

# Ideal Money and Asymptotically Ideal Money

## Revolutionary or Evolutionary Changes or Reforms of Systems of Money

Our topic is focused on an ideal, specifically on "Ideal Money", and it is not hard to see that there are naturally different routes by which a system of money might become either improved or might become, in some senses, more degraded and less worthy of praise. Change can come at a stroke, like when Alexander cut the Gordian knot, or it can come in a gradual fashion, through many smaller steps, and this latter can be classed as the pathway of "evolutionary change".

It is easy to illustrate cases of "revolutionary" reform or change in systems of money. A good example came in 1717 when Isaac Newton, supported by George II, fixed the value of the local UK currency to a precise amount of gold that defined the value of the currency (the "pound") in such a way that it was immediately recognizable throughout the Continent (of Europe) as of a fixed value in relation to generally accepted standards (of the time). (And this was the origin of the "gold standard".)

Another example of revolutionary change was when Argentina attempted to establish an internationally respectable system of money by means of a "currency board". (This attempt failed conspicuously, but the failure was rather similar to a bankruptcy event involving an ordinary commercial bank which simply turned out to have insufficient "capital".)

When the use of paper and printing was developed in China that made possible a "revolutionary" change, namely the introduction of paper money.

Jacques Rueff, F. A. von Hayek, and R. Mundell are notable scholars and economists who have particularly contributed to the theories of how a system or systems of money might be improved in an effectively revolutionary fashion. For example there has been a quite dramatic improvement in the internationally perceived (apparent) quality of the money used in the countries of Italy and Greece simply because they have moved through the revolutionary transition of renouncing the use of the lira or the drachma and have accepted the use of the newly established "euro" unit.

## Evolutionary Changes and Relevant Teachings

On the other hand (from the case of "revolutionary" changes) there is often the possibility that a system of money may gradually improve in quality, either through somewhat accidental circumstances (like a very favorable trade balance) or through the learning of good teachings of applicable varieties.

A series of American economists have been notable through their contributions which have enhanced the understanding of how systems of money actually function and particularly of how the dollar (US) and its value have been interacting with the relevant factors of influence. There has always been some "populist" thinking in the USA which can encourage ideas about money that are not well based in any scientific sense. And the teachings of some of the notable economists have sometimes given a more scientific perspective on the areas where the "populist" viewpoints have been influential.

M. Friedman acquired fame through teaching the linkage between the supply of money and, effectively, its value. In retrospect it seems as if elementary, but Friedman was as if a teacher who re-taught to American economists the classical concept of the "law of supply and demand", this in connection with money.

We can also note at this point that the understanding of the effects of the uncontrolled behavior of all the various "users" of a domestic money is the inclusive category of description into which the notable contributions of a series of American economists can be recognized.

F. Kydland, R. Lucas, E. Phelps, and E. Prescott are notable American economists who have contributed to the better understanding of issues arising in the area of theories of "macroeconomics". Without arguing for a direct constitutional reform of the status quo of the dollar in the USA they have contributed much enlightenment in relation to the interactions between intelligent categories of the "users" of currencies (or in particular the dollar) and "the central authorities" (of central bank, treasury, state institutions, executive and legislative government).

The evolving recognition of the fact that the "users" of a currency become like players in a game and have optional strategies by means of which they will be able to seek to optimize according to their own particular economic interests leads to the recognition that the tasks of central planners and managers, of a state, are not as simple as if they had only to herd flocks of sheep.

Thus the "users", like the managers, can be viewed as players in interactive games. In particular, with this perspective, it is natural to think of the users as having "expectations" in relation to the future value of the domestic currency, compared either with real assets, foreign currencies, or indices of costs. These expectations may or may not be "well-founded" or "rational" but they will inevitably guide or influence the choices made by the "users".

## General Considerations and History

The special commodity or medium that we call money has a long and interesting history. And since we are so dependent on our use of it and so much controlled and motivated by the wish to have more of it or not to lose what we have we may become irrational in thinking about it and fail to be able to reason about it as if about a technology, such as radio, to be used more or less efficiently.

We present the argument that various interests and groups, notably including "Keynesian" economists, have sold to the public a "quasi-doctrine" which teaches, in effect, that "less is more" or that (in other words) "bad money is better than good money". Here we can remember the classic ancient economics saying called "Gresham's law" which was "The bad money drives out the good". The saying of Gresham's is mostly of interest here because it illustrates the "old" or "classical" concept of "bad money" and this can be contrasted with more recent attitudes which have been very much influenced by the Keynesians and by the results of their influence on government policies since the 30's.

### Digression on the Philosophy of Money

It seems to be relevant to the politics of state decisions that affect the character of currency systems promoted by states that there are typical popular attitudes in relation to money. Although money itself is merely an artifact of practical usefulness in human societies and/or civilizations, there are some traditional or popular views associating money with sin or

immorality or unethical or unjust behavior. And such views can have the effect that an ideal of good money does not seem such a good cause as an ideal of

a good public water supply. There is also, for example, the Islamic concept which has the effect of classing as "usury" any lending of money at interest. (Here we can wonder about what sort of inflation rates might have been typical for any major varieties of money, such as Byzantine money, at the times actually contemporaneous with the Prophet Mohammed.)

In general, money has been associated in popular views with moral or ethical faults, like greed, avarice, selfishness, and lack of charity. But on the other hand, the existence of money often makes it easy to make valuable donations of philanthropic sorts and the parties receiving such contributions tend to find it most helpful when the donations are received as money!

But the New Testament story about "money changers" being driven from the Temple illustrates clearly the idea of putting the clearly mundane and possibly "unclean" utility of money at some distance from where that money would presumably continue to be received when used as a vehicle for donations.

Economics has been called "the dismal science" and it is certainly an area of studies where "the mundane" is appropriately studied.

And philosophically viewed, money exists only because humanity does not live under "Garden of Eden" conditions and there are specializations of labor functions. So we are always exchanging, mediated by money transfers, the differing fruits of our varied forms of labor.

## Welfare Economics

A related topic, which we can't fully consider in a few paragraphs, is that of the efforts to be made by the national state and society in general for dealing with "social equity" and concerns for the general "economic welfare". Here the key viewpoint is methodological, as we see it. HOW should society and the state authorities seek to improve economic welfare generally and what should be done at times of abnormal economic difficulties or "depression"?

We can't go into it all, but we feel that actions which are clearly understandable as designed for the purpose of achieving a "social welfare" result are best. And in particular, programs of unemployment compensation seem to be comparatively well structured so that they can operate in proportion to the need. And public works projects allow the wealthy to pay through taxes to provide jobs for workers and these can produce valuable works if the projects are well planned.

## Money, Utility, and Game Theory

In the sort of game theory that is studied and applied by economists the concept of "utility" is very fundamental and essential. Von Neumann and Morgenstern give a notably good and thorough treatment of utility in their book (on game theory and economic behavior). The concept of utility (mathematical) does indeed predate the book of Von Neumann and Morgenstern. And for example, as a concept, mathematical utility can be traced back to a paper published in 1886 in Pisa by G. B. Antonelli.

When one studies what are called "cooperative games", which in economic terms include mergers and acquisitions or cartel formation, it is found

to be appropriate and is standard to form two basic classifications:

(1): Games with transferable utility.

(and)

(2): Games without transferable utility, (or "NTU" games).

In the world of practical realities it is money which typically causes the existence of a game of type (1) rather than of type (2); money is the "lubrication" which enables the efficient "transfer of utility". And generally if games can be transformed from type (2) to type (1) there is a gain, on average, to all the players in terms of whatever might be expected to be the outcome.

But this function of money in generally facilitating the transfer of utility would seem to be as well performed by the currency of Zimbabwe as by that of Switzerland. Or the question can be asked "How do 'good money' and 'bad money' differ, if at all, for the valuable function of facilitating utility transfer?". But if we consider contracts having a relatively long time axis then the difference can be seen clearly.

Consider a society where the money in use is subject to a rapid and unpredictable rate of inflation so that money worth 100 now might be worth from 50 to 10 by a year from now. Who would want to lend money for the term of a year?

In this context we can see how the "quality" of a money standard can strongly influence areas of the economy involving financing with longer-term credits.

And also, if we view money as of importance in connection with transfers of utility, we can see that money itself is a sort of "utility", using the word in another sense, comparable to supplies of water, electric energy or telecommunications. And then, if we think about it, we can consider the quality of money as comparable to the quality of some "public utility" like the supply of electric energy or of water.

## "Keynesians"

The thinking of J. M. Keynes was actually multidimensional and consequently there are quite different varieties of persons at the present time who follow, in one way or another, some of the thinking of Keynes. And of course SOME of his thinking was scientifically accurate and thus not disputable. For example, an early book written by Keynes was the mathematical text "A Treatise on Probability".

The label "Keynesian" is convenient, but to be safe we should have a defined meaning for this as a party that can be criticized and contrasted with other parties.

So let us define "Keynesian" to be descriptive of a "school of thought" that originated at the time of the devaluations of the pound and the dollar in the early 30's of the 20th century. Then, more specifically, a "Keynesian" would favor the existence of a "manipulative" state establishment of central bank and treasury which would continuously seek to achieve "economic welfare" objectives with comparatively little regard for the long term reputation of the national currency and the associated effects of that on the reputation of financial enterprises domestic to the state.

And indeed a very famous saying of Keynes was "...in the long run we will all be dead ...".



## A Critique of the Science of the Keynesians

It is difficult to make a criticism here because so much of the scientific research work, particularly of American economists, in the years since, say, "the thirties", has been in the area of the study of the topic called "macro-economics" and most or almost all of this work has a "Keynesian" orientation.

I think there is a good analogy to mathematical theories like, for example, "class field theory". In mathematics a set of axioms can be taken as a foundation and then an area for theoretical study is brought into being. For example, if one set of axioms is specified and accepted we have the theory of rings while if another set of axioms is the foundation we have the theory of Moufang loops.

So, from a critical point of view, the theory of macro-economics of the Keynesians is like the theory of plane geometry without the axiom of Euclid that was classically called the "parallel postulate". (It is an interesting fact in the history of science that there was a time, before the nineteenth century, when mathematicians were speculating that this axiom or postulate was not necessary, that it should be derivable from the others.)

So I feel that the macroeconomics of the Keynesians is comparable to a scientific study of a mathematical area which is carried out with an insufficient set of axioms. And the result is analogous to the situation in plane geometry, the plane does not need to be really flat and the area within a circle can expand hyperbolically as a function of the radius rather than merely with the square of the radius. (This picture suggests the pattern of inflation that can result in a country, over extended time periods, when there is continually a certain amount of gradual inflation.)

The missing axiom is simply an accepted axiom that the money being

put into circulation by the central authorities should be so handled as to maintain, over long terms of time, a stable value.

Instead of this one can observe, in the context of the popularity of "Keynesian" orientations, that it is considered extremely undesirable that there should ever occur a period of deflation (where wages and prices might be forced to decrease) but that continual inflation is an acceptable consequence (of whatever actually causes it under the effective circumstances of the actual "management" of a national money system).

Looking backwards, in the period of time between 1717 and 1931 the Bank of England actually had to operate with the axiom accepted that we are viewing as comparable to Euclid's "parallel postulate". The theory of what can be done, in central banking, with a money value axiom being in effect is not an empty theory but this is an area which seems hardly to have been studied at all since the advent of "the Keynesians" in "the thirties".

Another aspect of "Keynesianism", in relation to scientific themes, is that it seems to me to be very much like a school of medical theory and to be oriented towards "therapeutic" procedures. But often a school of medical practice can be criticized from one or another point of view. For example, "What are the long term consequences of the continued application of the procedures of therapy?"

### The Machiavellian Perspective

A serious study of the phenomena of paper money or coinage as issued by state authorities would not be complete without consideration of a Machiavellian analysis of the "con games" that arise whenever the quality level of a money may seem different to different types of appraisers. And Machiavelli is very notable as an early "non-mathematical" game theorist (!!).

The issuer of a state-sponsored "legal tender" is comparable to the person of "Il Principe" in the writings of Machiavelli. And the Prince (in the Machiavellian sense) naturally has a circle of advisors and counselors (some of whom may be qualified to be called macroeconomists or economists).

The advisors to the Prince will typically find it easier and more strategically wise not to criticize the fundamental structure of the Prince's provision, for his Principality, of a specific medium usable to facilitate exchanges of utility. And financial institutions, in the Principality, may have become adapted over time periods like at least a generation or maybe of several generations to the specific characteristics of the money system, perhaps the "legal tender", that is provided in the Principality.

If the (effective) position of being the Prince is rotating or like a political office with a "term limit" then it can easily happen that one Prince will want to spend heavily, on his own most favored projects, before the next Prince will come to power with his own quite different agenda and perceived system of preferences for state expenditures and taxation. And a current Prince may not infrequently be able to spend additional money without immediately raising taxes, thinking to leave that burden to his successor and to his successor's (legislative) Government. (And also such a Prince can naturally think that if his successor finds that the Treasury is relatively bare of resources and that tax income is limited that that successor will be discouraged from heavily spending on his own pet areas (which might be viewed as undesirable from the viewpoint of the current Prince).)

Thus, viewed in this fashion, systems of economic foundations (for labor, business, and exchanges) that have actually many areas of deficiency compared with the ideal possibilities (which can be imagined by consideration of foundations of a more ideal quality); these systems can yet persist over long time periods in a manner similar to that of the persistence of political and governmental systems that are ultimately judged to have been of an

inferior or unfavorable sort.

From 1917 to 1989 (dating to the fall of the "Berlin wall") an economic system existed in Europe that, arguably, failed to efficiently motivate human entrepreneurial labor through a system of materially valuable rewards to the (entrepreneurial) workers. (In the future Socialism may, possibly, find a good solution for the problem of providing motivation for innovative works of practical value.)

And we can't really logically assume that human civilization has found the ultimate ideal of forms of social government in the times of the twentieth century. (One can imagine a future form of government where a highly advanced automaton (or array of computers) would function like the office of a City Manager with the human input to the government passing through the analogue of a City Council.)

## Ideal Money

Our proposal is that a preferable version of a general system for the transferring of utility, thus a "medium of exchange", would be structured so as to provide a medium with a natural (and reliable!) stability of value. And this stability of value would be particularly of benefit in connection with contracts or exchanges involving long time periods for the complete performance of the contract or exchange.

Classically, when gold or silver was used as the basis of a standard for exchanges, that objective was consequently achieved (even though neither of these two "precious metals" would be, in fact, perfectly stable in value by comparison with the other). The existence of a standard provided comparative certainty contrasting with the gamblers' situation that results when a lender must lend money without much of an assurance that in 30 years the value of it

will not have been greatly eroded by inflation. Thus, faced with such value uncertainties, mortgage lenders must learn to lend, if they are lending their own money, at sufficiently high interest rates so as to have a fair chance of winning their gamble against inflation!

We published a paper entitled "Ideal Money" in the Southern Economic Journal (in 2002) and it was essentially the text of a keynote lecture that we gave on that topic at the meeting of the Southern Economic Association in Tampa, Florida. Of course, necessarily, on a topic with such a universal relevance to human affairs, it is difficult, really, to say something new. But there can be novelty in the details and in terms of the context and the times.

Our key proposal was/is that an index that can be called an ICPI or "Industrial Consumption Price Index" could be employed as a basis for the standardization of the value of money. This proposal is for an index based on the international prices of specific goods. For example like the prices for silver or copper as recorded daily at London.

The commodities or utilities or services for which their international prices could be used in an ICPI index should be wisely chosen so as to avoid those that might have comparatively rapidly changing prices. Exactly how an index should be constituted cannot be specified at this point but it can be noted that the problem of constituting a suitable index is quite analogous to that of constituting index measures for the prices of "Industrials" or "Transports" or "Utilities" like Dow Jones has long had for the stocks traded on the New York Stock Exchange. But of course one doesn't expect the value measure of a "basket" of commodities to rise as much, over long times, as the value of the Dow Jones Industrials index has risen in the past.

We also observed that a method of calculation could be employed that would use "moving averages" to achieve that the money value being defined would vary as smoothly and gradually as practicable with the passing of time.

But now we want to mention another possibility that arises because of the present day circumstances that are relevant to the international interactions of the various national currencies. It could be very difficult, and a slow process, to set up such a practical and useful system of conventions as the international metric system of measures (of length, volume, and weight). So it should not be expected that reform and progress, in the area of systems of money, will be very easily achieved.

Nowadays we see some new areas of competition between different major currencies of the world since the euro has come into existence and the psychological climate in which the "central bankers" are operating is recently changed by the theme that is next described.

## The Confessional of Targeting

It was the observation of a new "line" that has become popular with those responsible for "central banking" functions relating to national currencies that gave us the idea for the theme of "asymptotically ideal" money.

The idea seems paradoxical, but by speaking of "inflation targeting" these responsible officials are effectively CONFESSING that, notwithstanding how they formerly were speaking about the difficulties and problems of their functions, that it is indeed after all possible to control inflation by controlling the supply of money (as if by limiting the amount of individual "prints" that could be made of a work of art being produced as "prints").

This popularity of the line of "inflation targeting" seems to have started in New Zealand, which is the place, among the USA, Canada, Australia, and New Zealand, which had the most depreciated dollar. And we can note also that New Zealand was hardly a place where any crisis of poverty really forced

them to not maintain the value of their dollar but rather just a place where "Keynesian" thinking was probably very influential.

If now we think of a world of a number of major currencies and with all of these provided by central authorities that operate under some sort of a ritual of "inflation targeting" then, as things evolve, what SHOULD the targets be?

It is only really respectable that there should not be an arbitrary or capricious pattern of inflation, but how should a proper and desirable form of money value stability be defined?

Rapid inflation is easily measured, on a national level, by a domestically defined "cost of living" index. So if the cost of living, as measured by another agency than central banking authorities, were not rising (when expressed in terms of the domestic money) then one could feel assured that there was not inflation.

However this requirement is actually a little too strong (for a properly good money worthy to be called of "ideal" type)! It is actually quite natural for the calculated "cost of living" to be rising, even when measured, say, in terms of gold, whenever there is so much technological progress that the people in an area, without working harder, are lifted to a higher standard of living by the rapid progress, as if each human would become the beneficiary of the assistance of 3 robot helpers to do the work of his livelihood.

So in the last years of the era of the gold standard the "cost of living" measures were gradually rising, in "advanced countries", but it was not appropriate to view that as indicating inflation since the money was not losing value in relation to alternative options for "treasure hoarding", (such as gold!).

To be quite respectable, in a Gresham-advised sense, money needs only to be AS GOOD as other material commodities that might be hoarded. It does

not really need to be so good (as time passes) that the cost of living statistic should remain constant.

But "inflation targeting", unless all major currencies would (somehow!) be able to be adopting and really employing the same target rate, would still provide the opportunity for "connoisseurs of quality" to rank the currencies in hierarchies of gradations of quality (like bond rating agencies rank the debt of commercial enterprises or like other rating agencies comparatively appraise various insurance companies). Those really having lower planned inflation rates would naturally be seen as superior in quality. (We should note that the INTERNATIONAL perspective relating to a currency is not how it relates to domestically measured costs in its home country but how it compares, on the international markets, with other currencies and commodities.)

What inflation targeting does is to open up the possibility that somehow the various major currencies may evolve to develop stability of value. And in this sense there could be "asymptotically ideal money" in that an evolving trend could lead to the value stability that would constitute a major improvement in quality.

## Currencies in Competition

It is observable that certain types of financial enterprises, such as large internationally operating insurance companies, tend to migrate to national homes where the national currency is of at least comparatively higher quality (such as, e. g., Switzerland).

In the near future there may be a smaller number of major currencies used in the world and these may stand in competitive relations among themselves.



There is now the "euro" and the inflationary tradition of the Italian lira seems to be past history now. And there COULD be introduced, for example, a similar international currency for the Islamic world, or for South Asia, or for South America, or here or there.

And if "inflation targeting" were used as a "line" by the managers handling all of these various internationally prominent currencies then there would arise interesting possibilities for comparisons between these major currencies. Each of the currencies managed thusly would have its officially recognized status in terms of inflation as measured by the domestic index of costs of the state of the managers. But also, and this is what is more significant from an internationally oriented viewpoint, the various currencies would have rates of exchange so that they could be realistically compared in terms of their actual values.

And so the various currencies managed with "inflation targeting" would be comparable by users or observers who would be able to form opinions about the quality of the currencies. And what I want to suggest is that "the public" or the users, those for whom a medium of exchange functions as a basic utility, may develop opinions that are critical of currencies of lower "value quality". That is, the public may learn to demand better quality of that which CAN be managed to be of better quality or which can be managed to be of the lower quality observed in so many of the various national currencies in the 20th century.

So we can imagine the evolutionary possibility of "asymptotically ideal money". Starting with the idea of value stabilization in relation to a domestic price index associated with the territory of one state, beyond that there is the natural and logical concept of internationally based value comparisons. The currencies being compared, like now the euro, the dollar, the yen, the pound, the Swiss franc, the Swedish krona, etc. can be viewed with critical eyes by their users and by those who may have the option of

whether or not or how to use one of them. This can lead to pressure for good quality and consequently for a lessened rate of inflationary depreciation in value.

Illustrating these optional choices that the public, the users of a money, may have, the people of Sweden recently had the opportunity of voting in a referendum on whether or not Sweden should join the euro money bloc and replace the krona by the euro and thus use the same currency as Finland. The people voted against that, for various reasons. But it cannot be irrelevant whether or not the future quality of a currency is really assured or whether instead that it depends on the shifting sands of political decisions or the possibly arbitrary actions of a bureaucracy of officials.

The voters in the U.K. are expecting to have the opportunity to vote in a referendum relating to the adoption, for the U.K., of the euro (which is already adopted in Ireland). Here they have a dramatic conflict, since the pound was the original currency of "the gold standard", with its value pegged to gold in 1717 by Isaac Newton (who was then Master of the Mint).

In recent years the pound has had a comparatively good rating with regard to inflation, inferior to the rating of the Swiss franc but superior to most currencies of the world. So the British have the alternatives of accepting adoption of the euro when first voting, or after a delay, or never.

We can legitimately wonder how the speediness of its adoption or delays in its adoption might affect the policies operating to control the actual exchange value of the euro. The constitutional structure of the authority behind the euro is of the "paper money" character in that nothing is really guaranteed as far as the value of the euro is concerned. But this is typical of all currencies used in the world nowadays.

Of course when a currency, for a time, does have a specification of its value beyond that simply depending on supply and demand for a fiat money, like the money of Argentina had a peg to the U.S. dollar a few years ago,

then international observers can wisely distrust the reliability of such a stabilization of its value. Such forms of value definition are not necessarily unsound, particularly when a small economy, like that of Panama, links its currency to that of a larger area like that of the USA. But it is obvious that this sort of thing puts a (paradoxical) burden on the foundation of the currency that is used as a reference basis.

For example, if all sorts of non-European countries decided to define the values of their currencies as on a par with the euro, without actually joining into any system of cooperative regulations associated with that, then the effect of that would seem likely to destabilize the stability of the euro if it would otherwise be highly stable and of good value quality.

### Insurance Companies, Commercial Banks, and State Banks

It can be difficult, psychologically, for good patriots to appreciate the comparison, but state banks, or whatever issues the money used in a state or in a group of states, are logically comparable to good or bad commercial banks or to good or bad insurance companies.

And it is observable that internationally operating commercial banks or insurance companies can be favored by being based where the conventional money is of relatively higher quality. The same principle also applies to the business of "investment banking" which is a differentiable specialty function of commercial banks or other financial companies.

## Savings, Savings Institutions, and Savings Rates

Another area where money quality is very relevant is in relation to the "savings rate". How will individual decision makers behave with regard to options for thrifty or more "spendthrift" behavior? It is arguable that the larger classes, in the sense of economically differentiated population strata, should be able to employ thrift options that are not extremely complex in character. And if the quality of the money is really good then simply to save in terms of the ordinary medium of exchange is at least a practical first step. So thus the existence of good money may naturally promote a higher "savings rate".

The history of "savings banks" and "credit unions" seems to illustrate social and economic developments that occurred during the time of stable money values of the gold standard era. Thus forms of financial institutions came into existence in the climate of "good money" which would not have evolved were the money of an obviously unstable value.

The process of capital investment by means of which enterprises prepare to have the competence for making successful products in the future naturally relates to the processes recognizable as involving savings decisions by individuals and households. And it can become as if paradoxical, when the official "savings rate" is found to be low, how the investment processes are occurring.

The truth may be that the mass of the citizens of a state with an apparently advanced economy can become actually comparable to the people of an area being developed by colonialists and thus not be a leading force in relation to the advancement of the national economy.

## Investment Strata Theory

There is a "classical" or traditional concept that influences investment decisions by "run of the mill" investors and which, ultimately, derives from the history of varieties of money which seemed, at least for a time, to have relatively stable value (per unit of the currency).

So middle-class investors are often advised by their investment advisers to invest "conservatively" when they become older and have, presumably, reduced life expectancies.

There are traditional concepts of "safer" or "more speculative" channels for the investment of savings. If a counseled investor seems to have a reduced "life expectancy" then, typically, this investor will be counseled to invest "conservatively", perhaps in government bonds, rather than "speculatively", (like in land or commodities or stock market issues).

BUT this standard variety of advice could be VERY BAD advice if the domestic money were like the money in Argentina, or Thailand, or Zimbabwe, during the times of recent national currency crises.

### Should "Conservative" Investing be Possible?

Here is the related issue of social policy, or of "good social policy" (if there can be, practically, a question of good or bad concerned with the availability of investment options).

It is not simply an issue concerned with the options to be available to individual human citizens or residents. We can observe that provinces, municipalities, or institutions deriving from these may have needs for investment. These needs may derive from assets which are acquired at one time but which are expected to be spent gradually over future times.

## The Differential Strata (If They Exist)

A money usable as a "medium of exchange" obviates the comparative complexity of transactions needing to be achieved by barter. And beyond that, a money with a respected stability of value provides a basis for a practical simple means for achieving "storage of wealth" which could be of great practical value to institutions or other entities that need to preserve reserves of assets over time periods of gradual expenditures.

In principle, a corporation operating in one country COULD keep its reserve assets in an "exported" form. For example, Toyota, operating in China, could keep all its reserves overseas in yen, rather than in RMB/Yuan currency accounts or bonds, etc. But if the Yuan of China seemed to have as much basic stability of value as the yen then wisdom might dictate another course than that of exporting the reserves to the yen sphere.

Analogously, it is easy to imagine Nestle' with similar options.

## Traditional Themes Relating to Investments

There has been the phrase "gilt-edged bonds" representing a category of bond investments of the highest quality level. But now, in fact, if we think about this we see that the phrase derives historically from the times of the existence of the "gold standard" and thus from the times of currencies having stable values in a quite meaningful and quantitative sense.

When the debenture bonds of the sovereign state itself have become,

really, a very speculative area for investment there have been introduced options, like "treasury inflation protected securities" or "TIPS". But this actually introduces, for investment, a speculative area, since the investors must GAMBLE on the comparative merits of TIPS-category bonds with lower coupon rates and standard bonds offering higher paper rates!

## Our Opinion

We think it is ultimately desirable, for the State relating to a national society, to have institutions that favor and cultivate the possibilities of reinvestment, in the national economy, especially by the intelligent actions of institutions which may themselves be of the type favored by the State with exemption from taxes on "income" or "profits".

Economists have learned that higher levels of technology or of industrial or agricultural arts derive from long histories of the "feed-back" of earned assets into the components of the economy forming the capacity for production at comparatively higher levels of technology, science, or arts.

So we argue that if the possibility of "conservative investments" is made easy or easier that this will favor the re-investment processes that will favor comparative economic advancement.

## Relations to Law and Contracts

A concept that we thought of later than at the time of developing our first ideas about Ideal Money is that of the importance of the comparative quality of the money used in an economic society to the possible precision,

as an indicator of quality, of the contracts for performances of future contractual obligations.

We have noted, as a matter of general theory, that money provides the practical means for the "transfer of utility" and that the distinction between "games with transferable utility" and "games with non-transferable utility" (or TU and NTU games) thus is naturally linked with the matter of whether or not there is available the means of money transfers to facilitate a good cooperative game solution (which could be that of a relatively simple game of bargaining).

But when there is the dimension of time also, incorporated into a contract for exchanges (such as for example a mortgage contract, or an annuity contract with an insurance company, or a contract for services to be performed over an extended period of time) then the quality of the money unit in terms of which the contract is written makes a big difference in the level of certainty of the contract terms.

Uncertainty perturbing the issue of the effective meaning of a contract is comparable to and analogous to a climate of lawlessness that would make contracts, in general, unreliable.

It is reasonable to expect that were the quality of a national currency very high (in terms of the stability of the value of the currency unit) then that interest rates on mortgages or on the national debt would become comparatively low (as "rational expectations" would interact with investment options for mortgage and investment bankers).

If there were only the alternatives of two varieties of money of which one of them would depreciate in value, compared with the other of them, AT A CONSTANT RATE, then it would be reasonable to expect that REAL interest rates, say for mortgages, could be the same whichever money were used. But the pattern to be expected when there is money that decreases in value compared with "real value" measures is that this continuous devaluation



IS NOT AT A CONSTANT RATE (and the phenomenon of "surprise inflation", which has been much discussed by economists, is to be expected). (So of course, expected, it won't be entirely a "surprise", but yet, when "Keynesian" policies are strongly in effect, one must rationally expect inflation but also a degree of difficulty for precisely and quantitatively predicting that inflation!)

### Ideal Global Money, the Concept

It is not a new concept in economic theory, that there could be material benefits whenever a number of separate currencies would be replaced by a single money. This caught the eye of John Stuart Mill, in particular.

But with a benefit there may also come the reverse of benefits and it is logical for human advisors of human societies to be wary when the world, in 2008, seems not yet ready for a globally effective federal government comparable to those operating on national levels in Berne or Washington.

My opinion is that if it were too easy to set up a form of "global money" that the version achieved might have characteristics of inferiority which would make it, comparatively, more like a relatively inferior national currency than like any of the more praiseworthy national or imperial currencies known to historical records.

But there is a good prospect for avoiding the establishment of another, possibly deceptive, currency of inferior quality. Here I think of the possibility that a good sort of international currency might EVOLVE before the time when an official establishment might occur.

We can observe that, in the world, that there continue to exist varieties of areas where religion, language, laws, and customs are quite variable.

And one can suspect that indeed it is somewhat in the nature of Man and his cultures that this variableness is typical.

So my personal view is that a practical global money might most favorably evolve through the development first of a few regional currencies of truly good quality. And then the "integration" or "coordination" of those into a global currency would become just a technical problem. (Here I am thinking of a politically neutral form of a technological utility rather than of a money which might, for example, be used to exert pressures in a conflict situation comparable to "the cold war".)

A process analogous to this occurred when a number of European countries passed first through EFTA, then through the EU, then into an "exchange rates stabilization" and then into the structure of "the euro" (which is based in Frankfurt).

Another topic to consider is that if a few large-scale currencies are interacting then that the agencies (or states) responsible for each of these currencies might benefit by holding certain amounts of currency reserves in terms of the other major currencies. And also the authority managing one currency might calculate an appropriate index to define the standard value for that currency by using the observed values of the other major world currencies. (We mentioned before the use of less volatile values in connection with "smoothing out" the calculations of a normative ICPI index that would define a standard value for a currency.)

At the present time it can be observed that the currency of China has a value stabilized in relation to an index based on the values of other currencies. So in the future it could be that the currency sponsored by Japan or by the Southeast Asia Economic Cooperation Area might become stabilized in value with the aid of an index including the value of the currency of China.

## Evolution of Customs and Opinions

In a large state like one of the "great democracies" it is reasonable to say that the people should be able, in principle, to decide on the form of a money (like a "public utility") that they should be served by, even though most of the actual volume of the use of the money would be out of the hands of the great majority of the people. But most typically the people would expect to be served by their elected representatives and not to make most of the relevant decisions in a direct fashion.

If it becomes a matter of strong and definite preferences that the money used should have definite characteristics of quality then, in principle, the people can demand that. For example formerly there was the drachma and now there is, in Greece, the euro instead of that. And the people seem to be pleased with the change.

So the quality of the medium or media of exchange that is/are used can be improved, if the improvement is really desired. Here we speak of quality in the sense of Gresham or like a bond rating agency.

But the famous classical "Gresham's Law" also reveals the intrinsic difficulty. Thus "good money" will not naturally supplant and replace "bad money" by a simple Darwinian superiority of competitive species. Rather than that, it must be that the good things are established by the voluntary choice of human agencies. And these responsible agencies, being naturally of the domain of politically derived authorities, would need to make appropriate efforts to achieve such a goal and to pay the costs that are entailed before their societies can benefit. And the benefits would come from the improvement in the quality of this public utility (money) which serves to facilitate the game-theoretic function of "the transfer of utility".

An example of an efficiently working global reform (at least in relation to electronic manufactures) is the metric system, with its central Bureau located near Paris. And this is an example of a system of yardsticks where inflation is currently NOT in fashion!