *exchange* of income and wealth. It appears when the prohibition on such exchanges has been removed, making hoarding and dishoarding obsolete. Indirect conversion is the irreducible form of credit that represents a leap in efficiency over direct conversion. The party giving up present wealth in exchange for future income is the supplier of credit. Interest is seen as the measure in the increase of efficiency of conversion due to the appearance of credit, zero interest meaning direct conversion.

As history and logic suggests, income is primary and wealth is derived. This recognition was codified by the American economist Frank Fetter as the *Principle of Capitalizing Incomes*. It states that *the value of wealth is due to the possibility of converting it into income (deriving an income from it). Thus income is the source from which the value of wealth flows. The capitalization of comparatively safe permanent incomes contains within itself all the factors for the independent determination of the rate of interest.*

Teleology *versus* Causality

The merit of the Principle of Capitalizing Incomes is that it puts the phenomenon of interest into its proper context. Without it the mistaken belief may take hold that wealth is primary and income is derived. Income is obtained by putting wealth out at interest. But how is wealth obtained? This is a question that cannot be side-stepped, and it is not a chicken-and-egg problem either. Wealth is obtained by capitalizing incomes.

The theory of interest holds a very special place in the history of human thought. Since the time of Aristotle the practice of charging and paying interest on wealth put out in loans has been stigmatized and, in many cases, criminalized. Even though the Reformation put an end to the latter, much of the stigma has remained and continues to be the source of anti-capitalistic agitation. Aristotle's mistake in ruling that taking and paying interest is against natural law (*pecunia pecuniam parare non potest*) was that he looked for the *causes* of interest — finding none. Instead, he should have looked for *ends* that interest might serve — in which case he could have found the Principle of Capitalizing Incomes. Here we have a most important means of wealth-creation: people with little or no wealth can get it by capitalizing (part of) their income. Indeed, ever since interest was decriminalized, the accumulation of productive capital has accelerated beyond belief, along with the proliferation of inventions finding industrial (not to mention therapeutical and recreational) applications.

Thus the Principle of Capitalization of Incomes exposes the teleological nature of interest. The sources of interest cannot be determined on the grounds of causality. Nor can interest be stamped out of existence by secular or canonical authorities as it is the result of purposive action, being inextricably involved with the conversion of income into wealth and wealth into income by economizing individuals, for whom it is indispensable for survival. Proscriptions against interest may eliminate the exchange, but never the conversion. The economizing individual may simply bypass the exchange and fall back on atavistic forms of conversion: hoarding and dishoarding. However, society would pay a high price for such wrong-headed policies. Wealth-creation would suffer a setback. Industrious and frugal people would be prevented from accumulating capital. Efficiency would be sacrificed, and society penalized for the sake of "ideological purity".

The right approach to understanding the phenomenon of interest recognizes its teleological nature. It does not attempt to explain the nature and sources of interest on the grounds of causality. As Carl Menger has emphatically pointed out, all voluntary exchanges, such as that of goods for goods, or goods for services, are based on the mutual advantage of the parties. The exchange of income and wealth is no exception. Here, too, either party gets something it wants more in exchange for something it wants less. The Principle of Capitalization of Incomes was originally stated by the American economist Frank A. Fetter in his *Principles of Economics*.

There are two ways of looking at lending $1,000 for ten years at 5% annual interest, although only one of the two, the loan, is normally recognized, in spite of the fact that the other is the more revealing. Thus the man who borrowed $1,000 for ten years at 5% annual interest has, at that price, sold an income of $50 per annum for a period of ten years. At the end of that period he has the right and obligation to repurchase the same income at the same price. It is clear that both the lender and the borrower are better off with the exchange than without. Typically, the seller of the income is a younger man, while the purchaser is older. The former is well able to generate the surplus income he has sold through physical or mental exertion. With the proceeds of the sale he will buy the necessary capital goods he needs in his enterprise to increase the efficiency of production. The latter, the buyer of the income, could hardly put his wealth to a better use than making a loan in order to augment his income. "He cannot take it with him", as the saying goes. He is no longer able to augment his income through increasing his physical or mental exertion. The reason for his accumulating wealth earlier was precisely the recognition that time would come when his surplus of physical and mental energy would give way to a deficit. These are his "harvest years", and the facility of exchanging wealth for income is his tool of harvesting. The Principle of Capitalization of Incomes recognizes the division of labor between successive generations. It is based on cooperation that is perfectly voluntary, quite unlike the coercive "social security system" sponsored by the government, whereby a shrinking number of younger workers are coerced into supporting one older retiree, while the population of retirees is exploding. These considerations were lost in the heated debates about usury and other aspects of the nature and sources of interest, not to mention the debates about the merits and demerits of governmentally enforced “old age security”. It is time to recognize that voluntary division of labor has always been at the source of any act of exchange, including exchanging income and wealth.

No Usury Is Involved in the Exchange of Wealth and Income

Contrary to the bad press it has been receiving in this age of "scientific culture", scholastic philosophy was way ahead of contemporary thought and, in many respects, it is also ahead of ours. An outstanding example is scholastic thought on the subject of interest and on the question of usury. The scholastic fathers were careful to distinguish between usurious interest charged on personal loans and on 'dry exchanges' on the one hand, and interest involved in the exchange of income and wealth on the other. They did not consider the latter usurious. The issue came to a head at the Council of Constance in 1414 that upheld the position of the schoolmen that *the purchase and sale of rent-charges and annuity contracts involved no usury.* Apparently, this decision did not satisfy the more dogmatically inclined (not to say economically more backward) segments of the Church. They raised the question again in Rome some ten years later. In 1425 Pope Martin confirmed the earlier decision made by the Council, thereby conclusively ending the debate.

Scholastic philosophy was on solid grounds with regard to its stand on the narrowing the definition of usury to exclude interest on the exchange of income and wealth. According to the Jesuit economist Istvan Muzslay, Thomas of Acquinas (1225-1274) determined that a modest interest (in our terminology, discount) was justifiable on short-term commercial credit as a risk-premium (*damnum emergens*), as well as compensation for lost income (*lucrum cessans*). We shall return to this point in a future course on the bill of exchange.

The Triple Contract

In Lecture 2 I have examined "rent charge" as an important historical example of the exchange of income and wealth. A second example is the Triple Contract or *contractus trinus* that was popular in the Middle Ages and in the Renaissance. As its name indicates, it was a combination of three contracts in one as follows: (1) a partnership contract between the 'lender' and 'borrower' sharing the profit or loss in the borrower's business, (2) an insurance contract through which the borrower promised the lender compensation for any possible loss in the business, and (3) another insurance contract through which the borrower guaranteed the restitution of his share of the capital to the lender after a stated number of years, regardless of the fortunes of the enterprise, provided that the lender gave up his claim to the full share of profits. It can be readily seen that the triple contract rationalized interest as an insurance premium. Economically, capital stock in the enterprise has been legally converted into a bond paying interest to the owner of the bond at a fixed rate.

This construction is most revealing. It exposes the point of contact between the marginal productivity of capital and pure interest. It reveals that every investment is an exchange of wealth for income. It also reveals the character of pure entrepreneurial profit as an insurance premium that the entrepreneur must collect in order that his business may survive the vicissitudes of an uncertain economy. Comparing the triple contract to triple-entry accounting (mentioned in Lecture 2) we see that the lender is the capitalist and the borrower is the entrepreneur. It does not matter whether a manager is hired, or whether the entrepreneur acts as his own manager. The substance of the contract is the underlying exchange of wealth and income. The triple contract was also considered as an admissible use of credit that escaped proscription on grounds of the usury laws. The problem of exchanging wealth and income, and its relevance to the problem of interest, has also been treated by the British economist Philip Wicksteed.

Turning Stone into Bread and Water into Wine?

As discussed above, the point of departure in this study of the phenomenon of interest is the recognition that an inexorable need exists, second only to the need for food and shelter, urging the economizing individual to convert income into wealth in order that later, when past his prime, he may convert his wealth back into income. For him, income is an ultimate end, insofar as without it he may have no other ends in this "valley of tears". Since wealth is an indispensable means to that end in the twilight years of his life, his need for conversion is beyond doubt. The theory of private property ought to take full account of the fact that the conversion of income into wealth is the rational and characteristically human manifestation of the law of the biosphere where all living things can only survive by hoarding their substance in one form or another. In case of the economizing individual this substance, as we have just seen, is the "most hoardable" commodity, gold, which is in demand even as it is offered in the smallest practically realizable quantities, and can be traded with the smallest possible exchange losses.

In passing we may touch upon a paradox that utilitarian philosophy has failed to solve. An apparent contradiction exists between the needs of the individual and society. There is a time in the life of every individual when he needs to draw on his savings accumulated earlier. Yet dishoarding (no less than hoarding) is being looked at with disapprobation, as an anti-social activity. It is unsettling as it allegedly affects supply unfavorably, possibly at a time considered inopportune from the point of view of society. (By the same token, hoarding allegedly affects demand unfavorably.) The utilitarian philosophers could not clarify how the market provides for the conflicting demands of society and its ageing members. Utilitarian philosophy has failed to solve the problem of hoarding and dishoarding. In particular, it has failed to explode the arguments of Silvio Gesell, John

Maynard Keynes, and other inflationists, according to which the contractionist and deflationary pressures inherent in a metallic monetary system can be the source of poverty and chronic economic distress. In particular, the gold standard admits hoarding of the monetary metal which, according to inflationist doctrine, is deflationary and the chief cause of depression. At the same time these authors talk about the inflationist paradise, where the miracle of "turning stone into bread and water into wine" would be routinely performed by monetary technicians in the service of governments.

I refute the inflationist argument in the spirit of utilitarian philosophy, removing an obstacle that had for a hundred years blocked the advancement of monetary science, as follows. One must distinguish between two kinds of dishoarding. It is the dishoarding of marketable goods other than gold that is deflationary. Dishoarding gold does, on the contrary, ease the (real or imagined) shortage of purchasing media. To the extent gold is hoarded occasionally, if is offset by occasional dishoarding. The gold standard is far from being contractionist as asserted by the inflationists. Quite to the contrary: gold is the chief prophylactic that protects the economy against deflation. When the banks or the government sabotage the gold standard, they spawn a cycle known as the Kondratieff long-wave cycle. The hoarding instincts of the people are channeled away from gold, a natural conduit (as gold is not essential for human consumption), to other marketable goods, an unnatural conduit and a dangerous agent when hoarded (as they could be indispensable for human consumption). The cycle manifests itself through the destabilization of the price structure as hoarding (dishoarding) marketable commodities results in rising (falling) prices. The cycle of high and low prices gives rise to a resonating cycle of high and low interest rates, as further analysis shows. The Kondratieff long-wave cycle consists of inflation alternating with deflation. Resonance ultimately causes a "runaway vibrator" effect that is capable of destructing the economy.

Inflationary and Deflationary Spirals

I define an inflationary spiral as the phenomenon of a rising price level causing people to hoard marketable goods which, in turn, causes further price rises forcing a repetition of the process. The definition of a deflationary spiral is analogous. It is a statistical fact, first observed by the Soviet economist N.D. Kondratieff (1892-1930) that, for the past two hundred years or so, inflationary and deflationary spirals have alternated, each lasting for a period of 25-35 years. I shall discuss the Kondratieff long-wave cycle in greater details later in these Lectures.

The most ominous consequence of the deliberate destruction of the gold standard is that the Kondratieff long-wave cycle is getting out of hand, becoming a runaway vibrator and threatening the world economy with a depression more devastating than any previously experienced. When gold is banned, people will not refrain from hoarding. On the contrary, their attention will forcibly be focused on the urgency of hoarding as they fully expect prices to rise in the wake of the government and the banks defaulting on their gold obligations. This triggers an inflationary spiral that must come to a violent end when prices over-react and threaten the value of hoarded goods with an imminent collapse of prices (in other words, the principle of declining marginal utility finally asserts itself). At that point hoarding gives way to dishoarding, and a deflationary spiral is triggered. As prices fall, more dishoarding occurs since owners of hoarded goods scramble to cut their losses. Producers go bankrupt in droves, and unemployment soars.

Many a book has been written on the *microeconomic* damage that the destruction of the gold standard by government sabotage has caused (such as damage to savings, capital accumulation and maintenance). Yet authors have not given sufficient attention to the *macroeconomic* damage for which the destruction of the gold standard is also responsible, such as the deflationary spiral, bankruptcies, debt repudiation on a massive scale, falling production, and growing unemployment. Paradoxically, the gold standard is blamed for causing depressions when, in fact, the *sabotaging* of the gold standard is the culprit.

At the present juncture the world economy is threatened by a treacherous deflationary spiral that could end in the worst depression ever. It is not possible to understand this development without realizing that the removal of the gold standard has destabilized the interest rate structure and, hard on the heels of the Japanese, American interest rates are inexorably plunging to zero. Falling interest rates decimate the balance sheet of the producers, forcing many into bankruptcy. Later in these Lectures I shall give a more detailed analysis of this hidden process in terms of failure in accounting practice. For the time being I confine myself to reiterating that the disaster is a direct, although much delayed, consequence of the deliberate destruction of the gold standard some thirty years ago.

Double-entry book-keeping

The invention of double-entry book-keeping in Italy of the *Trecento* was a momentous landmark in economic history. Göthe called it “one of the finest produced by the human mind” in his *Wilhelm Meister’s Apprenticeship*. Double-entry book-keeping is of utmost economic importance second only to the much earlier appearance of indirect exchange, making direct exchange (better known as barter) obsolete. The new invention has made *indirect accumulation of capital* via the instrument of contract possible, thus making *direct accumulation of capital* via hoarding obsolete. Previously, there was only one way for the economizing individual to convert income into wealth outside of family bonds: hoarding (for much of the Orient, which was slower in developing the institutional framework to protect contractual rights, it is still the only way). This immobilized large amounts of gold, and made capital accumulation an arduous and protracted process, in which reward was far removed from effort, dampening incentive.

The invention of double-entry book-keeping made possible a heretofore unprecedented increase in the efficiency of gold as catalyst for capital accumulation. Gold's physical presence was no longer necessary in every conversion. From then on gold could work by proxy as its role in the conversion has become residual. Thanks to the breakthrough, partnerships could now be formed representing exchange of income (of the junior partner) for wealth (of the senior). Later, with the gradual acceptance of "sleeping partners" in the firm, the formation of a joint-stock company has become possible. Shares in the joint-stock company could be traded as fixed-income securities (see the triple contract above). Indeed, this they were in all but name, in order to avoid censure by canonical and secular authorities under the usury laws. It is clear that without double-entry book-keeping a departing partner could not be bought out, nor would balance-sheets, income statements, and stock markets, have been possible. There would be no precise and objective way of attaching value to the assets and liabilities of a firm, short of liquidation.

Oriental hoarding — Occidental dishoarding

The new development released huge amounts of gold from private hoards as people began to accumulate and carry wealth in the form of securities disguised as partnership equity, instead of gold. By contrast in the Orient, where the social and institutional arrangements were far more inimical to the individual and his freedom to choose, the demand for gold and silver for hoarding purposes continued unabated. During the *Quattrocento* gold disgorged by the Occident flowed to the Orient in payment for exotic goods. Spices, silk, and satin enjoyed exceptional marketability in the Occident where all great banking houses engaged in financing this lucrative trade. The world was treated to a curious spectacle. The Occident was thriving while trading its gold with the Orient for frankincense and myrrh — as it could use more of the latter, and it had learned to get by with less of the former. It was this migration of gold from West to East that gave the edge of industrial power to the Occident, an advantage it still has over the Orient.

This shows that gold is merely the whipping boy at the hand of the inflationists. Gold is not scarce, though it quickly goes into hiding the moment the government and the banks conspire to tamper with credit. There is no conflict between the welfare of society and that of its ageing members. Very little if any gold is needed to complete all the exchanges of income and wealth in the course of normal business, provided that the government does not interfere with the free choices of individuals and the banks do not engage in borrowing short to lend long. Only when such interference by the government and illicit arbitrage by the banks take place does the demand for gold become sizeable. The correct policy for the government is "hands off" — to let the market decide what is best for its participants, and to blow the whistle when banks are caught red-handed indulging in illicit interest arbitrage.

Interest and the Reformation

The next advance came with the Reformation, during which canonical and secular strictures on interest were eased, the definition of usury narrowed and, later, the prohibition against both repealed. Whereas the partnership contract had originally been designed with the concealment of interest in mind, now it became possible, for the first time in history, to engage openly in the exchange of income and wealth with the rate of interest freely quoted. The bond market was born as a result of these historic changes. The right to income reserved by the bondholder could now enjoy the same legal protection as the right to rent-charges (discussed in Lecture 2) enjoyed during the prohibition era. Thus it remained for the Reformation to crown the great economic advances of the Renaissance, and to free the exchange of income and wealth from its former fetters. For the first time in history the rate of interest could manifest itself as a market phenomenon.

References

Carl Menger, *Principles of Economics*, New York: N.Y.U Press, 1981 (originally published in German in 1871 under the title *Grundsatze der Volkswirtschaftlehre*)

John Fullarton, *On the Regulation of Currencies*, New York: A. M. Kelley, 1969 (originally published in London, 1844)

Frank A. Fetter, *The Principles of Economics*, New York, 1905

Philip H. Wicksteed, *The Common Sense of Political Economy*, vol. I, London: Routledge & Keagan Paul, 1933 (originally published in 1910)

A Message to the Friends of Gold Standard University

Last year I was, for personal reasons, forced to suspend publication of these Lectures in the course Monetary Economics 102: *Gold and Interest*. I am happy to have a chance to resume the series with Lecture 4. I shall do my best to avoid any further interruption. My Lecture series will continue at the rate of one Lecture per month.

I welcome my audience, wishing everyone a Happy New Year. It may turn out to be year of historical importance. 2004 may see the return of the discussion of the gold standard from the "lunatic fringe", where it has been exiled, to the center of academic interest.

Let me take this opportunity to remind you that I have developed my theory of interest in the spirit of Carl Menger, the founder of the Austrian school of economics. Still, my theory is flatly rejected not only by establishment economists but, curiously enough, by latter-day Austrians as well. Their antipathy is presumably due to their belief that any criticism of Ludwig von Mises, whom I also respect greatly, is sacrilege calling for excommunication. My theory of interest rests on the thesis that the marginal utility of gold is constant (while that of all other commodities is declining). This is the very property that imparts to gold its quality of "moneyness".

However, in the Gospel according to Mises we read that constant marginal utility implies infinite demand which is contradictory (I agree); *ergo* gold cannot have constant marginal utility (I disagree). Mises simply missed the interrelation between gold and interest. The demand for gold is not infinite because interest acts as an obstruction to gold hoarding. (For other goods, obstruction is provided by declining marginal utility). Coming to grips with this fact is the key to the understanding of the predicament in which anti-gold propaganda has landed the world. Tampering with interest *ipso facto* means tampering with gold, and *vice versa*. The two cannot be separated, and it does not matter whether the country is on the gold standard or not. If you ban gold, then people will start hoarding other marketable commodities, which brings in its wake great economic dislocation such as the destabilization of the interest-rate structure, the Kondratieff long-wave cycle, and the runaway vibrator of extreme swings in prices and interest rates.

I would like to draw your attention to the discussion in my Lecture 4 (see section under the caption "Inflationary and Deflationary Spirals") of the so far unrecognized *macroeconomic* damage that the deliberate destruction of the gold standard has caused, in addition to the well-known *microeconomic* damage. The gold standard is blamed for causing depressions when in reality it is the best prophylactic against economic contractions. It was in fact the removal of the gold standard that has turned the Kondratieff long-wave cycle into a runaway vibrator programmed to self-destruct.

I believe what we are discussing in this course is very timely: we may be witnessing the turning of deflation into depression. The inflationary spiral that ended in 1980 was characterized by the hoarding of marketable commodities such as crude oil (incredibly, with the government of the United States as the greatest hoarder), grains, lumber, sugar, to mention but a few. 1980 also marked the beginning of the deflationary spiral of the Kondratieff long-wave cycle, characterized by dishoarding. It manifests itself as a slowing of price increases and outright price declines as producers are losing their pricing-power — the latter being so typical of the inflationary spiral. But the deflationary spiral is not over yet, as the plunge of interest rates to zero is still continuing. If American interest rates follow in the foot-steps of the Japanese, then we shall see the ugly face of depression, complete with bankruptcies, defaults, and wide-spread unemployment. Contrary to conventional wisdom, falling interest rates are not helpful to business: they are lethal. A more detailed analysis of this hidden mechanism is one of the tasks of this Lecture series, so please stay tuned. Another danger is that the Federal Reserve, in an effort to check deflation, will run the printing press overtime. The paper mill churning out unlimited amounts of new dollars may cause runaway inflation as foreign holders of dollar-denominated assets are frightened into dumping their holdings. It is not possible to predict whether the economy will succumb to depression or to runaway inflation. Ultimately, the issue will be decided by the bond-speculators and their risk-tolerance of carrying the burgeoning debt of the United States government in the face of the danger of a collapsing dollar.

There is still time for the United States government to steer clear of these dangers and, at the same time, to retain its monetary leadership in the world, provided that President Bush opens the U.S. Mint to the free and unlimited coinage of gold.

It will not be easy to admit that the Federal Reserve has pursued the wrong monetary policy for seventy consecutive years, cheered on by Big Government, Big Business, Big Labor, and Big Academia. Politicians, businessmen, labor leaders, and economists must swallow their pride, and accept history’s verdict that (whether they like it or not) gold is an integral part of the world economy and cannot be shunted into irrelevance. Gold will have a role to play in saving the nation and the world from a great disaster that is staring us in the face.

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GOLD STANDARD UNIVERSITY

SUMMER SEMESTER, 2002

Monetary Economics 101: The Real Bills Doctrine of Adam Smith

Lecture 1: Ayn Rand's Hymn to Money
Lecture 2: Don't Fix the Price of Gold!
Lecture 3: Credit Unions
Lecture 4: The Two Sources of Credit
Lecture 5: The Second Greatest Story Ever Told; (Chapters 1 - 3)
Lecture 6: The Invention of Discounting; (Chapters 4 - 6)
Lecture 7: The Mystery of the Discount Rate; (Chapters 7 - 8)
Lecture 8: Bills of the Goldsmith; (Chapter 9)
Lecture 9: Legal Tender. Small Bank Notes.
Lecture 10: The Revolt of Quality
Lecture 11: The Acceptance House; (Chapter 10-11)
Lecture 12: Borrowing Short to Lend Long; (Chapter 12)
Lecture 13: The Unadulterated Gold Standard

WINTER SEMESTER, 2003

Monetary Economics 102: Gold and Interest

Lecture 1: The Nature and Sources of Interest
Lecture 2: The Exchange of Income and Wealth
Lecture 3: The Janus-Face of Marketability

WINTER SEMESTER, 2004

Lecture 4: The Principle of Capitalization of Incomes
Lecture 5: The Pentagonal Model of Capital Markets
Lecture 6: The Hexagonal Model of Capital Markets
Lecture 7: The Bond Equation and the Rate of Interest
Lecture 8: Lessons of Bimetallism
Lecture 9: Speculation

Lecture 10: The Kondratieff Long-Wave Cycle
Lecture 11: The Ratchet and the Linkage
Lecture 12: Accounting under a Falling Interest-Rate Structure
Lecture 13: Aristotle on Check-Kiting

IN PREPARATION:

Monetary Economics 201: The Bill Market and the Formation of the Discount Rate

Monetary Economics 202: The Bond Market and the Formation of the Rate of Interest