

THE U.S. DOLLAR AN OWNER'S MANUAL

The Importance of Our Dollar Currency

Past, Present and Future

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Money Taxonomy

Checking (Fiduciary) Accounts

Credit Money Substitutes

Standard Money (includes F)

Fiat Money

Savings & MMD Accts

Includes Certificates

Credit Cards

Commodity, Specie Money

Greenbacks

Federal Reserve Notes

F: Bank Reserves at Fed and Vault Cash

Money: That medium of exchange or currency in which the array of prices are expressed in a market venue.

Introduction

The simplest, most rudimentary economy is self-sufficiency or autarchy of a cooperative group.

One step up is a market economy of simple direct barter or trade where owners exchange goods or services provided they find someone who has what they need and wants what they themselves have.

No one being forced by others to exchange (in a free market) means that both sides to the exchange benefit. Buyer and seller mutually gain, but find direct exchange to be awkward.

Gradually the barter economy begins employing intermediary goods, not traded for their own use but to allow exchanges without each having to find someone who coincidentally wants just what each person has. They can sell their goods for an intermediary good such as salt or cattle and then acquire goods they need from those who don't need what they produce by using the intermediary good to buy them.

People will choose an intermediary good that is easily divisible to overcome the inconvenience (in barter) of trying to exchange say a wagon for 2½ canoes. Now also people can account, i.e. compare different mixes or combinations of goods they own or produce once the goods are assigned a price. This simple arrangement explains the essence of money as the intermediary good. Money then is a good commonly bartered as an intermediary good.

Note that money is always in a relation of barter with other goods. It is only the other goods that become "priced" in units of this common good. Once one good is used for barter other goods lose their

barter character among each other, ultimately interactions resulting in only one commodity, or one for large transactions and another for small playing this role.

Precious metals, being easily transportable, divisible, and of known value as a commodity under barter ultimately through competitive trial emerged as the money of the civilized world.

Money then, is a common medium of exchange. Prices are generally established in units of a common commodity or substitute commodity or in certificates of such commodity.

Certificates can be money even when counterfeit.

Money can be degraded into a counterfeit of a contractual promise to pay commodity money and then into even a true certificate with no promise to convert if made legal tender and protected from massive overproduction through a monopoly of the right to print the certificate. It is then fiat money.

Fiat money is vastly preferred by a treasury or bank of issue. But this comes at the cost of the public facing higher prices from the extra spending created and at the cost of the whole economy that must live with a much weakened monetary system at once more vulnerable to mistrust and disruption.

The transition to fiat money ended the contractual linkage to gold. It follows that gold today is not money for general commerce, but a commodity. It is thus priced in dollars or some other currency before being used in a transaction.

A requirement for money is that it be that medium of exchange or currency in which the array of prices is expressed.

That money gained its monetary status from gold and retains the custom of acceptance only possible from a commodity such as gold doesn't change the fact that we don't use gold grams or ounces as a medium of exchange, we don't and aren't likely to price all other goods in terms of gold ounces when the currencies we have carry that function.

Money, like language, is an aid to interpersonal transactions. This manual is not about making money. It is about how its use in society implies certain results discoverable by following chains of reasoning

and cause and effect. Deductive logic, in the manner of proofs in geometry, allows for derivation of propositions otherwise unobtainable.

Money permeates the entire non-barter economy. Hence the subject of money is inseparable from the discipline of economics. Basic understanding of the role of money requires neither employment of complex economic models, nor a textbook approach that dedicates a majority of space to interesting but incidental aspects of the discipline. Modern economics tends to relegate money to an accounting role. This is a mistake; understanding its central influence and its historic genesis is the key to economic analysis.

Topics were selected to appeal to non-economist as well as those more familiar with economics. Topics draw most heavily from writers of the Austrian School in economics (see terms below) who developed monetary theory as a subjective-value based science. The emphasis on enhancing or reviving the dollar, as opposed to replacing it, most closely falls in line with a tract by Murray Rothbard (1997).

It is no secret that Austrian economics today is free-market in orientation. Knowledge of the economics of these writers has been expanding. There are those that may make good use of some insights of this economics whether or not interested in the workings¹ of a libertarian society. But it will be necessary to define some of these workings that have become increasingly distinct from society, as we find it, to clarify matters

The Austrian theory explains impacts from monetary stabilization policy. It explains how policy induced booms result in crashes.

Formal mainstream approaches have an emphasis on equations, on the use of unrealistic ideal types, and aggregation that obfuscate real world phenomenon. There has been a mistaken reliance on statistical regularities as a method of drawing inferences.

It will be shown that today's money, no longer tangibly linked to a commodity such as gold, nevertheless cannot be explained without

¹ Revealed in Tannehill (1970), or Rothbard (2006) who both detail how order and governance performs in the absence of the State.

its continued subjective tie to its past, and thus retains to a diminishing extent its commodity money character. The customary tie to the commodity predecessor of fiat money fuels the inertia that undergirds today's money. This inertia has allowed for interim periods (that can last for decades) where "official" money was purported to be devoid of its inherent commodity nature. Hence the seemingly plausible contention that formally irredeemable money is as sound as commodity money is no surprise. But this contention is a fiction; at best, these interim periods were notable for relative money depreciation.

Under a fiat money regime, the monetary authority may declare tokens or scrip to be legal tender. But as a brand new money system, if not piggybacked on an established price system, these can only be introduced in a very limited setting such as a barter economy, or for small groups lacking an extensive price system. Contemporary currencies although not legally specie-based are customarily so.

For all but the most limited economies, custom carries forward money's historical linkage to a commodity base. Central bank attempts to control currencies only amount to quantity control in terms of units artificially produced. The essence of money is socially derived, not engendered by, but exploited by a government fiat money regime. Accordingly the purchasing power of the dollar has been eroded without loss of its function as the medium of exchange.

Money is peculiar in its role as a universal trading good, permeating all exchanges in the market, unlike other goods, once established it cannot be refined by competition. Recent years of dollar mismanagement under the aegis of the Federal Reserve have resulted in an increasing number of economists favoring hard money reform, with some common remedies centered on introducing competitive currencies. We shall see that in this camp too often the recipe proposed for a conversion to an official gold money system leads unnecessarily into difficulty. This camp maintains that commodity money is the better choice objectively over fiat money, and therefore a new commodity based currency could prevail in competition with fiat money. We will see however, that the dollar cannot be so easily jettisoned. The point being that the dollar is already in its essence a commodity money, only irredeemable juridically. The defense of the dollar follows from

respecting its exchange economy origin as a fundamental social convention and not acceding to attempts to wrest it completely from its original social underpinnings.

This manual revisits some of the seldom-discussed aspects of money—aspects essential for making investments, hedging against inflation, buying gold, understanding moves in the bond market, or details of monetary policy.

Fundamental analysis yields more reliable results than technical in considering financial trends. For instance, inflation favors debtors over creditors due to a lag in the interest rate price premium. When inflationary expectations increase, stock market prices for certain corporations can rise to reflect the projected relative gains, specifically gains by corporations that are net debtors. Depositors and bondholders, and corporations that are net creditors may face losses. And there are profit gains when inputs purchased before price increases are compared to product prices that have risen during the production period.

Such attention to causality obviously precedes technical treatment of data because the relevant variables must first be identified. The conventional habit of data driven investigation has led to too many lost trails of inquiry. Hence insights deductively formulated may have been given too little attention to assist the analyst.

This includes insights of Austrian School economist Ludwig von Mises, (*The Theory of Money and Credit*, 1912) who outlined the monetary theory of boom and bust resulting from credit expansion, the ABCT (Austrian Business Cycle Theory). His protégé in business cycle theory and later Nobel Prize winner F. A. Hayek, in 1925 challenged the misdirection of U.S. stabilization policy in the mid 1920's. Their warnings in the 1920's that current policies would lead to economic imbalances and a financial crash went unheeded. While Mises personally declined to hold accounts in banks in the 1920's that he knew to be unsound, Irving Fisher, architect of Federal Reserve policy in the 1920's was clueless up through the crash of '29 and personally lost a fortune in the stock market (deSoto-2006, 487-493)

Murray Rothbard's *Americas Great Depression* (1963) restated the theory. Rothbard documented the unprecedented new tax and regu-

latory burdens that lengthened the bank crises into a great depression. In the (1971) introduction to the 2nd edition (1972) Rothbard's early recognition of the inflationary recession or stagflation phenomenon emerging in the 1970's was instrumental in exposing contradictions in the Keynesian economic paradigm.

The dollar evolved as a social institution. That is, from its social or public custom of use as opposed to official sanction. Too often the positive side of human nature and our daily exhibited propensity for social cooperation have been underplayed. Mises points out in *Human Action*, that peaceable habits engendered by trade arise even when parties have no liking for each other. Markets and free trade are thereby of immense importance in keeping the peace locally and globally.

Money, (the dollar in particular), is the people's heritage. Confirmed each day in transactions, it is a tool or technology that ranks in importance with the development of language or cultivation of crops.

The story of our dollar has been under reported, especially the events of the Twentieth Century which led up to loss of the free use of money in exchange—specifically, the measured, progressive loss of separation between money and politics and the resultant effective piracy of our monetary heritage. Whether perceived entirely along the way or not by those responsible for this loss, the consequences go far beyond visible marginal gains and losses we might attribute to influence by various interest groups or sectors in the economy.

The important differences between commodity money and fiat money should be restated. The former (as gold or silver) were initially underpinned by non-monetary uses; the latter (our current fiat dollar) is now underpinned only by custom and government mandate.

The money supply may be defined as the sum of each individual's holdings of currency and checkable deposit accounts plus CD's, savings and money market accounts.

Conventional use of measures of the velocity of money lack a scientific basis. The average turnover rate or velocity is equated (inversely) to the demand for money, a relationship largely misunderstood. The subjective human character of economics is based on individuals acting with a purpose either in isolation or as identifiable

members of a group. Relative valuations of money holdings and other assets need not be linked at all to the velocity turnover of money holdings. Exchange volume is no reliable indicator of asset pricing. For example, one party can be involved in bidding up the price of a painting at an auction without any money transaction on his part.

Money is that medium of exchange or currency in which the array of prices is expressed in a geographic region or market venue. Historically the most marketable good, money emerged as a social or economic rather than a political phenomenon. Underlying transactions by peaceful trade, money facilitated the demise of socially destructive predatory means of wealth transfer.

Yet hegemonic, hierarchical systems of organization based on compulsion and dominance (kingdoms, governments etc.) gradually won stewardship over money, and in keeping with their exploitative practice undermined its stability.

In the U.S. this state of affairs devolved by default. The public relinquished complex money and finance decisions to firms and institutions closest to centers of finance and most adept in taking control of these matters.²

An unbiased accounting of the government role in monetary management and macroprudential policy has been lacking. Such an accounting would reveal the subsidy to the banking industry resulting from the seigniorage (money creating) process. It is predatory in its wealth transfer effects. Open market operations (Fed purchases of bonds, or any assets) provide new reserves for banks. These gains (seigniorage) to the banking system are a separate matter from Fed profits. Newly produced reserves support a multiple of new demand

²One often hears the reference to the role of government as analogous to that of a referee. This allows for attributing government wrongs to failings of character, not insulated power. Yet referees and governments are stark examples of two concepts entirely at odds. Referees, are an example of participatory or commercially based order totally outside of any need to be established by government. They provide needed regulatory services under the free market model, not the political or legislative model.

deposits used by banks for interest earning loans for which the banking system need only maintain reserves at a small fraction of new loans.

Even a money supply increase of only 3 to 5% per year that seemingly just accommodates an expanding economy can be problematic macro-economically. With such a rate, purportedly to maintain overall price stability (rather than a slower increase as under the gold standard with beneficial dollar appreciation), malinvestments and distortions ensue as interest rates are made lower than normal. Under normal circumstances with increasing savings and increasing productivity “To keep the price level steady would mean, in similar circumstances, that the loan rate of interest would have to be lowered below the equilibrium rate.” F.A. Hayek, (1967 [1935], 27).

Under market disciplined free banking, the tendency for banks to keep ever smaller fractional reserves (or low capital) would be checked. Markets would be forced to develop their own prudent behavior absent the government imprimatur, the FDIC, and the implicit backing by involuntary taxation.

Treatment of deposits as legal titles would support a policy of 100% reserve requirements. Just as a storage facility simply charges fees for storage, not considering deposits of items as liabilities on their balance sheet to be loaned out, so too banks could be constituted. A free market would determine the financial landscape and the degree of bank leverage.

Under the present system when banks run into trouble the FDIC and the Fed stand by, not as legitimate insurance--which could never apply to such economy-wide operations—but as guarantors for a taxpayer bailout. This encourages unnecessary and inappropriate risk taking by banks (moral hazard). Thus the government seemingly rescues private excesses. But those excesses result from the antithesis of free market banking policy.

Given these concerns some advocate replacing Federal Reserve System credit money production with Treasury money printing and credit. But the Fed is only one aspect of the problem. Replacing it with Treasury inflating fails to address dollar depreciation. Although limiting the ability of the private banking system to earn more windfall interest through expanding loans when more reserves are pumped

into the system, both Treasury money such as greenbacks and bank loans (demand deposits) would remain fiat based. Such money is functionally the same as counterfeit money, the key being who gets to print it. With treasury fiat money the incentive to inflate remains intact. The Treasury already sells treasury bills and bonds that take on some of the qualities of money as liquid repositories of wealth. We see also little inhibition in over-issuing these securities, even to the point where we now have the potential of a future global flight from these assets.

Naturally, increases in government deficits impact the loan market with borrowing demands backed by the security of the taxing power of government. This is known as crowding out. It diminishes funds available for business needs.

These unsatisfactory outcomes give rise to innovative corrective proposals by various free market proponents. They propose retrieval of the dollar from the present regime of fiat money, or replacement of the dollar in favor of soundly based free market money. Beside questions surrounding the Fed, there are other aspects of the problem not well understood. Some of these aspects have to do with the laudable suggestion that a commodity dollar is superior to a fiat dollar.

Freeing precious metals from capital gains taxation, or legalizing any kind of private coinage, would be an advance toward financial freedom. As mentioned, some writers propose a gold or commodity based money to compete with the dollar, as a return to sound money. As paradoxical as it may seem, the release of the dollar to its market-liberal economic role would not be accomplished by a purported legal abandonment of the government fiat dollar money system. Achieving a free market end also requires measures enhancing the dollar's underlying support. The dollar can be seen as a free-market institution usurped by the state. Abrupt abandonment of the present fiat dollar would be pulling the rug, albeit now counterfeit, out from under the economy.

We may follow this reasoning more easily if we see money, and so the dollar, not as a creature of government, but rather an outcome of commerce among the general public, as the essence of trade and the market, presently under custody of the government and as having

been weakened by political replacement of the option of redemption with legal tender fiat. With this in mind, an informed goal of reform should be to rescue, not destroy the dollar.

As a matter of correct terminology, governments don't strictly create money. Markets and people can create a money regime; governments only then take custody of its management. Governments certainly produce units of a currency and produce money substitutes, usually in concert with commercial banks. Devaluation of dollar units has not removed its currency functionality.

A recent introduction of **Liberty Dollars** that had partial specie backing by a private interest was enough of a competitive threat to the dollar as a store of value that authorities moved to prevent this option by prosecution on the basis that it constituted the act of counterfeiting. One key element was that this currency carried the trademark designation of dollars. What the displacement of use of dollars with the use of these alternative Liberty Dollars amounted to was a move to capture some degree of the seigniorage that results from printing dollars (although these did not resemble dollars, only made use of the designation of the dollar). In this case the margin of gain to the provider, instead of the whole face value of the bill, amounted to its face value, less the promised backing in specie (a fraction of the face value). This was somewhat similar to using another company's trademark to sell products, here it was the word 'dollar'.

It should be seen that, if allowed, the printing and selling of these partially backed notes would have had an impact similar to adding to the money supply. As this caught on, more providers would emerge with higher ratios of backing to out-bid the Liberty Dollar, and so on with more providers to out-bid those, until eventually all of the seigniorage advantage was gone as the backing approached 100%.

That authorities moved to disrupt this process points to the vulnerability of fiat dollars over commodity backed dollars. The activity could have been a means to move towards edging out at least some of the demand for unbacked paper currency. Yet more likely this whole process would fail to supplant the fiat dollar that would never have been deposed, and by using the dollar imprimatur competing notes would have begun trading at a premium over the official dollar. When the Greenbacks were introduced under Lincoln as unbacked

Treasury Notes, they were discounted in value. One can find an economic parallel to this type of partially backed currency in periods when the copper penny was available as an alternative to fiat paper dollars, or currently the nickel. These coins had a melt value at a substantial fraction of the currency (market) value, but never dominated as a hedge against inflation.

To the extent the specie backed notes such as Liberty Dollars would replace other money balances held by the public, the effect would have an inflationary bias in reducing the demand for liquid dollar balances. This could draw attention to the weaknesses of Federal Reserve money. The risk, of course, is the possibility of setting off an inflationary flight from fiat money that would be disruptive for the money economy itself—that would perhaps bring down ATM's etc. in an irreversible collapse of the intricate and extensive crucial nexus of division of labor and coordinating functioning of the market economy.

To some this risk could be seen as acceptable given the negative economic long-run outlook under a continued fiat regime that perpetuates boom and bust, secular inflation, and gradually creates a critical state that portends a probable but unpredictable future financial collapse.

One could predict, that if allowed, the newly introduced 'money' would gradually pre-empt earlier issues of these partially backed 'dollars' by incrementally including more gold backing. In fact, a new concept of money in this genre has been forwarded privately. These are notes containing gold leaf presumably with the amount of gold represented by the note (at some specified market value of gold measured by dollars). Incidentally this would assist in accommodating the need to have contractual guarantees for redeemability for small denomination notes under a gold standard. But in the last analysis, such an introduction of title to gold ownership in the form of currency would hardly amount to a new currency.

Further consideration of this episode of specie (partially) backed notes such as the Liberty Dollar brings up an interesting point. It is easy to see that a private provider of these new dollars would be able to exchange older ones for newer at a higher face value as the fiat dollar price of gold rose, as did occur with Liberty Dollars. Providers

would see their gold holdings appreciate to allow issuing new 'dollars' with less physical gold. In time holders of earlier issues would see potential for appreciation and begin a speculative rush into these instruments that would put further pressure to bid up the fiat dollar price of gold in the market.

Hence under the supposition that these partially backed 'dollars' were not prohibited, it would be quite possible that depreciation of the fiat dollar could accelerate if large financial institutions saw an opening to provide 'dollars' backed by gold. Since there is no floor for the exchange value of the dollar as constituted, the value of the dollar could collapse. But fiat dollar denominated financial assets would be at risk, they could henceforth collapse in value as well. The speculative adjustment mechanism in financial markets could overwhelm any attempt to return to a convertible dollar without any real confidence in the Treasury's ability to acquire gold reserves, or to stem a runaway gold price.

Historically, hyperinflations have been halted by credible policies that return a currency to a sound commodity link or to another currency, but usually after the ability to sell financial assets has been eliminated by their loss in value.

With this said, the astute reader may argue, along with the establishment neoclassical economist, that with intelligent monetary policy, and protection of the dollar from such replication challenges we have been considering, there is no good reason to worry. It could be maintained that, granted that inflation of prices may well continue long run, this beneficially allows the government to be financed by monetizing its debt and so reduces the tax burden.

But even assuming that the fiat dollar could last indefinitely, the loss to the public has been recognized by numerous writers defending free-markets. It is three-fold:

First, the loss of purchasing power. It is not as if everyone's money balances were magically enhanced with new money, or fixed incomes were easily adjustable. Losses amount to precisely the same as if a select few were allowed to print money in their basement and then spend it pushing up prices faced by the rest of us. While we in fact have seen prices fall in the electronics sector, in real terms by even more than in nominal terms, how many more sectors could have been

lowering prices had we not had a general inflation rate that depreciated the dollar by more than 90% since fiat money was extant? Is it any surprise that of the top 18 largest MSA (Metropolitan Statistical Areas) for 2008-9 as reported in the 2012 Statistical Abstract of the United States (p. 448) the Washington Metropolitan Area had the highest consumer unit annual expenditure and with more than half of the top ten counties (in median income) for the entire country? Your position in the spending chain determines your ability to exploit prices not yet adjusted to the money supply increase.

Second, the loss of fiscal discipline: The present regime fails the public in the areas of fiscal responsibility and accountability because of the ease of financing government expenditures. Would there have been the means to fund a bloated bureaucracy, no-bid contractors, fund the preposterous drug war that has eviscerated whole ethnic communities, or engage in pre-emptive strikes, or intervene in foreign conflicts that now look imprudent with hindsight? Can governments be trusted with such an easy source of financing? The suspension of the gold standard by the European belligerents in WWI allowed for deficit financing enabling unprecedented carnage and prolonged that war to such a destabilizing outcome that it produced WWII and then kept the world at the brink of calamity throughout the 20th Century.

Third, the loss of stability: business cycles have been shown to be exacerbated, or even caused by errant monetary policy that created asset bubbles, skewed investments, and misappropriate capital expenditures. Real estate booms are underlain with subsidies and tax exemptions only possible with deficit financing and credit conditions spurred by easy monetary policy that lowers interest rates artificially.

Writers have emphasized an important difference in approaches to reform that should be made clear: actors in place are not as important as institutions and procedures such as legislation; individual conduct by those in government, or even those close to government largess will always exploit opportunities to gain outside of the mutual exchange nexus of markets and are behind some of the legislation cranked out by Congress or rule making by agencies. The fix must be at the level of institutions and checks and balances. The fix will need to address the proliferation of positive law over remedies already in

place under common law—remedies long established as an avenue to adjudicate identifiable damages produced by violent or fraudulent acts.

Specifically, there is a case made by free-market advocates for reforming the monetary landscape that would imply revisiting the 1913 decision to create a central bank and the 1933 decision to demonetize gold. As with other areas of life when we look at systems of compulsion we find that they can appear to be a solution to discord but can fail to produce intended results. It is sometimes more difficult to work within tried and true social norms that are based on the public's propensity to cooperate through peaceful trade and commerce.

Order can best emerge from the harmony of mutual gain through specialization, division of labor and from freedom to control and benefit from the product of one's labors, based on equal respect for property rights (equality in property as defined by John Locke's Law of Equal Freedom). A consensus that achieves or acquiesces in debasing an honestly derived currency for expediency by a political or financial elite not surprisingly diminishes economic choices.

In brief, economic reasoning from sound premises can lend to early recognition of major swings in markets and policies. These premises also point the way to the reclamation of our monetary heritage of sound money.

An ultimate solution will necessarily reflect natural law and 1) help stabilize the economy, 2) prevent chronic inflation and 3) eliminate the risk of a global monetary melt-down.

This implies addressing the proper regulation of banking through removing obstacles to market discipline caused by Federal insurance and central banking legislation.

It implies revamping of the dollar and recognizing the failure of its fiat legal status. The first task is clear—to undo the constructivist-legislated destruction of the commercially derived essence of our money as an institution of emergent order. Upending the dollar holder's title to precious metals reduced the dollar to an artifice. Included in this text are brief sketches of an innovative dollar peg to gold that may exclude ultimate gold convertibility. After grounding the dollar on what was the public's heritage from the competitive process arising out of time-tested commercial custom, perhaps another form of

money will emerge through choice in currency. Producing a blueprint for such needed reforms may be quite different from this approach, only limited by the imagination of contributors who, having learned the basics, will no doubt, with increasing acumen, preserve the integrity of money in its future forms.

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1. Money established by past use.

In the 20th Century the **Dollar** emerged as the dominant unit of money for the world. Following the reasoning of the **Regression Theorem of Money** (formulated by Ludwig von Mises, *The Theory of Money and credit*, 1912) the quality of a currency that makes it money, making it acceptable in trade, relies on what it could buy yesterday. And yesterday, in turn to what it could buy the day before, and so on back to when it was commodity money, representing an ounce of silver, or a measure of gold. Silver and gold were valued in the same way back to the first days of barter to when they were valued by marginal utility only as a commodity yet to be used as money.³ First, money was a weight of monetary metal. Now it is a designation, inconvertible, sustained by custom, and as fiat money lacks contractual ties to its original barter equivalent.

2. Dollars are not government made.

The predominant, customary commodity used as a medium of exchange became money. It was employed for indirect exchange, liberating people from the confines of bartering good for good; but itself retained the direct exchange or barter relation with goods.

The dollar's money character or functional quality originated entirely aside from government.⁴ Evidence of this is in the historical record of moneys' chain of use beginning in a primitive or rudimentary barter economy.

Public trust in a particular currency is manifested by its use in trade. Economic need created money. Now the dollar, kept afloat by its own commodity money inertia, but backed only by the historically feeble force of government mandate (fiat), faces the possibility of a crises in confidence, and is to that extent vulnerable.

Money then, has a socio-economic rather than socio-political origin, and a socio-political rather than socio-economic end: its demise occurs after political control undermines its economic basis (see 28 below).

³ Mises (1971 [1912]) so solved the circular value paradox of money and established a marginal utility explanation for its value.

⁴ Functions of money are means of payment, unit of account and store of value.

3. Origin of the Dollar.

Congress adopted the dollar in 1792 as the official U.S. money. Originating in Europe the dollar comes from the German word “thaler” after a silver coin introduced in the 16th Century.

The government was able to smoothly adopt a new name for its new money that was in essence equivalent to existing monies used during the 18th Century (i.e. silver or gold). The U.S. was on a gold coin standard at \$20.67 per ounce (a dollar was 23.22 pure gold grains) established by the Gold Standard Act of 1900, that ended bimetallism. Only later (1934) were dollars made fiat (made irredeemable and kept as official money by proclamation). Britain still uses a weight designation (the pound sterling) for its currency.

4. Legal tender status not backing.

“This note is legal tender for all debts, public and private” appears on all Federal Reserve notes to convey the backing of the government for our currency. However, legal tender as backing is only as good as the applicable loan contract that one is bound to. Should debts be contractually linked to price indexes then dollars have no guaranteed value at all. It is well known that interest rates will tend to adjust upwards to include a price premium to compensate the lender for inflationary expectations. In 1980 some rates were assuming more than 10% price inflation as they reached 16% on some loans. This makes evident that simple legal tender status is no protection against dollar depreciation.

As interest rates rise homeowners are subject to foreclosures; adjustable rate mortgages defeat any “backing” that legal tender laws are purported to provide.

Keeping in mind, that as the one tradable good that remains in a state of barter, economically speaking, currencies, including fiat currencies, retain the character of a commodity in market valuations. And strictly speaking, specie commodity money also is not ‘backed’ in that the value of gold or silver is not ‘backed’ but depends on subjective valuations in the market. Yet it is widely understood that the differences require making a distinction, hence the term ‘backed’ has importance.

5. An idea unacknowledged.

20th Century economic analysts mistakenly separated money from the goods market and proceeded to ignore money as a barter phenomenon. The government stands powerless to effect its reintroduction once price arrays are destroyed and it is forsaken as a currency. A new money can only be reintegrated through barter, unlike market provision of other goods, say food, where a superior product introduced by the private market will be accepted and soon find its market price. Money is the only good desired for its use as a medium of exchange; lesser quality money is preferred as currency (provided it qualifies by habit as money). Put another way, money is ultimately desired simply because we wish to exchange it for something else in the future. In itself, we need have no other use for money, although if sound, it retains its commodity market value.

Textbooks commonly overlook this insight, giving the erroneous impression that governments can simply create a new fiat money *de novo*. Without any reference to how modern money became established, it is often portrayed as a mutually determined phenomena related to all other goods as a numeraire, no mention is made of the various ways the commodity character was compromised.

For example, although clear about the advantages of money over barter where, (without money) trade among individuals requires an unlikely double coincidence of wants, **Samuelson** states: “money is accepted because it is accepted.” and “The age of commodity money gives way to the age of paper money.”⁵ Or **Alchian and Allen**: “Do not try to account for the general acceptability of money with the old wives’ tale that money is ‘backed’ by, or convertible into, gold...Gold then does not give the dollar its value.”⁶ Or **Mishkin**: only that “currency has evolved into **fiat money**,”⁷

⁵ Paul Samuelson, *Economics*, Sixth edition. (1964) p. 52.

⁶ Alchian and Allen, *University Economics* (1965) p, 644.

⁷ Mishkin, Frederic S., *The Economics of Money, Banking, and Financial Markets*, eleventh addition (2016) p. 99.

6. The dollar—its commodity past.

These authors' statements, while internally consistent superficially, omit the fact that all of the functionality in the dollar today is attributable to its earlier use as money, starting as a commodity coming down to us through the conscious process of actual market transactions. Each exchange with money occurs after the transaction before it. To paraphrase Samuelson more correctly, the dollar is accepted because it *has been* accepted not because it is accepted. That it is accepted *as money* has to be explained. Without dropping the dimension of time in analysis we gain better understanding. There is no circularity as Samuelson would have it. Money circulates but not in a circle, rather in a spiral through time. Thus there is continuity back through exchanges in the past to its origin. See (1.)

Other goods can come onto the market anew and be priced by supply and demand. Money, although priced per unit by supply and demand cannot be thrown onto the market, as can other goods, for first it must be bartered, then its purchasing power can be found. It only becomes money through barter with the array of goods and services it is bartered for, that is, all market goods. It is the only good valued for its use as a medium of exchange against other goods, the only good in a money economy that always remains in a state of barter. For this reason even gold or silver certificates cannot compete with the fiat dollar if introduced privately as a parallel currency—their link to our money, the dollar, having been broken. This is evident by the fact that we don't use gold or silver ounce prices for goods, only dollar prices. (See 34-36) this does not mean that specie based money could not supplant fiat based money once the government abandons its statutory support of fiat money allowing its collapse through hyperinflation for instance. This would happen if the trademark or copyright of the dollar were no longer defended so that 'counterfeiting' would be legal. This is what is meant by true competition in currencies, even with government ensuring enforcement of contracts and titles to property. In this instance Federal Reserve notes (purportedly liabilities to the Fed, in actuality are not legal debt in any meaningful way) would be free to depreciate.

Of course an existing money can be given a new name, but it is the same money.

7. The nature of a dollar collapse.

Understanding this historical connection is essential because it informs us that if we have a collapse of the dollar there is no easy way back to establishing a new money. No government proclamation could successfully establish a brand-new money out of paper aside from being piggy-backed on commodity money or a currency that was once commodity money. Under a collapse of the dollar, in a dollar centric world, the other major dollar dependent fiat currencies would also be subject to rejection.

8. More money is not necessary.

On a superficial level producing more money supply has been confused with magically creating wealth. Less naïve is the mistaken proposition that, as a tool for trade and exchange, more money is better.

Once a money is customary, whatever supply of money exists fulfills the role of a medium of exchange, although as supply increases each unit may have less purchasing power.

Suppose two isolated countries A and B, have identical resources, population, and production of goods and services. But B has twice the amount of money as A. One could expect that the price (and wage) level in B would be roughly twice that in A. The country with twice the money supply (B) would also have each unit of money representing roughly half the purchasing power as the units of country A. If country B's economy were twice the size of A's then the price levels would be roughly similar. Note that any measure of the total economic activity of either country would need to be deflated by a price index.

A sound monetary system also incorporates credit arrangements that accommodate transactions for local or transitory commercial needs. Credit clearing mechanisms such as credit cards allow for transactions without the need for carrying large money balances. Banks provide this important clearing function in discounting commercial paper, and more broadly through the necessary service of providing loans. Financial institutions in general provide for pooling of savings and accommodating the

need for organizing streams of income in the economy. Innovation and technology allow more efficient coordination of an individual's transactions with his money income. These improvements reduce the need for money balances and economize on the size of the money supply outstanding.

"Inflation and credit expansion are the means to obfuscate the fact that there prevails a nature-given scarcity of the material things on which the satisfaction of human wants depends." ---- Ludwig von Mises

9. Prices rise when money increased.

According to the Federal Reserve, and U.S. Dept. of Labor, the production of dollars (M1) increased to \$1.366 Trillion by 2007 and \$2.7 Trillion in 2014 from \$409 Billion in 1980, up 675% in 34 years. During that period the CPI increased 235%

Up to now the loss of value (in terms of dollars) of the paper dollar resulted not from its loss of redeemability, but from its increased supply (quantity theory of money),⁸ it has not lost value because of credibility as money but because of ease of production due to its loss of required backing. The dollar still rests on its past commodity nature through custom; it retains a full complement of price arrays. Loss of confidence in the dollar because of its broken ties to gold and expectations of future over-production explains periods of volatility in alternative store of value assets such as gold or other commodities.

⁸ See Terms: Quantity Theory of Money. Strictly, prices will be higher than they would have been without a supply increase. Hence the price level may not rise absolutely if the economy expands.

10. But now overvalued.

The dollar, has depreciated to less than a tenth of its value in the last half-century. Clearly losing its tie to monetary metals resulted in its over-issue, but paradoxically from the standpoint of convertibility now the dollar is in a state of over-appreciation, still valued by the public through custom and faith. There is no way to predict when confidence could be lost. Faith in the dollar has started to falter globally. It always faces the threat of future unrestrained inflationary policies by the monetary authorities.

11. Money not priced like goods.

Goods and commodities are priced according to present value on the margin depending on present supply and demand and future expectations, rather than past prices. In contrast money has no price other than its purchasing power over all other goods. It is established by its past marketability.⁹ As with other goods, present supply and demand determines its price. But unlike other goods, for money there is no social loss of function in having less; its total utility for the economy is preserved; it fully retains its social value as a medium of exchange. A reduction of the supply of money will only raise its relative purchasing power over other goods.¹⁰

Money, as a commodity or a virtual commodity, has the peculiar quality of not having one price, and in fact is “priced” separately for each exchangeable good or service, and so remains in an economic relationship of a state of barter unchanged in this respect from its beginnings.

⁹ Mises, (1966) explained that he who holds or exchanges money and goods is interested in money's “future purchasing power and the future structure of prices. But he cannot form a judgment about the future purchasing power of money otherwise than by looking at its configuration in the immediate past. It is this fact that radically distinguishes the determination of the purchasing power of money from the determination of the mutual exchange ratios between the various vendible goods and services.” p.411.

¹⁰ For a discussion of the supply and demand of money see **the importance of money** below.

12. Gold lacks supply problems.

For commodities such as copper, the existing stock is 1 to 2 times the yearly production of the commodity. Gold on the other hand has a stock 50-60 times its yearly production, and is thus less subject to supply driven price volatility. Gold retains a large part of its value because of its quasi-money functions,¹¹ and because of this suffers price volatility according to vagaries in confidence of the future viability of the dollar.

Estimates are that there are about 160,000 tons of gold, half in jewelry and less than half of the rest in central banks.¹² Unlike other commodities gold is retrievable for sale on the market. Thus the total supply of gold continues to increase each year.

13. U.S. in currency default.

The US government defaulted on its obligations to maintain convertibility of the dollar to gold domestically with the passage of the Gold Reserve act of 1934, and defaulted on its international obligations to foreign central banks to exchange gold bullion for dollars in 1971.

14. Dollar now degenerate fiat money.

What does a government do when under a convertible money rule? It desires to print up more claims than it can redeem, which might naturally lead its citizens to lose trust and begin to turn in their certificates for gold or silver. The U.S. Congress in 1933 passed the Gold Reserve Act requiring the people to give up their gold in exchange for irredeemable notes (and devalued the new currency notes by almost 50% against gold).

A paper certificate, even when convertible into coin, lends itself to manipulation. The certificate status can be removed without changing its look, it can be only the shell of the money it once was, its convertibility withdrawn. It can be made into fiat money. Many people still remember

¹¹ It serves mostly as a store of value while also exhibiting a speculative demand on its future price, and possibly its future use as money.

¹² Various estimates in 2008 set the price of the contents of Fort Knox, controlled by the U.S. Mint at 5,000 tons or 147 million ounces.

a one dollar silver certificate indistinguishable in appearance from the subsequent one dollar Federal Reserve Note.

15. Why gold is now legal.

The requirement for commercial banks and U. S. citizens to turn over their gold at \$20/oz. in 1933 allowed a government windfall gain from the consequent devaluation of the dollar to \$35/per ounce and reflected a need perceived by those in control to preserve trust in the dollar at that time by monopolizing gold reserves. At present such a need no longer obtains since gold has been de-monetized. This would explain why Congress legalized gold ownership in 1975 and gold clauses in contracts in 1977. Full legalization of coinage may be the next step. In this view private gold accumulation, allowed today, no longer threatens the entrenched fiat dollar.

It is vital to understand why gold could not re-assert itself on its own (see 42). The exemption of capital gains taxation on gold would be insufficient. Without removing legal tender status for the fiat dollar, and the loss of the dollar trademark or copyright protection against counterfeiting, gold would be subject to Gresham's Law: *bad money drives out good*. Gresham's Law only applies in controlled conditions. Under the free market *good money drives out bad*. But having a free market removes legal tender status, and incidentally, without government institutions, a pure free-market (without impositions by government) would threaten the loss of the dollar as money, especially since its replication could not be made illegal. The point is not that the dollar can't be replaced by free market competition, but it would involve the dissolution of the price system. And since the Dollar remains 100% money, a result of its original commodity connection, why surrender to its unnecessary destruction, just to allow for a new commodity money? After all, the market has already spoken in historically choosing precious metals as money, the task is to move in the direction of reinstituting convertibility at a sustainable dollar price of gold.

That such a task presents difficulties is evident. First, setting a price deemed by the market as too high (for gold) would cause a rush to sell gold to the authority. How else would such a pegged price be credible?

Setting the price too low would cause a run on the dollar to sell dollars to the authority until all the gold was purchased, essentially what was going on before 1933 that prompted the Gold Reserve Act, and internationally before 1968 that prompted the U.S. default on the Bretton Woods agreement to maintain gold convertibility for foreign central banks. No doubt there will be those with the resourcefulness to find an outcome to this enigma that produces a soft landing.

16. Monetarism not free market.

Monetarists (see terms) called for legalization of gold ownership, and from this and other policies were identified as proponents of free markets. However, they mistakenly refer to an un-backed dollar and freely floating exchange rates as free market policies. These policies were measures addressing difficulties with government fiat money, money that was unsuccessful in fully co-opting the essence of market commodity money. These monetary policies removed the dollar even further from its roots in the free market.

17. Is silver money?

Hard money advocates are quick to point out that silver presents an excellent investment having served as a parallel or complimentary money to gold, having been at a ratio of 15 to 1 under bimetallism in the 19th century, which would translate today to over \$80/oz. (in early 2019 silver was close to \$15/oz., gold \$1300/oz.). But we would note that technological changes have made the metal obsolete as a currency, except perhaps under a dollar collapse where silver coins would be quite useful.

Silver was useful as silver coins before the development of credit cards and electronic means of dividing money into smaller units, gold being too expensive for most to carry in coins. Under a gold standard, certificates in fractions of gold ounces could be used for small-scale purposes. Historically we had the development of various money systems using, for example, salt for small-scale money purposes, and cattle for the larger. In fact, the term salary comes from salt and pecuniary from cattle. Much of the rationale for the bimetallic standard was from this perspective. Yet had Gresham's law been understood in the 19th century the difficulty of maintaining such a parallel money system may have been avoided.

18. What are Federal Reserve notes?

Federal Reserve Notes contain no statement in the form of a debt and thus are not, in this respect, explicitly credit money or instruments of debt. At most they are quasi-credit money. They retain legal properties to prevent the holder from destroying them or replicating them. Whether *de facto* they have legal qualities resembling government property, or as if on loan from the Federal Reserve, is an interesting question.

The Federal government by law co-opted the market's choice of gold and silver money long after these metals had emerged as money by custom on their own. The government established the dollar as legal tender and later removed its formal connection to a weight of gold or silver, thereby changing the dollar to a fiat money. This fiat substitute money (Federal Reserve Notes) retained exchange value because of trust by past habits of use among the public in the same manner that counterfeit dollars unrecognized as such have been accepted on occasion on a small scale.

At the outset the Federal Reserve Note, in order to be accepted, needed to resemble an existing currency. The dollar note had the same look, size color etc. as the earlier silver certificate and yet was not counterfeit since it did not purport to be a silver certificate. Similarly \$20 Federal Reserve notes closely resemble the \$20 dollar gold certificate. That they have the word *note* printed on their face is however disingenuous since a note is a contractual promise to pay something other than a duplicate of itself. The statement printed on the note that it is legal tender helps ensure its use over more sound competing currencies, but does not prevent loss of value since the government made no guarantee of its future value (See 4).

Enforcement of its legal tender status in the market is no longer necessary, as the fiat dollar has become customary fiat money (see terms). Enforcement of copyright status to prevent private duplication (counterfeiting) remains necessary.

19. The Fed.

Created by the Federal Reserve Act in 1913, the Federal Reserve System (Fed), a quasi-government institution, provided a framework for

banking interests to succeed in their long desired effort to produce a bank cartel.¹³ Profits made by the Fed through creation of reserve assets are funneled back to the Treasury, minus expenses, grants etc.¹⁴

The unique ability to be funded outside of the Federal budget allows the Fed to escape congressional appropriation oversight of the Federal Reserve budget, a budget that is automatically over-funded by the money printing privilege (economically and functionally but not legally equivalent to counterfeiting).

We should be reminded that these expenses cost the rest of the economy dollar-for-dollar. It would be no surprise if Fed funded economic research, employment of economists etc. should be supportive of a philosophy of active monetary policy and central banking.

With unsustainable debt obligations Congress knows that inflation provides a means of automatically lessening the debt burden. Thus there exists little incentive for congressional oversight of Fed policy. This arrangement lacks even the first ingredient in checks and balances for objectivity regarding inflation policy.¹⁵

20. Money inflation subsidizes banks.

The Fed, Treasury, and private banking system share the monetary gain from producing more money. Historically increases in the monetary base following Fed increases in new reserves allowed bank credit to expand, the banking system each year enjoying automatic increases in funds available for new bank loans and thus the windfall of an increased

¹³ It provided a central bank clearing mechanism that frees member banks from the earlier self-limiting mechanism of redemption of bank notes that kept each bank from over-issuing notes. "For the Federal Reserve Act was the result of a movement led by bankers seeking rationalization, and hoping to offset the decentralization of banking toward small banks and state banks." (Kolko, 243).

A whole economy organized by industry in partnership with the government is called corporatism or economic fascism. It is hard to imagine that the founders were unaware of the nature of this kind of central banking.

¹⁴ Fed remittances for 20016 were \$92 Bn.

¹⁵ As with many policies that result in an over-reach of power, the "conspiracy theory" charge of complicity might be justified with respect to interests that gain from policies. However, overt or even conscious collaboration need not be present to arrive at the same result as long as incentives to power are given free reign.

interest income. FDIC guarantees also keep the fractional reserve system as a whole viable at the expense of (what would be in the last analysis politically speaking) the ultimate guarantor—the taxpayer. Little wonder that the system has had a bias favoring at least a cautiously gradual expansion of the money supply. The gain to the Treasury from the money printing or creating process is seigniorage.

21. Treasury money vs. Fed money.

Some critics have suggested that the U.S. Treasury alone issue money, by-passing the Fed. The Treasury issued its own fiat currency (before there was a Federal Reserve) with Greenbacks in the 1860's, and the Continental Congress with Continentals during the revolution.

Such a policy would indeed remove much of what amounts to a subsidy for the banking industry. However, with no ties to gold the power to inflate would remain. Political pressure to inflate might be greater for the Treasury than the Fed, from both a misinformed public and special interests since the Treasury lacks the political independence of the Fed.

In the years after the 2008 crises vast purchases of Treasury debt were placed on the Fed balance sheet. With little doubt, these holdings (in the \$Trillions) were possible through new money creation by the Fed. Since they are held by another agency of the government they constitute no true liability for the Treasury. Such monetization allows the government to enjoy seigniorage similar to that which occurred from issuing Greenbacks, and so blurs this distinction between Treasury and Fed gains.

But neither choice is necessary. Moreover fiat money, whether originating from the Treasury or the Fed, lacks the authority of specific enumeration in the Constitution.

*New Laws need more Laws,
To try their best to right'em,
And those Laws need extra Laws,
And so ad-infinitum.*

22. Fiat money extra-constitutional.

Whether one personally accepts the Constitution as binding or not is outside of the scope of this discussion. There have been writers that have made a good case against respecting its authority, especially for those generations not a party to ratification. The process of amendment was meant to account for this weakness, it being important not to see the document as an expression of the will of the majority as a ruling entity, but rather a means of strictly confining ruling power, of limiting whoever rules to well defined spheres of influence over citizens and social interactions under a customary common law environment. But if a party champions its validity for one cause, then it loses standing to question its applicability for another based solely on the document's lack of derived authority.

Under the doctrine of enumerated powers, powers not granted are not available to the government.¹⁶ After the words in the Preamble stating: *We the People ...do ordain and establish this Constitution...* the first sentence of the body of the Constitution, Article 1. Sec. 1 begins with these words: *All legislative Powers herein granted...*The power granted to Congress was to grade and mint coinage Article 1 Sec. 8, and contains reference to fixing standards of weights and measures in the same sentence. It was certainly not empowered to print money out of thin air. Hence, neither Fed nor Treasury paper nor credit money production adheres to the Constitution. This liberty to act was never authorized. There has obviously been no Article V. (due process) amendment, (government) Supreme Court decisions notwithstanding, to grant a new

¹⁶ Under our system, citizens abide by Supreme Court rulings without having to expressly agree with the constitutionality of those rulings. This is not to detract from the fundamental principles spelled out in the Declaration of Independence: That freedoms are derivable by natural law. Where the wording of the Constitution conflicts with natural rights or rulings conflict with the doctrine of enumerated powers, it might be amended.

power. Further, printing of fiat money had been undertaken during the revolution; an observer must reasonably conclude that such an option was rejected in that no such power was granted later in the Constitution, a constitution ostensibly authorized by the citizenry at large, and who were to remain the ultimate political sovereign.¹⁷

The point here is that the Federal Reserve Act of 1913 was no amendment. To keep the peace, citizens in disagreement with the Supreme Court's adjudication of the Constitution have, understandably, conformed to its rulings, yet by doing so have not surrendered their right to be committed to its textual meaning. After all, the formation of a republic (*res publica*—from the people) was to be distinct from a theocracy, a kingdom, or a form of mob rule. It was for the public that includes the non-conforming individual. Here reasonable people would agree to a mutual arrangement of equal freedom.

23. History of fractional reserves.

Although textbooks describe fractional reserve banking in detail, a survey of 65 economics textbooks by James Kimball on the subject of the development of fractional reserve central banking, found that *"All the textbooks did an appallingly poor job of tracing the historical development of this institution. They left out the effects of legal tender*

¹⁷ We should underscore that Article. I. Section. 8, states: "Congress shall have the Power ...To coin Money, regulate [make regular] the Value thereof ...". Note that the "Value thereof" refers back to the coins, and cannot be stretched to include paper notes or fiat money.

According to Madison's Diary entries the clause "and to emit bills of credit" were struck from the draft of this sentence after debate on the powers to be granted during the convention.

For an in depth analysis on this objective reading of the document see Richard H. Timberlake, (1993) pp. 129-145. Note that no power was given to restrict interest charges or invoke price controls. Interest is the cost for the privilege of present use of funds determined by the market. Usury laws, as with price controls, divert resources from efficient allocations by the free market.

laws and other government interventions necessary to institutionalize a fundamentally bankrupt practice.”¹⁸

24. Money surges undesirable.

Short term surges of newly produced money, to be expected under fiat money regimes, unevenly and unfairly favor only those first recipients able to spend before prices have had a chance to rise in response. Additionally, surges of newly produced money disturb the financial balance of investment and production disproportionately and are attendant with disruptions that underlie most business cycles. New liquidity might influence oil and commodities, the stock market, real estate or the government bond market. Excesses occurred in the bond market in the early 1930's during the depression, and recently in Japan. Bubbles in these markets are frequently and mistakenly blamed on the market system, not on the intervening distortions in the money supply. At the base of credit bubbles will be found infusions of money.

Instability in foreign exchange markets for fiat currencies are no more the result of derivative market speculators than garbage is the result of flies. These markets only grew after currencies floated following the breakdown of the Bretton Woods agreement.

The occurrence of business or economic gyrations may be unavoidable under any system. Few natural systems progress through time without perturbations. For market societies evidence abounds that intervention leads to their exacerbation. The analogy of misguided policy in controlling forest fires by putting out the small fires, only to have debris pile up for a more infrequent but more damaging conflagration, seems apt. The existence of winter avalanches in a watershed should not be seen as evidence of failure in nature to distribute moisture. Some turns in the road should be tolerated; markets always face changes in expectations because the future is only imaginable, not real until it arrives and then it has been changed by the process that produced it.

¹⁸James Kimball, “The Gold Standard in Contemporary Economic Principles Textbooks: A Survey,” *Quarterly Journal of Austrian Economics*, Vol.8 No.3 (Fall 2005) p. 72

25. Slow inflation undesirable.

Milton Friedman and other influential economists have expressed an indifference to a moderate, steady rate of price inflation. They contend that markets are resilient, and have developed techniques to adjust for inflation such as indexing based on the CPI, or the use of inflation premiums for the Fisher effect in the interest rates, the adjustable rate mortgage etc.¹⁹

But dilution of the money supply disrupts the calculation mechanism provided by the price system. Money serves as a measure of value among goods and services. Would the carpenter's task not be impaired in a world where the yardstick kept shrinking over several decades to 10% of its original length, as has the purchasing power of the dollar?²⁰ On top of that, even creeping inflation occurs in jumps and starts, further reducing confidence in cost projections that hinder business commitments.²¹

The natural progression of increased productivity, and gains from increasing division of labor both normally contribute (under usual money balance assumptions) to a gradual fall in general price. Hence, less disruptive changes in the purchasing power of money are nevertheless to be expected even absent a managed monetary regime.

26. Does greed cause price inflation?

Generally, even though a producer or seller may want more profit he cannot simply raise his prices without losing business to competitors. At any given time he would normally raise his prices if he could.

A group of suppliers might collude to raise their prices, but even if successful the extra money spent by the public in that sector means less money left over to spend elsewhere. Without the money supply being increased, price rises in one sector would be offset by price declines in

¹⁹ The Fisher effect is the additional interest charged to make up for expected price increases so that the market interest rate retains its value in real terms. The nominal rate = real rate + price premium.

²⁰ Any unit of account only assists in measuring prices. Values being subjective cannot be measured cardinally but only compared ordinally.

²¹ Some contractors, unable to make commitments by contract during periods of unusual price increases sometimes refuse to offer their services at all.

others, with no general price inflation. Greed would in itself not be a mechanism for inflation.

27. Do costs push up prices?

It often appears that we have cost-push inflation. If supplies of goods or resources were suddenly destroyed or lost, general prices would be expected to rise. Absent this cost-push inflation is a misnomer.

The confusion follows from the observation that individual businesses rely on higher costs to signal the need for increasing their selling prices. They have no way of knowing if an increase in demand for their product is limited to only them or if it is more general and includes their competitors. So they don't automatically respond to demand increases. Yet when their costs rise they follow with price increases. But the impression that prices of goods and services rise in response to cost increases originates in misreading the cause of the temporal chain of events that occur in the market after new money is spent.

Increased spending on products initially draws down retailer inventories when retailers aren't yet aware of a need to raise prices. Then retailers and wholesalers increase orders to replenish inventories, in turn increasing the demand for producers' products.

Output from producers can't be increased at once. The result is that producers' products prices rise thereby rationing the current output to the wholesalers willing to bid more for them. This in turn signals the start of more production.

Wholesalers seeing their costs rise respond by raising their prices to retailers. Retailers who then see that their costs have risen respond by raising prices to the consumer.

Everyone except the owner of resources sees his costs rise before he raises his prices, but the cause of prices rising was the increased money in the hands of the consumer.²²

So an increase in home building leads to higher prices for logs first. Then the cost for lumber to the mill rises, which raises its selling price to the lumberyard and retailer before they raise their selling prices. Then

²² Both Milton Friedman and Alchian and Allen have fully explicated this important pricing process in their writings.

the building contractor raises his price to the homeowners after his costs rise. It appears to each of these that costs push up prices, yet as we see the cause is higher money demand for houses. Costs can't raise prices unless dollar spending comes first. For the economy as a whole, higher prices can only occur (without demand for money balances weakening or the "velocity" of money increasing) when more money is available for this purpose.²³

Price (inflationary) expectations likewise have no general effect in pushing prices up economy-wide other than through steadily decreasing demand for (holding) money.

28. Government money origin, a false narrative.

Governments can manage money and produce more units by fiat. They rarely originate money. Money evolves out of customary usage of a commodity under barter. That government rarely creates new money by fiat becomes painfully evident after a currency collapse when it is helpless to do so. The originary value of a paper currency cannot be re-created by declaration, edict or fiat. Government inflates money, it dilutes money, it destroys money; it coopts rather than originates the customary value in fiat money.

Some have theorized that by producing a form of scrip, and then requiring its use in paying taxes, government may thereby orchestrate the origin of a fiat currency. But notice that scrip is usually demarcated in an already established currency with established price arrays. Only in a limited, primitive economic setting would its introduction have some claim to origination. Such an example being irrelevant to centuries of dominance by precious metals in the role of money.

²³ This is one more example of the pitfalls in using data to draw conclusions in economics without first using cause and effect reasoning to understand the data. In economics the Austrian school is unique in its attention to a methodology that rejects the use of statistical regularities to arrive at theory, (see appendix on methodology).

29. Inflation no cure for credit crises.

Some observers, alarmed over the mountain of debt built up under both U.S. government deficits and U.S. trade deficits, have voiced concern over the possibility of a collapse of the inverted pyramids of credit.

The U.S. (Government) deficit for 2019 was estimated at \$948 billion, debt at \$22.3Tr., with the Gross Domestic Product of \$21 trillion. Foreign holdings of U.S. Treasury debt are in the Trillions of dollars. Private institutions certainly participate in pyramiding of credit off of the money base. Simply put, a fall in demand for M1, while unable to reduce the quantity of M1, can produce more near money investments such as in securitized mortgages etc. that may multiply out of control under good times encouraged by the assurances of Treasury guarantees, FDIC, etc. Securitized mortgages were held by GSE's (Government Sponsored Enterprises)--Fanny Mae, and Freddie Mac. In early 2008 they were allowed to exchange these instruments for Treasury securities. In other words the FDIC, and as most believe ultimately the Treasury, increased its debt in exchange for assets of dubious value. Past use of rescue operations and bailouts contributed to the unsustainable credit and real estate bubble that had to be deflated and de-leveraged. Continued programs purported to stem a collapse in credit markets enhanced the likelihood of future moral hazard (risk taking).

Under the threat of a credit collapse the then current Fed chairman Ben Bernanke was on record assuring that the Fed would purchase whatever assets were necessary (and thereby inject liquidity) to keep contractionary forces at bay. This means that the Fed would exercise its ability to manufacture reserves out of thin air to buy T-bonds, packaged mortgages, real estate or other assets, and thereby stimulate the production of bank credit. As the new reserves would be deposited in fractional reserve banks, this could potentially increase the money supply by a multiple of the new reserves. Lender of last resort guarantees may weaken the current financial system. Guarantees that reduce perceived risks (moral hazard) naturally contribute to credit bubbles. Political pressures for policies that avoid credit contraction dominate over those that might prevent credit expansion.

Out of this the danger is of unavoidable dollar depreciation. Historically, pressures to issue and print more money become irresistible to the central banking authority. Initially the accompanying increasing rate of turnover of money causes prices to rise. As the real value of each dollar is less this appears as a shortage of money, initiating more pressure to inflate. (See 57, 58) In the post 2008 economy banks reinforced their balance sheet need for more capital by not lending the new reserves while encouraged to hold them at the Fed by its profitable interest payments. But, this only reinforces the view that in earlier decades banks had been allowed too much leeway to over-leverage—the consequence of inflation and credit expansion forces having already taken their toll on the economy.

The power to expand the money supply by the simple accounting act of adding more zeroes allows and facilitates unlimited accommodation to political pressures.

30. Crises by money management.

Monetary crises emanating from money supply contractions became more disruptive after the Federal Reserve Act in 1913, the most dramatic crises occurring in 1929-33.

Under a market-tested regime of free banking, economy wide collapses in credit would be unexpected.

Short-lived bank crises that occurred before 1914 were the result of policies granting banks privileges that encouraged reckless fractional reserve lending practices. Even during the era of the gold standard, market discipline in banking was forestalled by exemptions allowing suspension of specie payments and periodic impositions of National Bank legislation

31. Risks from reflation policy.

Under an expansionary monetary policy, massive spending could counteract general deflationary forces. But if followed through repeatedly would risk loss of faith in the dollar and in monetary and financial institutions. A loss of confidence in financial institutions, investment, and the dollar, could result in both a credit collapse and a hyperinflationary rejection of the dollar.

Possible outcomes include economically debilitating rationing and wage and price controls.

32. Fiat money drives out sound.

Gresham's Law—bad money drives out good—applies only to a fiat money based economy. It occurs only under a regime of currency price controls or legal tender laws. Thus silver dollars today are not in circulation (i.e. not used for money) because they are now worth more than our fiat paper dollars.²⁴

This also will be the fate of new competing private silver or gold backed currency or private gold or silver coinage (not currently lawful in the U.S.). One is more inclined to spend Federal Reserve notes and fiat dollar account balances than these hard currencies. Holding on to them means taking them out of circulation. Thus new commodity backed currencies denoted in dollars fail to rise to the status of independent alternative currencies. Such currencies denoted in dollars are fully dependent on the already established array of dollar prices. This does not mean they should be discouraged. Widespread use of such certificates in contracts could be helpful in promoting the idea of sound commodity money. As yet federal statute prohibits competing private coinage.

33. No need to undercut dollar.

Some hard money advocates believe that merely allowing a sound currency to compete legally with the dollar would promote a spontaneous supplanting of the inflationary prone fiat dollar. But again, this ignores Gresham's law as well as the history of the dollar, its emergent origin from a monetary metal arising out of barter.

Measures removing the dollar's fiat legal tender or contract status, or even the exclusive privilege for a means of payment of taxes, would be

²⁴ The next time you take a frayed dollar bill out of your wallet to spend before the other crisp bills you demonstrate Gresham's Law, circulating the bad bills in preference to the good ones, which you hold inactive. Of course it will reach a bank sooner than a clean bill and be retired, but without this filter we would be handling more and more frayed dollar bills since they still have legal tender status equal to the clean bills.

insufficient to cause the success of a competing currency.²⁵ Customary use of the dollar and the mental expenditure already made by each player in the market who thinks in dollar prices already, make it no more likely for participants to substitute another set of prices in another currency than to adopt a second language. Of course, should a hyperinflationary collapse of the dollar occur, whether from over-emission past or current, then new money could well evolve in a barter environment, but not first without unacceptable dislocations to the economy.

34. Competing currency reform.

Suggestions that the new currencies with various forms of backing be used to transition (from the dollar), or be tied to the dollar, amounts to currency reform rather than a new currency. Since the public has over the centuries demonstrated its preference for gold no need exists to experiment with other solutions such as another commodity, or even a basket of commodities.

Competing currency reform does not go far enough in undoing the imposition of fiat money in the economy.

35. Why not a parallel currency?

An independent parallel currency, even with gold backing, would face insurmountable resistance in the market short of a panic collapse of government mandated un-backed (fiat) money.

Imagine an employee given the option of payment in gold certificates for a fixed number of ounces of gold. Without also knowing that she could pay her rent or mortgage in another contract set in oz.'s, and so on for all necessary expenditures she would likely opt to be paid in dollars. What it comes down to is that there would be great resistance to the develop-

²⁵ Legal tender status has no influence on dollar denominated private debt which is obviated by right of contract between parties for means of payment, which may include inflation indexing, higher interest payments, etc. Legal tender is needed when introducing fiat currency such as was the case with Greenbacks in the 1860's. Even then they afterward were discounted from par.

ment of a two-tier set of prices in the economy unless the dollar had already been effectively abandoned in a hyperinflation. Otherwise it works against the need to economize on information costs.

For the economy as a whole, switching over to the dollar at par with gold at some future price makes sense, but not if attempted piecemeal. Commerce need not be sacrificed with a hyperinflationary loss of the dollar's value to get there. (See 49, and Further Discussion on Competing Currency Reform in **Foundational Concepts**)

36. Fiat money precarious.

Fiat money lacks a guaranteed price floor; it has unlimited downside risk on the demand side. While no asset has intrinsic value (all valuation is subjective) specie backed currency has intrinsic limitations on issuance not present in fiat money. The potential loss of confidence in an irredeemable currency may not be reversed by policy that simply stabilizes its supply. For once specie support has been removed, the prospect of a future overproduction of money could trigger a crises. So also could some other shock to the credibility of the existing currency. Holding to a policy rule of little or no supply growth guarantees no stability, ultimate stability in the market depending on the subjective preferences of the participants. The variability of its purchasing power with respect to gold (i.e. price variations in gold since the 1970's) testifies to this lack of stability.

We might concede that political stability and a responsible monetary policy may prevent loss of confidence in a fiat currency. History gives us less confidence. What is stable or responsible about the current unsustainable budgetary commitment when the U.S. unfunded liability is in the tens of trillions of dollars, or the fact that 60% of the value of the supply of U.S. currency is held abroad?

Subjective valuations don't always respect authority. The near runaway inflation of Continentals (before 1779) being a case in point, the currency collapse occurred *after* money expansion policy had ended.²⁶

²⁶ After an accelerated depreciation in value of Continentals, "it was widely recognized that the cause was the continuing and ever larger emissions of paper money. Congress resolved to issue no more in 1779, but it was all to no avail. Runaway inflation was at

Once a government has violated contract and property titles to specie, as was the case in 1934 in the U.S. with the Gold Reserve Act, then mere repeal of that measure fails to establish adequate confidence that such a measure could be prevented in the future. Thus a constitutional amendment would be a more effective reform.

37. Need to shore up dollar.

In sum, at the present time our options for currency are limited to the dollar. Although only a vestige of the specie currency it once represented, the dollar remains society's money. The (gold derived) dollar was a phenomenon of the inverted hierarchy of the market; the establishment of any new money requires a long iterative bartering process, as was the case for gold. Thus, the first step in restoration is an official plan for redeemability of the dollar. Control of its supply would be in the hands of people through their market choices. Far from having the government simply sit back and watch competing currencies unsuccessfully challenge the dollar, the government could undo what it has done to our money, by setting a future exchange rate for redeeming dollars with gold, then stepping out of monetary matters, allowing for marketization²⁷ of money (See details in 43-49 below).

There is a better way to do it, find it...Thomas Edison

38. Resistance to reform.

We should expect resistance to U.S. monetary reform by those who would lose control over the artificial perquisites generated by the system. Under current practice a limit on the monetary authority's ability to grow the money supply conflicts with its policy role of lender of last resort. Characteristically U.S. policy makers have shown an inability to be fiscally

hand. In 1781, Congress no longer accepted its own paper money in payment for debts, and the Continentals ceased to have any value at all." Clarence B. Carson, (1996) p.169.

²⁷ This would include free banking with freedom to issue certificates or bank notes that could be used as money as determined by the market. We choose this term over "privatization" since private interests are already overtly influential in monetary policy.

responsible, conveniently relying on secular inflation to avoid repudiation of the debt. It is noteworthy that state governments are more fiscally responsible in part because they are unable to emit or inflate money.²⁸

39. Markets speed currency demise.

Wholesale trading in currency futures emerged *after* the onset of floating exchange rates (in the 1970's). Speculation in international currencies to accommodate expectations and avoid risk in currency and commodity prices largely arose from fiat money instability. Trading volume in these global derivative markets has become large enough to swamp even central bank efforts to support currencies.²⁹ There is always the potential for a run on the dollar in reaction to its overvaluation against commodities.

Such occurrences originating in primary human motivations are unpredictable. An indication of the onset of a dollar collapse may show up first as a fall in the ratio of the distant futures contract over the spot price for some commodities, indicating a loss in confidence that the contract could be honored to make delivery in the future or reflecting actual delivery being taken in the present as a result of loss of confidence in financial assets.³⁰

40. Government-country conflated.

Fruitful analysis of the actions of large groups requires understanding the purposes of the individual participants. This applies to foreign as well as domestic government. We know that foreign treasuries and central banks hold dollars, and dollar denominated assets in the hundreds of bil-

²⁸ Some economists see the market as inherently too unstable and in need of regulation. Others see intervention and guarantees at the root of the boom-bust cycle. Unfortunately experiments can't be run in the laboratory. Economics requires the formulating of correct explanation based on sound reasoning, and then careful application to measurable events.

²⁹ Daily trading volumes are in the trillions of dollars. Estimates for totals have been in the \$700+ trillion range.

³⁰ See Professor Fekete's discussion of backwardation on his web site: *Gold is Freedom*.

lions. Preservation of these assets depends on the motives of those directing policies of these countries. It would seem that they would want to keep the dollar viable, yet because, as in the U.S., these officials are not actually the owners of these assets, we cannot conclude that they would put the best interest of their country first and avoid a run on the dollar. To the extent foreign currencies are fiat currencies or based on dollar reserves, they are subject to similar concerns.

It should not be surprising that in some countries officials may, for instance, oversee policies not to stabilize, but to destabilize markets. They thereby create opportunities for personal political gain or perhaps even opportunities to privately trade in front of engineered moves in currency markets. Policy making then lends unpredictability to markets even in cases where management could have been stabilizing.³¹

41. Currency recall risky, unworkable.

An official devaluation of existing dollars with respect to goods in general carries unacceptable risks. The current array of prices conveys a condensation of highly complex economic activity to signal individual decisions made throughout the structure of production. Under a currency devaluation not all prices will adjust evenly. Readjustment cannot simply make use of price arrays as they were before the change since the change itself will radically alter relative wealth, income, and prices. A major price adjustment, say a 90% general devaluation of the dollar, must fall back on the trust of the public in the new set of prices, this cannot be ensured by proclamation or fiat.

Imagine a 90% revaluation of the dollar where ten old dollars equals one new dollar. Imagine that on a Monday morning all bank accounts will be officially worth 10% of their value on Friday. How could any commerce proceed when no one knows who will be bankrupt, which contracts can be honored, what institutions, corporations etc. could carry on business? Such a move would depreciate 90% of balances held in accounts, and in all dollar denominated investments. Would a truck driver be able to fill up with fuel on Monday morning with his ATM card? Who could trust such payments?

³¹ See: **Some Foundations**--Economic Projections.

What would be the point of resetting prices anyway since the dollar has no assured ultimate support level above zero? There could be no point where trust could be reset. In 1720 in France, an official devaluation of Livres triggered the currency's immediate collapse as the move alerted the public to its irredeemable fiat status.

42. Gold not a quick fix.

Alternatively, should the dollar falter, resort to use of gold alone would also fail without dollar price arrays already available to allow conversion to gold ounces. But these prices would be destroyed, and gold is not in place nor adequately dispersed as an alternative money. For generations its use has been primarily for jewelry, a store of value and for central bank reserves. It would take a lengthy iterative process to establish the gold barter price in ounces for all goods and services. Legalization of gold ownership in the 1970's was only a necessary but not sufficient condition for re-establishing gold as money.

Should gold be remonetized, meaning that the dollar would be convertible to a specified amount of gold, then dollar accounts at banks would constitute titles to gold. Likewise currency would be in the form of gold certificates. In this way gold would then be instantly dispersed to the public, but not as a challenge to the dollar, but in concert with the dollar. Such a measure would include granting banks the right to hold physical gold in their vaults as reserves.

43. Dollar price of gold not known.

With the recent turmoil in markets it would seem well past time to reestablish some official relationship between gold and the dollar as a necessary step towards marketization of money. Though a dollar price of gold exists today on the market, it is in no way a guaranteed price. This is evident from the fact that the price of gold would be the first to skyrocket should loss of trust in the dollar occur in the speculative (futures) markets.

44. Can't set a price for gold...

Unfortunately we can't simply put the two back together again by setting an official dollar price for gold. Since both dollars and gold now have

qualities of money independent of each other, setting an exchange value between them would result in Gresham's law driving one out of the market.

For instance, if gold were set at its last designated price of \$42/oz., the Fed's (or Treasury's) gold would be quickly depleted, purchased to be either held or sold on the private market for what the current higher market price would bring, (in early 2019 gold was \$1300/oz.) it would not be used as currency valued at \$42/oz.

If gold were set at a price where the supply of dollars corresponded to the supply of Fed gold, i.e. if the number of dollars in the total of M1 were divided by the number of ounces in the Fed's possession physically held by the Treasury then the price would be set so high that an unrealistic value would be put on gold and dollars would in effect not be backed by gold because that price may not be sustainable.³²

45. nor a maximum price.

One solution might seem to be to set a maximum dollar price for gold on the market, say \$2,000 per ounce, so that the Fed would be instructed to sell gold in the market to prevent its rise above the set price. Unfortunately its present gold reserves may be inadequate.³³ As a result there would be no guaranteed minimum amount of gold per dollar at the exchange price.

Further, the supply of money could not be controlled under current fractional reserve banking. Actual backing of dollars with gold could only work under a market and legal climate restricting fractional reserve bank-

³² Murray Rothbard's (1997) suggestion to do just this was made in 1985 at a time when the Fed owned a greater stock of gold than today and M1 was less. [See the Case for a Genuine Gold Dollar in (7)] Later he proposed using the gold stock of the Fed to be priced to replace only Federal Reserve Bank Credit and currency (the monetary base). *The case Against the Fed.*, Auburn Ala.: Ludwig Von Mises Institute, 1994 p147-151.

³³ According to the Federal Reserve Board in early 2007 the market value of the Fed's gold was approximately \$167 billion, M1 was \$1,366 billion, thus the amount of gold was about 1/8th the amount of money.

ing, not with the current artificially low (approximately 6%) fractional reserve system where leveraged money supply expansions and contractions would be destabilizing.³⁴

46. Pegging the dollar to gold.

Author Nathan Lewis (2007) suggested that pegging the dollar to gold would not require Fed ownership of equivalent amounts of gold or even any gold at all, only the commitment to redeem dollars in gold at a guaranteed price. This would be accomplished not only by buying and selling gold, but also more importantly by expanding money when dollar gold prices ease, and contracting money when they rise. Simple open market operations on the part of the Fed (FOMC) would involve creating reserves when the Fed purchases bonds and extinguishing them when bonds are sold, as is done currently for interest rate stabilization.

Granted, such policy would be more sensible than the present one of chasing interest rates. Interest rate targeting can be pro-cyclical, or inflationary when nominal rates may be deemed too high (when not factoring in price expectations premiums in observed market rates).

But pegging gold also raises doubts.

Lewis arrives at a stable gold pegged dollar under the assumption that governments have the capacity to follow established guidelines. But the breakdown of Bretton Woods has already disproven the viability of this approach. The U.S. failed to refrain from undue post World War II increases in the money supply. In the 1960's the stock of Treasury gold fell to 8,000 tons from 20,000 tons after Bretton Woods (1946) as foreign central banks cashed in their chips. By 1967 specie payments were suspended and finally officially ended in 1971 with the breakdown of Bretton Woods.

³⁴ Ultimately marketization includes free banking. What fraction of reserves the market will establish for checkable deposits, and what will be defined as near money, credit etc., will be based on consumer preference, competition, and jurisprudence consonant with accepted custom.

Presumably open market money supply expansion and contraction rules would stabilize the dollar and gold. But 2013-2014 experienced unprecedented money expansion and yet the price of gold fell. The link between dollars and gold may not be reliable.

Yet, there seem to be few other policy choices given the recent ballooning of the monetary base. (\$3.8 Trillion in 2014).

The Rothbard solution is to break up the monopoly of control by government institutions and defer to marketization of money through free banking. Once this approach is chosen the only choice in establishing dollar convertibility to gold is to earmark gold for each dollar of currency and for at least each dollar of bank reserves or "high powered money" (the monetary base). This amounts to \$3.8 Trillion in 2014 and would require pricing gold at a ten-fold increase in the price of gold at \$1300/oz. or accumulation of the requisite amount of gold to meet parity.³⁵ This said, we could more easily adopt Lewis's reform of targeting a gold price as an immediate move with the intention to set a price ceiling at the price compatible with 100% gold backing for high powered money (the monetary base).

Alan Greenspan's in 1981 suggested (Wall Street Journal) that some, but not all Federal Reserve Notes could be (as a transitional step) convertible. But this simply would result in those notes not circulating (Gresham's law). Just as with old silver dollars they would then command a premium, and instead of being part of the supply of currency would simply be collector's items, in no way backing the money in use.

Some, however would say the genie can't be put back into the bottle. We must have a dollar (and economic) collapse to return to sound money. But what is there to lose by attempting an amendment based announced pegging rule? A low price of gold could be set at say \$100/oz. below its closing price on a date certain. A high price at say \$1,000/oz.

³⁵ The reason for decentralizing the money supply decision stems from the need to put equity owners of bank stock at risk for decisions regarding leverage of assets over gold reserves. This is an improvement over allowing decisions by bureaucrats or politicians who have a shorter time horizon as demonstrated by Public Choice theory. After all, under Bretton Woods precisely this sort of trust in public institutions led to the over production of money and the consequent run on the dollar hence leading Nixon to close the gold window in 1971.

above that. Any fall in price below the floor could be easily arrested by monetary easing and/or gold purchases. Any move higher than the initial market price of gold in dollars towards the ceiling could trigger graduated and transparent monetary tightening. This, however would need to include a commitment to the austere measure of running a budget surplus if necessary that would be a way of extinguishing tax money collected so that the money supply could be reduced, even drastically. In the end, such a measure should be better than the failed pegging of other variables or other attempts such as the Taylor rule. After some years of a stable ratio of gold to the dollar, gold convertibility may be possible without 100% gold reserves.

47. Converting to gold.

The purpose of convertibility is to defeat inflationary expectations and to prevent quasi-counterfeiting. Under the gold standard of the 19th Century issuance of fiat Greenbacks demonstrated that even with a gold dollar quasi-counterfeiting will be attempted. Hence, at a minimum there must be a constitutional amendment to prohibit fiat issuance or at least to enforce the Lewis rule.

Under the Rothbard solution only a marriage of gold and the dollar would be workable. The dollar (Federal Reserve notes) would have to be changed from fiat money to a gold certificate, i.e. convertible after a date certain. This would make for a need to have gold set aside for this purpose.³⁶ Under a stable trustworthy currency, gold would command less attractiveness as a safe store of value especially because it pays zero interest as an investment. Hence, it is possible that its price could fall dramatically.

The attempt to demonetize gold had the opposite effect. Many economists predicted the price for gold would fall after its supposed full demonetization in 1971 when it was \$35 per oz. Yet its attractiveness increased, its latest price now around \$1300 per oz. (2019). It provides a

³⁶ Henry Hazlitt's suggestion that a slightly higher price for gold purchases than for sales would help to stabilize any immediate rush for gold, in *What you Should Know About Inflation*, 2nd Edition. Auburn Ala.: Ludwig von Mises Institute, (2007) p. 60. Lewis's plan also calls for a conversion premium.

protection of wealth that fiat currencies have been unable to provide with assurance, it retained at least one quality of money—a store of value.

To go the rout of complete conversion, once the announcement of the conversion date is made, provided it is made credible, the market will begin to adjust the price of gold to a point of convergence with the dollar, but probably well above its current level simply because of the sheer volume of dollars outstanding. This includes approximately \$1.2 Tr. in currency and \$2.9 Tr. in reserve bank credit. We may expect some other currencies around the world to follow suit, which could put more upward pressure on gold prices.

For this more difficult strategy the date should be set far enough out to allow time for orderly, gradual adjustment, say a period of four years (a shorter period could overly affect gold futures contracts). As the Treasury purchases gold to bring it up to a workable supply to match outstanding dollars so would the dollar price of gold rise.³⁷ Fed gold would then be put in the hands of commercial banks as member bank reserves at the Fed would be gold or convertible to gold. Instead of reserves at the Fed, banks would have gold, or titles to gold, as reserves. To the extent the market would support unbacked near money deposits, less gold would be needed to cover deposits than measured by M1.³⁸

³⁷ This could weigh on the side of higher interest rates keeping in mind that higher interest rates tend to depress the price of gold since investments in gold yield no financial returns other than appreciation. Interest rates that are high because of a high inflation premium and not high in real terms would not have this effect on gold. This was evident in the late seventies as gold prices rose because of money and price inflation even with high nominal interest rates.

³⁸ Some sound money advocates including Murray Rothbard have opposed fractional reserve banking in favor of 100% legally required reserves. Even here Rothbard's reform left this issue to the future, Rothbard (1994), p. 150-151. Without needing to enter into this debate, we can expect the level of reserves to at least rise significantly once Fed and FDIC assurances are removed. Clearly, any gold certificate or representation of gold deposits would be the more sound money and as title to ownership, these instruments could only be fraudulently backed by less than 100% gold. The market would determine whether such near monies as time deposits or checkable money market funds could be viable, perhaps at discount.

FDIC insurance is part of the support structure holding together fractional reserve bank credit money. This reform would include lifting bank reserve requirements while FDIC insurance could be phased down from 100% of a bank's qualifying deposit's the first year to less each year thereafter, coupled with an increased cost for this insurance each year after the return to conversion. Concurrently, emergency treasury backing for the FDIC could be instituted to avoid fear of FDIC insolvency until it would be phased out. Such a move would help bring down any inflationary expectations premium in the interest rate. This phase down of FDIC support of demand deposits would need to be extended perhaps 10 years to avoid the types of contraction that produced the 1938 setback in recovery that was a result of the doubling of Fed reserve requirements to 20%.

Finally after canceling its holdings of Treasury bonds the Fed could be relieved of its special status as monetary authority and its other services might be phased into the Treasury or other departments.³⁹

48. Dollar more unstable than gold.

Variability in the dollar price of gold has been used to argue that the fiat dollar is more reliable for monetary purposes. Yet the exact opposite applies here: the dollar price of gold fluctuates because of the variability of price expectations in the dollar.

Gold is seen as having liquidity as well as being a safe haven for wealth. Gold prices naturally increase dramatically during times of inflationary expectations because these qualities apply more to gold than other commodities.

Such price variability simply reveals the uneven process of price inflation brought about by increasing the money supply. Price inflation may show up first in commodities, the unstable variable being government policy. Markets merely adjust to the uncertainty surrounding the consequences of managed money.

³⁹ These or similar solutions are mentioned because they are possible and thus not utopian, only requiring a shift in opinion for their implementation. As long as the reform is proposed as a series of steps each closer to a market solution ultimately replacing government control over money, and the process to this end is deemed practicable, it remains consonant with minimizing intervention. (See 67. The Future.)

The appropriate comparison is between the secular stability of prices under a gold dollar and stability under a fiat dollar. Over the long run gold, not the fiat dollar, has maintained its value with respect to other goods in general.

49. No need for a parallel gold money.

Some writers propose freeing up restrictions on gold such as legalized gold contracts (accomplished in 1977), exemptions from capital gains taxes, granting legal tender status to a gold based currency, etc. to encourage a switch over to a new gold currency. These measures are fair and would at least allow for this possibility should the dollar collapse, but no gradual transition can be expected for reasons already discussed (see 32-35). But in an age of fluctuating gold prices, gold would remain unattractive in the eyes of the market. As a result we are still left with the need to first stabilize the dollar.⁴⁰

It bears repeating that even the removal of legal tender status and other supports for the dollar, although ultimately desirable, would fail to ensure a transitional path back to sound money without unnecessarily jeopardizing its stability. Gold already once emerged as the commodity of choice centuries ago; there is no need to go through the same process again; there is no need to dethrone the dollar. There is only need to re-attach it to gold.⁴¹(See 37 above)

50. Let people decide.

Textbooks maintain that digging up gold just to bury it again in bank vaults goes against common sense. But by implication the same writers deny the right of consumers to choose secure, peaceful economic arrangements for themselves. They imagine that, imposed by force of law, fiat money systems will magically be directed for the good of society. Yet every extended experiment with a force-fed fiat money system has demonstrated otherwise: Viz. that only the politically well positioned, if they are lucky, gain from these disruptions in the market.

⁴⁰ Murray Rothbard (1997) made this point.

⁴¹ A proposal to require taxes to be paid in redeemable certificates is another version of removing legal tender status for the dollar.

We have noted that before the 1971 demonetization of gold it was thought that the use of gold would decline and its price would fall below its official price of \$42/oz. after demonetization. That gold is in high demand even when not monetized solidly refutes the argument that use of gold for monetary purposes is wasteful.

This argument against gold is a moot point. Whether official or not, society has not relinquished its monetary utility. Even without its official use as money it remains in high demand precisely for its use as a store of value, and so will never be free of this form of monetary demand. Since many economists point out that the store of value role of money derives from its role as a medium of exchange, we might well attribute much of this demand for gold as derivative of its prospective future use as money. In this sense gold, although not now a currency, may yet be considered prospective money. On the question of the costs of a gold standard see Garrison (1992).

51. Fiat money inflation is wasteful.

What is certainly wasteful are disruptions from inflation, (for the U.S. a loss in purchasing power of the dollar of over 90% under a fiat regime). This has been detrimental to fixed income groups. Further, wealth is transferred from later to earlier recipients of new money injections (see 63). The consequent unpredictable price structure impedes cost comparisons for everyone. Additional costs result from redoing price schedules (menu effects) throughout the economy.

52. Freedom to choose.

Responsible financial institutions are fully capable of guaranteeing whatever commodity reserves public custom would dictate. That a stock of gold chosen by individuals seems wasteful to theorists begs the question as to whether the public should have the right to provide for their own financial security. We cannot pre-judge what cost allocations are proper. Under free banking and a market determined currency, incentives for economizing on money balances would encourage accounting clearing houses, commercial bank discounting of various credit instruments, credit cards, bills of exchange etc. After reversal of policies that

divorced the dollar from its commodity origins, repeal of legal tender laws would let the market decide the extent of use of these instruments.

We should not expect the public to over-pay for their money balance needs any more than they would over-pay to buy a car. We don't imagine that cars would be safer if the auto industry had been one big non-competitive government monopoly over the last half century. Why should the provisions of monetary services be a non-competitive monopoly?

Predictably, in the information age more educators and economists now recognize that choice is preferable to autocratically imposed, constructivist legal regimes. The classical liberal policy of leaving people alone is more compatible to modern outlooks.

"All the perplexities, confusion and distress in America arise not from defects in the constitution or confederation, nor from a want of honor or virtue so much as from downright ignorance of the nature of coin, credit and circulation"

(John Adams in a letter to Thomas Jefferson, 1787)

53. Gold standard undermined.

The misperception that gold was of inadequate quantity under the gold standard to sustain the world economy's need for money stems from the deconstruction of international free market trade clearing mechanisms and from the abandonment of monetary discipline during W.W.I deficit spending. The consequent miscalculated attempts to force deflation under an unworkable return to gold at too low a price in Britain added to this misperception. In the U.S. the monetary contraction in the 1930's occurred not under a gold standard with free banking, but under a reserve system run by the Fed, established in 1914. Expansion and contraction of money and credit were exaggerated under this system, a system that overruled market restraints that had under the gold standard prevented banks *en-mass* from over extended loan to deposit ratios. "It is not the old classical gold standard, with effective gold circulation, which

has failed; what *has* failed is the gold 'economizing' system and the credit policy of central banks of issue."⁴²

54. Gold has financial flexibility.

Market oriented monetary systems such as the gold standard can be fully complimented by sophisticated financial institutions. Bank discounting of commercial paper results in short-term bank liabilities covered by longer-term bank assets, a market function of intermediaries. Borrowing also allows use of money now, in anticipation of future money income, made possible by a developed financial system, just as renting allows for present use of assets or property that one cannot afford to buy, but which generates the possibility of income to the renter in excess of rental payments.

The textbook description of the international gold standard adjustment mechanism known as the *price specie flow mechanism* implies that gold flows were necessary to adjust to trade balances. Through reducing prices with gold outflows, for instance, a country would thus have more attractive prices that would lead to more exports. However, adjustment where, for example, deficiencies of goods exist in one country, can occur simply by higher short-term interest rates drawing on more short-term loans from foreign sources until prices fall back to normal. In any case under a uniform currency, the world economy would be no more out of balance than the state of New York is with the state of California of which both, after all, have larger economies than most countries. No one tries to keep track of trade balances between New York and California. In other words balance of trade deficits and surpluses are a non-problem.

55. Fairness of private property.

Safety in contracts and titles of ownership, including the freedom to contract interest fees, fosters economic growth and is essential for monetary stability. Clearly the institution of private property rights correlates to economic progress, however measured.

⁴² Ludwig Von Mises, (1990 [1930]), p85.

Geo-economists maintain that entitlement to land and the natural endowment is universal, reflecting ancient roots in commonality. Such a view need not be in conflict with Lockean natural property rights principles. In this approach, while resolving certain disparities through various pollution, resource and sight value charges or fees, some entitlement to every member of society proves expedient where covered by a part of the revenue from implicit land rental windfall. Henry George (1879), an early advocate of this position, envisioned a tax on land that remained under private ownership.

The 2007 real estate crash followed a bubble amplified by government tax, loan & **Fed** policy. Do ancient rights of the commons cast an ethical cloud on titles to ground land? **Geo-economists** claim universal shared natural wealth was usurped by a landed aristocracy with State land grants and enclosures. They see windfall gains to sites benefitting from public works. They favor site and resource usage fees or a land value tax (LVT) to effect lower lot purchase costs, to end to taxes on buildings, to reduce urban blight, release idle or underused land to market, damp real estate cycles, spur renovation and urban infilling, slow geographic sprawl, and reduce taxes on goods, labor & trade.

56. Failure of money management.

By itself, lack of reliable money supply measures raises questions on the effectiveness of monetary policy. Recent official discontinuation of the series M3 underlines the difficulty of using monetary aggregates for accurate tracking purposes, especially aggregates that include near-monies.

The alternative strategy of price index monitoring also has severe limitations. Measures of the CPI (consumer price index) or PPI (producer price index) fail to account for real estate and capital markets adequately. In particular these measures have most recently under-represented price appreciation in land and the stock market. Of greater consequence, they are incapable of picking up other important systematic distortions that permeate an economy. F.A. Hayek (1967) has analyzed prices change during inflationary periods. Prices never change in concert but unevenly and disproportionately and with different time lags. Thus artificial monetary and credit injections introduce an unnecessary disruptive element to the

economy. Without a scientific measure of prices, policies based on price level targeting rules are likely to be disruptive and fail to prevent real estate and stock market bubbles.

Further consideration of the difficulties for policy has been noted by writers associated with public choice theory as well as methodological individualism. They reveal a well-documented, alarmingly regular, disconnect between what well-intentioned policy proponents expect or recommend, and what governments ultimately do. For instance, easy monetary policy seems regularly to be applied several quarters preceding a general election, producing what has widely become known as the political business cycle. More disturbing is the partnership between government and too-big-to-fail financial institutions that has led to the growing use of terminology such as **corporatism** or **soft fascism** to describe the dominant economic arrangement surfacing in recent years.

Under a free market monetary system, with free banking and no Fed, the potential for undue monetary expansion yet exists. Expansion occurs during increased confidence in financial instruments that reflects fading memory of previous downturns. Nevertheless markets produce more safeguards when free from government guarantees that promote moral hazard behavior. Under market discipline we may expect a spectrum of credit instruments based on risk or illiquidity from low to high. The money character of low risk instruments may change, they may approach that of redeemable currency itself. For instance, stock in or claims to gold mining companies that own proven reserves could, absent political instability, be considered assets of more liquidity.

57. Fiat money has inflation bias.

As we have seen under a regime of fiat money, the combination of public pressure, politics, and a misperceived need for a loose money policy can combine to accelerate price inflation. When an economy suffers a downturn from the uneven stimulus of monetary injections, and consequent price uncertainties, the financial community looks to government to undertake expansive monetary policy. But more money only results in affecting prices, alas, the real money supply cannot be raised.

58. More money is no help.

We have seen (8) that ultimately money in itself only renders one service—that of a medium of exchange.⁴³ Money, unlike other inputs in the production process is never consumed or used up, and more units of money delivers no general benefit. Individual market participants as well as government agencies desire more funds, however gained, at affordable interest costs. To translate this as a need for the economy as a whole is an example of the fallacy of composition.

Under numerous inflations in the past monetary authorities have succumbed to unwittingly running the printing presses to supply liquidity, thereby exacerbating inflation. This has been stated as the “*law of accelerating issue and depreciation*”.⁴⁴

Under past instances of hyperinflation, because the money supply was increased at a slower rate than the rate of inflation, the perception was that money was in short supply since the real (adjusted for inflation) money supply was falling. Of course this occurs because the demand to hold money drastically falls (“velocity” of money rises) as people buy anything to get out of holding a depreciating currency. So to accommodate perceived liquidity needs, money supplies are increased only to accelerate the currency depreciation process.

The demand for holding money for purposes of wealth declines because of money's falling value; concurrently, the demand for holding money for transactions increases, as more money units are needed to engage in the same transactions. The former effect dominates the latter forcing prices up, total demand for money balances falling. This is why the rate of money supply expansion is overtaken by the rate of price increase. The supply of money is inadequate to provide for needed transactions, barter begins to surface, and further, governments are unable to meet payrolls for essential services.

⁴³ This function subsumes the other familiar functions of unit of account, store of value, etc.

⁴⁴ Andrew Dickson White, *Fiat Money Inflation in France*, Irvington -on -Hudson, New York: The Foundation for Economic Education, (1959), p.20.

Hyper-price inflation, becomes the end game of fiat money, as these misconceptions encourage more money inflation. Increased price expectations reflect the fear of future price rises; demand for money to hold diminishes as people want to avoid holding a depreciating currency, and spending on anything tangible thus spurs prices upward until the asset values of financial holdings are reduced to irrelevancy.

59. Monopoly.

The absence of the pricing process for internal operations explains the natural limit on the size of large vertically and horizontally integrated firms as well as for governments. Government monopolies function and survive by access to power that insulates them from markets. Corporations generally gain monopoly status when granted legal privilege and protection against competition from more efficient rivals. In fact the only consistent definition of monopoly derives from this non-market condition (Rothbard 1962).

Along with the necessity of a market price system dynamic, progressing economies require wealth and capital to contend with competitive challenges. Only this produces the superior outcomes based on allocation and attendant risk born by the entrepreneur. However individual, as opposed to community, titles of absolute ownership are not always an outcome of market economies. Social institutions have been 'public' and yet not necessarily sponsored or derived from the State. Various forms of community or collective ownership in resources and land use can be compatible with a vibrant and progressive view of equitable sharing of the natural endowment. Inclusive of this the institution of private titles to ownership constitutes a prerequisite to progress.

60. The cost of losing price system.

As we have seen, one of the miracles of the market is the price system which signals each of the individual participants as to what and how much can be brought to the market, and as to what and how much can be purchased in the market without the need of participants to know any more about the overall picture of the economy's production and distribution

process.⁴⁵ A temporary suspension of the price-exchange system would unacceptably impact a modern economy, leaving it to rely on autocratic direction with the impossible task of coordinating input and output decisions for each stage of production for each good or service.

Only a return to the long iterative process of barter would build the array of prices necessary to reset the economy. In the interim the market would be unable to function. How would an advanced economy provide even the bare essentials? Civil order itself would be in jeopardy. The Soviet Union was unable to produce a viable economy under a command regimen; it relied on external price arrays copied from the West, and an underground black market.

61. Fiat money system too risky.

These concerns about the long-term outlook for stability of fiat money rest on several thousand years of failed fiat money systems and on the experience of recent history as a warning. Once a currency has been nationalized, removed from its market commodity connections, the entire market economy becomes subject to the vicissitudes of inept policy. This is the state of the fiat dollar today.

62. Money inflation...non-neutrality.

The “microeconomic” details of the inflation process are not amenable to econometric models based on Walrasian general equilibrium. An increase in the supply of money will ultimately result in generally higher prices as the quantity theory of money predicts, although not as the familiar mathematical equation $MV=PT$ (relating money, velocity, prices, and transactions) implies. What is missed, and what is of importance is the path between states of equilibrium and the long run result. Neither

⁴⁵ This phenomena known as emergent order has well known counterparts in the natural sciences such as seen in the apparent intelligence directed organization of ants and bees. Under scrutiny these reveal simple individualist rule-following, not at all centrally directed. Simple rules adequately account for optimal group behavior such as swarms of bees choosing the best of available beehives. For the market economy the simple rules are price signals that each participant uses to make decisions individually, not requiring information of others decisions.

wealth redistribution welfare effects nor malinvestment effects occur in equilibrium.

63. Money inflation-unfair.

Inflation has a perverse welfare effect. To illustrate this point, instead of the Fed increasing the money supply, suppose it was left to a ring of counterfeiters to produce the same quantity of new money over a given period. In the long run the standard quantity theory of money predicts a final or ultimate price level equal to that resulting from the monetary authority producing the new money and dispersing it evenly into the economy.

Counterfeiters are able to increase their wealth by spending the money without any contribution to the economy, in fact by stealing it from the economy.⁴⁶ And each of the rest of us who have money balances or savings denominated in dollars, such as CD's or bonds, lose purchasing power by some much smaller fraction that is in the aggregate proportional to the gain of the counterfeiters. They win; we lose. We lose by going to the market with our money and discovering that prices have moved up due to the free spending enjoyed by the counterfeiters. Those on fixed incomes lose altogether until, usually much later if at all; their pensions, annuities, etc. adjust upwards—their earlier losses never recouped.

Borrowing takes place through the sale of U.S. treasury bonds. Such borrowing has a credit tightening effect on the markets (crowding out effect). To accommodate this borrowing the Fed buys Treasury or other securities. Credit can be paid for by the designated privilege of check writing to monetize the debt so that the deficit financing doesn't interfere

⁴⁶ We are speaking of the generic counterfeiter. Some argue that there is nothing wrong with counterfeiting certificates that are ingenuous such as Federal Reserve notes (see 18). A true free market could hardly defend a copyright against replication of empty promise notes. But orderly transition to free market money requires preservation of the copyright. As we have seen fiat money has absorbed the market's accomplishment in originating money. The dollar as society's or the people's money could, in principle, be restored by returning to a free market in money through retracing steps that originally monopolized the system.

with the targeting of interest rates by the Fed. These checks are no different from bogus money, written on an account with insufficient funds, in fact with no funds! These checks are deposited in banks, which can use them as reserves to make loans merely because of a legal privilege.

Should a customer call on the bank to redeem a check paid to him out of this new bank credit he can demand only Federal Reserve notes costing the government only ink and paper.

In short, when this new surge of funds enters the economy the first recipients fortuitously get to spend before prices rise. After the money filters through the economy higher prices in general reduce the real value of dollar denominated assets generally. This process produces exactly the same transfer of wealth that would occur if an enterprise were able to counterfeit money, spending in the market making windfall gains at everyone's expense, the expense all the greater for those later in the series of spending transactions. Those in the proximity of Washington D.C. have this advantage over those in the hinterland.

64. Money inflation malinvestment.

Inflation of the money supply carries other costs to the economy at large in addition to generating inequalities. Cumulative distortions due to present value calculations of alternate streams of income from alternate production processes occurs because easy money lowers loan market interest rates. This results in over-investment in some parts of the economy, matched by under-investment in others, which leads to losses and dislocations revealed only in the later correction due to lack of real savings available to sustain the easy money environment. Thus during the great depression of the 1930's, far from being a failure of consumption-spending, spending for the longer term investment processes fell significantly more than for shorter.⁴⁷

⁴⁷ See Skousen, *The Structure of Production* (New York University Press, 1990) for graphical depiction of the Austrian view of the stretching and shrinking of the upstream vs. the downstream sectors in the process of bringing resources through the stages of production to the consumer. (Also see Austrian Business Cycle Experience in **Some Foundations**)

Price inflation leads to cost illusion which leads to profit exaggeration. Businesses calculate expected profits by subtracting costs from revenues. By using costs of acquisition for capital goods and inputs in the last period these costs give the illusion that profits are higher than will be the case when increased costs for the next period are realized. Without tax law changes this raises taxes on business much as does bracket creep and capital gains taxes. It can result in capital consumption as owners see less need to put aside funds for depreciation allowances, thinking that the appreciating capital and improvements valuations are sustainable.

65. Sound money to reduce waste.

Incentives for major costly government programs could be partially rectified by holding the Federal Government to the fiscal restrictions that each state faces, i.e. denying it the power to increase the supply of money. Deficit spending, the issuing bonds to pay for expenditures in excess of tax receipts, would confront increased costs of borrowing and rising interest rates which could not be eased by flooding the economy with easy money. There would be no monetizing of the debt (i.e. Fed production of new monetary reserves out of thin air to be lent the government by buying treasury bonds.) Unfunded liabilities of the Federal government now are in the tens of trillions of dollars. Unfunded liabilities for social security and Medicare now have become unmentionable.

Loss of the specie-linked dollar holds us hostage to the possibility of a collapse of trade and the loss of the economic advantages resting on specialization of labor. The emerging global market economy is enormously more efficient and beneficial than locally self-sufficient systems of the past. Even a partial financial collapse could escalate into a global breakdown of trade.

66. Banking: Impaired markets.

During the September 2008 financial panic the question of a need for stopgap measures to prevent a bank money supply collapse came to the fore. On the surface rescue measures included increasing coverage of FDIC insurance. This action of solidifying confidence in demand deposits

and money market deposits was seen as unavoidable. It constituted corrective measures arising out of government sponsored central banking and an artificial FDIC indemnified fractional reserve system.

The predicament in which monetary authorities found themselves was not prevented by central banking. The Federal Reserve System, the FDIC, and the resultant over-extended system of fractional reserves was no barrier to excessive credit followed by possible systemic default. In the modern digital world it was feared a run-away financial panic may have developed, raising the question as to whether the economy would remain intact, given the possible suspension of our electronic system of payments, credit transactions etc.

As a rule, Austrians hold that initial interventions, whether fiscal or monetary, fail to help in the long run. In this view intervention such as stimulus money during recession most often retards adjustment by spending in sectors in need of lower input pricing (in areas that experienced over-stimulation in the boom such as real estate, financials, automotive, and some stock equities). Stimulus money such as TARP (Troubled Asset Relief Program) to bail out corporate financial giants leaves the impression of policy directed as a form of corporate welfare and privilege; it fails to provide confidence that policies are directed to assist the general economy.

As a quasi-public institution the entire banking industry operates in its own world dependent on the tacit backing of the Treasury as the ultimate backstop for the public's bank deposits. These deposits are not held by banks in escrow for the depositor, but loaned out for profitable interest return to the banks. Free banking advocates, as well as those contending that commercial contract law, would hold banks to 100% reserves on demand deposits (Barnett and Block 2005). They claim that their solution leads to greater stability in supplying liquidity to the economy, and hence advocate governance through market discipline instead of quasi-government partnerships with commercial financial interests.

For Austrians such market discipline if unfettered and part of the market environment would have prevented the over-extension of bank credit and the development of the too big to fail phenomenon. Again, governance in the form of individual choice and consumer sovereignty applied in the beginning would have incrementally but effectively steered the banking industry away from its precarious insolvency—through the need

to instill consumer confidence. Regulation by the (sovereign) public had been preempted, if not subverted, by a congressionally concocted artifice, resulting in a less, not more, resilient money and banking infrastructure.

In short, for government protective intervention, just as in forest management, more is less. Frequent intervening against small fires increased accumulated flammable debris. Supportive intervening against small market corrections increased accumulated toxic assets and financial risk. The dilemma lawmakers find themselves in stems from the nature of their charge to fix problems with the only tool they possess—statutory legislation, which provides only a suboptimal outcome in jurisprudence.

67. The future.

Recent years have seen the advent of investment vehicles including index funds and gold mining mutual funds used for hedging purposes.

We've seen acceleration in the learning curve on monetary matters resulting from the ability of the Internet to provide information more efficiently. For example, we've seen increasing concerns from the growing awareness that the dollar was made fully irredeemable after the 1971 default.

Given the size of the derivatives markets one must ponder over the possibility of a panic run on fiat currencies into commodities, especially gold, and the disorderly results this implies for economies. Even knowing that this could occur gives no clue as to timing. As with other major market moves, the unpredictability of timing leaves us with a growing degree of uncertainty.

Where we do have certainty is in the fact that institutions that currently govern the value of the dollar have a proven track record of failure. Depreciation of over 90% of the value of the dollar in less than half a century by itself makes a good case against continuing the status quo. An orderly return of the dollar to a sound commodity basis, of incontrovertible attributes, offers an alternative.

None of these reforms are physically impossible, their adoption only requiring a change of mind. We are reminded that before the American Revolution, in a world of monarchy and despotism, it had been thought practically impossible to establish a political system unambiguously

based on individual sovereignty as envisioned by the founding generation. Visualizing change is the first step.

The results of a statutory monetary regime constructed through a combination of banking industry interests and political purposes speaks for itself. Alternatively, free banking in a free market is socially rather than hierarchically emergent. Its workings are not easily comprehended and so at a disadvantage in a culture looking for command and control solutions. But there exists another path that relies well-tested socially adhesive rules of interactive commerce.

Conclusions for this discussion cannot be predictions. This is in a field of inquiry neither able to produce certainty nor reveal timing of events. Our conclusions are that the technology of emergent order prevails over a constructivist one (in money, a gold rather than a fiat dollar). Eventually the choice will be made, the only question being whether we wait until it is forced on us by circumstances. It can arise from the inherent contradictions of artificial constructs. It can arise in light of global realities, by replacing of hierarchical monetary institutions with originary social ones.

Doing nothing takes the unnecessary risk of a well-established path, however delayed, that leads to disruption. It risks economic distress first through dollar rejection, then through government reactive intervention that destroys the price system.

Such an outcome may be difficult to see coming. Initially, even a hyper-dilution of the money supply by an inflationary policy would only mean that the dollar's purchasing power would rapidly lose value. Since the price system is essential, price adjustments, costly as they may be, would continue on without abandonment of the dollar, it being the only money-price system available.

But then, under such adverse conditions, and the call for more money as the real value of currency falls, misguided political intervention would take over to stem the dollar's loss of value. The government would resist admitting its role in causing price hyper-inflation. Blame would be placed on the free, "unregulated" market.

At this point even Monetarist fiat money advocates would be silenced. Ironically these economists would then be helpless to prevent the unravelling of their cherished limited free market economy that failed as a result of constructivist meddling in the social order, a meddling in which they played the leading role.

The policies to follow would be easily predictable: first wage and price controls would be imposed; then usury laws against charging interest (these are also price controls) would follow. Commodity speculators would be blamed; hoarding would be a crime, and businesses would be accused of greed and “price gouging”.

None of this would keep price levels from rising because no such mechanism exists to shut down the market's ingenuity in seeking ways to clear as supply and demand dictate.

The next stage would be increasing penalties for breaking these laws. At some point the level of enforcement violence would drive markets underground. The attendant flourishing of organized crime would follow. All of these measures have recurred in the past.

Hayek viewed renewal of economic discourse as necessary for each generation. False doctrines resurface unless challenged by examination under the discipline of discursive reasoning not evident at first sight. Hence every age will need to expend effort to review the insights provided by the early masters. Knowledge is not enough, understanding is necessary.

Foundational Concepts

How money differs from other goods in the market

First, money is far from the root of all evil—that could only apply to the love of, or obsession to amass, money; money is beneficial because (free) trade is an a-priori, win-win activity (as perceived by each party, ex-ante). Trade promotes peace for this reason. ‘If goods don’t cross borders, armies will.’

We know that money acts as barter good for all other goods in the market. We know that money liberates (exchange of) goods in the market from the inconvenience of direct barter. It solves the problem of the double coincidence of wants that is necessary under barter for one to find a buyer of one’s goods or services.

Second, we know that it provides a means of accounting where assets, and exchange of goods and services, can be reduced to a single measure.

Third, we know that money is not consumed or exterminated as are goods and services to one degree or another. It is not desired as a direct means of satisfying ends or needs. It is not used up.

Fourth, whatever the supply or number of units of an established money the function it plays in the economy is the same. A similar country that has double the money units of another country would have roughly twice the price level, but experience no functional difference.

Fifth, if a country with a stable economy is in transition to a state of greater or lesser supply of money there are consequences due to the disruption of its use in calculation, and due to distributional disparities, as well as due to location and due to individual differences in income, wealth and asset disposition which includes differences in disposition over time.

Sixth, money is demanded for transactions, speculative, and store of value purposes. These, however are all subsumed under its use as a means of exchange. These demands can be separate, especially in hyperinflation when the transactions demand increases, and the other demands decrease.

Seventh, the price of money is what it can be exchanged for, its purchasing power. It is thus measured best by the general price level, though inversely.

Eighth,, in using the term 'demand' we mean a schedule or demand curve, that may have a variety of quantities demanded at different intersections of the supply and demand for money. If supply is fixed (inelastic), increased demand (a shift out in the demand curve) can result in only a rise in its purchasing power (i.e. generally a fall in prices).

Ninth, money is a stock, not a flow. When the timing of income flows are matched to expenditure needs more efficiently, and when clearing-house techniques improve, such as with credit cards, the demand for money balances is reduced. Confidence in near monies and other liquid assets can reduce this demand.

Tenth, the demand for money affects the price level. Reduced desire to hold money raises prices and hence reduces the real money supply but not the number of units of money balances. The number of units is the monetary base controlled by the monetary authority in contemporary monetary regimes.

Eleventh, the price of present money is not the interest rate. Interest balances the exchange of present for future money, it could be seen as the rental price of money.

The Price System

Early economies rested on self-sufficiency. Growth in the use of barter eventually allowed later economies to make use of the advantages of association where individual diversity and division of labor complemented the pursuit of human goals. A social existence provided mutual benefits some of which were inadvertently fortuitous.

One most identifiable benefit was the spontaneous development of a price system. The success of an economy depends on the automatic coordination of countless daily exchanges—on allocation decisions and mental assessments of participants each able to signal demand and supply information through prices alone.

Resting on the need for a respect of ownership rights and the political freedom to enter into exchanges, it was the price system that provided the essential coordinating linkage for the gains of civilized life. And the price system was no result of planning by social organs; it was a prime example of emergent order.

Over the centuries political interference with this process had continually plagued the performance of economies. The fully developed analysis of how this interference progressed had to wait until the 1920's. This exegesis revealed how free association and free markets generated a price system that was singularly unavailable to centralized and authoritarian command economies. These insights were attributable to Austrian economist **Ludwig von Mises** writing on the subject of **economic calculation**.

The problem with central planning rested in its inability to marshal the requisite individually acquired information, including risk assessments and intuition that only individuals committed in the market could possess. As owners they were also directly affected by their decisions that brought either economic success or failure.

Mises recognized that without market prices such dispersed and decentralized information could only be transmitted to the central organ if that organ could read and assimilate everyone's thoughts instantaneously and omnisciently. With markets, all the way up and down the vertical production structure from resources to producer at each stage, to assemblers, wholesalers and to retailers and likewise horizontally across sectors of the economy, prices signal supply and demand at each level. These prices were to convey information that would coordinate the whole economy. Without prices a central authority was powerless to manage production.

This crucial insight applies to attempts to centralize decisions in large firms as well. Under a free market one of the natural checks to the consolidation of firms into monopolies follows from these principles. Vertical and horizontal integration within a firm eliminates prices at each level or sector thus depriving the firm of needed information. Efficiency requires market prices. For the individual firm the internal absence of the pricing process produces a natural limit on the size of large vertically and horizontally integrated firms. Austrian economist Murray Rothbard (1962) best illustrated this principle and the conclusion that monopoly only results from intervention by the state.

Governments attempting to run armament production during past wars made the mistake of also implementing price controls, creating bottlenecks and conditions where markets didn't clear. Governments only function and survive as monopolies by access to power that insulates them from market discipline.

An economy built on a price system has the potential for enormous gains. Unlike a central planning board the modern market daily, trillions of complex economic decisions, displaying a level of efficiency not comprehended by early socialist theorists.

The inherited spontaneous and unplanned phenomenon of coordination rests on information made visible in a dispersed decentralized manner by the price system. But, it is a system that works whether understood or not. It brings with it no automatic guarantee of its comprehension.

There was never any certainty of avoiding the intellectual error of assuming that central organs of authority could access this information. Intellectuals in an age of engineering marvels were blind to the limits to creating a non-price based allocation of inputs and outputs. Thus it was the understanding of the nature of the price system, not the system itself that became a point of weakness, the Achilles heel, of a developed market economy.

The more intricate or developed this system, the more vulnerable it is to failure in the event of a disruption in the pricing process.

At any time market prices depend on an iterative process of discovery through auctioning and negotiation and arbitrage based largely on knowledge of past prices.

In recent history the transition from old to new currencies or new money, though disruptive, was not usually destructive of civilization. With a global economy of largely fiat money led by the U.S. dollar the possibility of the loss of the price system looms more ominously.

But no new engine of money production was needed. The market would gain nothing by having more units of money one period over what it had the previous period. Any amount of money functions fully in its role of medium of exchange simply because there exists no one pre-ordained general price level.

Open market operations by the Fed can increase the money supply. More economists are beginning to see that the banking system as a whole operates under its own rules. It receives new deposits that automatically allow for increased interest earnings on the new loanable funds. This is a perverse incentive to inflate.

In the real world when money inflation occurs other dynamics enter into the mix. Historically, increasing the money supply resulted in a higher level of prices than would have been otherwise, but the path to that level was neither linear nor a simple projection.

As prices of assets rise, excessive expectations create bubbles. Just as science recently learned of the follies of fire suppression in a forest, economists now see parallel, unintended consequences as a result of money and credit infusions in the market. Corrections were thought to be possible through easy money policies whenever the economy seemed to falter. But studies have revealed misinvestments and unsustainable combinations of resources and capital fostered by imposed artificial credit expansion.

Eventually money and credit expansion would become self-limiting as prices increased. Return to a normal lower level of invest-

able funds would require downsizing in some capital intensive endeavors, including idling of some committed inputs, some processes unable to be brought to completion. Overall, the economy would suffer unnecessary losses. We need only refer to the stock market bubble of the 1990's and the real estate bubble of the 2000's.

F. A. Hayek's elaboration of these ideas in the late 1920's and 1930's underscored the unique efficiency of a system where independently each producer reacts to prices relevant to his/her inputs and outputs without need of knowledge of a general nature about the economy or factors affecting other producers.

Similarly corporations only become true monopolies if granted privilege and protection against competition from more efficient rivals. Along with the necessity of a market price system writers have recognized that dynamic progressing economies require individual control of wealth and capital. This produces outcomes based on allocation and attendant risk born by the entrepreneur.

The Importance of Money

Functional **Money** is *that medium of exchange or currency in which the array of prices is expressed in a market venue*. Money makes the price system possible. Because the money nexus constitutes the other half of each exchange of a good or service, its ubiquity enthrones it as the kingpin of the price system. Again, money arises out of a barter system as a means for one person to trade goods he has with another who has goods he needs but who does not want what the first has. Either can sell what he has for money to buy what the other person has. It overcomes the limits of barter described as a system of trade among those with a double coincidence of wants.

Unlike other goods, money retains and embodies the original barter relation with all other goods and releases or liberates the exchange of goods from the inconvenience of barter. Money links all of the other goods and services together so that they can be measured against each other.

Ordinarily, should any currency or money denomination suffer destructive rejection, another currency quickly takes its place as people continue to desire money on a daily basis. This was the case in Europe when there was access to more than one currency. But in a one currency dominant economy such as the U.S. no substitute is readily at hand.

In imagining the introduction of a new currency, the mind first thinks of linking the new money to an existing array of prices. It is one thing to lose the use of a currency, but quite another to lose the memory of prices. Historically venues for failed currencies were not as geographically extensive as the dollar. Their replacement with alternative currencies at hand was possible. Some merely substituted for the old currency at an exchange ratio so that the price system could remain intact.

With a dominant currency such as the U.S. dollar (and an entire economy with only one set of prices) substitute currencies were unnecessary. Should a rapid loss of value in the dollar occur, that process itself could (by disrupting prices) destroy bond values, savings accounts etc.; it could change the value of contracts, and interrupt production. Any attempt by participants to link or revert back to the last set of normal prices by an ordered devaluation would be frustrated by bottlenecks. Markets would not easily clear. Wholesale bankruptcies of financial institutions would likely close essential access to credit accounts and ATMs. Merchants would refuse checks, cash would be short of hand. Shortages and dislocations would further disrupt coordination.

Political reaction would follow with imposition of wage-price controls; accusations of price gouging, and even more severe penalties could sabotage the price nexus.

Then only a reestablishment of prices through a long process of barter could restore normalcy.

Such an occurrence has parallels to an impending avalanche—a definite threat, but not necessarily immanent.

The re-establishment of the price system was put to test on a large scale after the fall of the Roman Empire. Debasement of

money had finally led to its abandonment despite resort to every measure including the death penalty for refusal to accept it in trade. Destruction of the market ushered in the Dark Ages. Return to an extensive, trade-based market economy took centuries. The downside to fiat money is not simply the potential for disruptive inflation, but the collapse of the cooperative economy back to rudimentary self-sufficiency. Once the price system is down, it can't be brought back through decree, for no criteria remains for setting prices. The collapse in itself would rearrange needed price ratios.

The dissolution of a price system from 400 to 500 A.D. meant a return to the land, not an option today. The downside risk for the value of a commodity-linked money has never been zero. The downside possible value of fiat money built on promises only is exactly zero.

As stewards of government, U.S. citizen have dropped the ball. Now this one essential kingpin, money, is solidly in the hands of a system that knows how to wring out the value of money for the benefit of interests remote from the people. We've trusted money with one centralized monopoly insensitive to this downside risk that its loss presents to public commerce and market participants.

Normally, the cheaper it is to produce a good accepted in commerce, the better off the supplier. The federal government/banking partnership could cheaply produce more units of money only because it first captured control of commodity money that had derived its acceptance out of customary use in the markets.

That governments are incapable of creating *de novo* a money system will be explored below. It will be seen that money is a time dependent market phenomenon rather than a result of proclamation, edict or statute.

Government expanded its domain to include exclusive production rights with a disingenuous but legislated (albeit extra-constitutional) sleight of hand. It printed irredeemable paper dollars that appeared indistinguishable from notes redeemable in commodity money. (Compare the new Federal Reserve Note dollar to

the older silver certificate dollar, or the twenty dollar Federal Reserve Note to the its twenty dollar gold certificate predecessor, each the same size, color, and appearance.) Making the new dollar **legal tender** by force of law completed the process. At no point did government “create” this money. We will see that rather governments co-opt and often destroy money by over-printing money certificates or partnering with banks in issuing excessive credit money.

Leading economists sympathetic to a politicized monetary system, never addressed the weaknesses of fiat money. They saw in it an answer to managing economies without dealing with fiscal matters through a legislature, for initially the monetary authority kept the money price system intact. These economists were as social engineers sparing society the trouble of keeping commodities on hand just to back the dollar. But these theorists overlooked that 1) they weren't the ones really in control of this new engine of money production and 2) with what control was possible, money remained unmanageable. They have presided over the destruction of the built-in market protection of society's currency against infinite downside risk, thus recklessly over-ruling historically established stable money, all of which was unnecessary.

As an unintended consequence of money printing or **money inflation**, what appears to be a period of growth in available financing for business later is revealed to be of no long term benefit. This results as prices rise enough to adjust the ratio of the real money supply (after the money depreciates in proportion to price increases) to its normal level in the economy. Although the economy is never quite identical thereafter, and can be disrupted in extended inflations, this adjustment back to its normal (real) supply occurs historically over and over. This reflects the fact that money's usefulness to an economy is fundamentally unaffected by the size of the nominal supply, or how many units is extant.

To see this suppose two isolated countries have identical resources, population, and production of goods and services. And one has double the amount of money as the other. It would be

easy to expect that the only difference would be that the price level in one country would be roughly twice that in the other.

Econometric studies can document that recession and depression followed super-imposed bouts of easy money and credit. These results were fully explained by the Austrian dynamic theory of the business cycle.⁴⁸

We have now seen the purchasing power of the dollar fall to less than 10 percent of its WWII value by the government's own estimates. Gradual degradation of money and the resulting economic drag militates against a fiat money system. It provides the monetary backing for massive deficit spending that enables an adventurist undemocratic foreign policy.⁴⁹ What is more, such weakening of the foundation of a currency places the financial system in a critical state. Even though not immanent or predictable it raises the possibility of a severe and unnecessary interruption of the price system. Such a state of affairs is inconsonant with the intelligent application of economic science in pursuit of the public interest.

Methodology

The distinguishing feature of economic science is its study of agents acting from motivations. Analysis begins with the knowledge that individuals act guided by purpose.

⁴⁸ "Early-stage industries grow more rapidly during expansions, but they also shrink more rapidly during recessions." Robert F. Mulligan, *A Hayekian Analysis of the Term Structure of Production*, Quarterly Journal of Austrian Economics Vol. 5, No. 2 (Summer 2002) p32. Note that the Austrian School of economics differs in methodology from the other approaches in understanding that applicable economic theories are not dependent on testing, nor are they arrived at through statistical empirical research, they are causal-realistic.

⁴⁹ Global adoption of the quasi-counterfeit method of raising revenue enabled the belligerents in W.W.I. to extend that war to excess with the well-known disastrous results that carried up through much of the 20th Century.

This methodological individualism starts with what we know: That groups are best seen as acting individuals who are governed by purposes which includes interdependencies.

Accordingly a government acts according to the purposes of the individuals comprising it. Abstractions such as countries or “society” are less helpful in analysis, often leading to using literally incorrect phrases such as *we* went to war when those making the decision are usually far removed from the general public.⁵⁰ More egregious is conflating the group making up the government with the country or nation of which it is associated. [See 38].⁵¹

Economic science is not a physical science. It has one advantage over physical science—self-evident empirical information about purposes behind economic phenomena. We have causal understanding regarding behavior unlike in the physical world where statistical regularities are all we have to develop laws of nature. Human action employs the elective faculty which intervenes in the physical world of time and place. We can make use of this insight to develop laws in economics.

For example, since we know something about the causes and purposes of the mechanical forces applied to a game of pool, we do not try to understand the phenomena by statistical analysis of the movement of balls. We don't simply observe that sometimes they go into pockets in sequence and sometimes out of sequence to arrive at rules of each game, when we already know the intentions of the players for each kind of game.

⁵⁰Another misleading use of terminology occurs when economists define the *national debt* as only government debt; yet define *national income* as the nation's income, not that of the government.

⁵¹ Today it might be useful to also look at an intermediating entity, the corporation, in that influential action in the productive economy involves corporations, and keeping in mind that these collectives are understood by analyzing the intentions of the individuals composing them.

The idea that simple statistical correlations and regularities give us theories, while sometimes true for the physical sciences, has led to erroneous policies in monetary economics. For instance, the relationship between total income and the money supply cannot be defined meaningfully due to indeterminate demand for money balances. Without first having an idea, one cannot know what facts may be useful to investigate. No laws can be arrived at without applying reasoning to narrow down known causes to the relevant human causes.⁵²

In the physical sciences we form a hypothesis and then test it with the facts. Economists have applied this approach to economics to test a hypothesis against its predictability. But the causal link should be discovered through deductive processes. We can never know if a correlation implies causality by looking at the facts. This is not to challenge the appropriateness of using statistical data to test the applicability of a theory to history.

The Austrian business cycle theory has been shown to have explanatory power by several studies (see below) but history cannot be studied without *a priori* concepts about what is important data and what is irrelevant. For example we would not give equal weight to both a scientist's domestic household affairs and her technological discoveries even though each may take up as much room in her file cabinet.

Money in Price Theory

In price theory there are established laws of supply and of demand. An increase in the *supply* of a good means that more units are offered in the market at each price. An increase in the demand means more is desired to be purchased at each price.

Under normal conditions at any one time we observe some behavior regularities. We see not an increase in *demand* at each price, i.e. there is no desire for more at each price, but an increase in *quantity demanded* when buyers respond to a lower price. And at any one time we

⁵² See: **Equations in Economics** below.

observe not an increase in *supply* at each price but an increase in *quantity supplied* when sellers respond to a higher price.

An increase in *demand* for money means an increase in the desire to hold money, i.e. a decrease in buying with money offered at its "prices" which are the inverse of the array of goods prices in money (only one of which is bonds or their inverse price the interest rate in the loan market). However, this in itself will result in a reduction of prices overall, and as a result will raise the value of each unit of money until the increased desire for money held is satisfied, and thereby requiring no increase in the supply of money.

An increase in the *supply* of money means an actual increase in the number of units, but because the units in a sense are all bidding against each other, there is virtually no gain from increasing the supply. Prices simply rise so that each unit is worth less. (To the extent that the money is a commodity, its lower price will (marginally) increase the well-being of the society by making it less costly for non-monetary uses.) Thus unlike an increase in supply of a real good, no social welfare gain results by an increase of money units.

An increase in the *quantity demanded* of money occurs *ceteris paribus* when the supply increases (the supply curve shifts) and prices rise (i.e. the price of money falls). An increase in the *quantity supplied* of money occurs when the demand increases (the demand curve shifts) and prices fall (i.e. the price of money rises). But with money because it is used in each price, the real money supply is left where it started.

Textbooks define the market for money as the supply and demand for money with respect to the price of loans, i.e. the interest rate. As we have just seen the demand and supply for money determines its purchasing power in the goods market including the bond or loan market⁵³

⁵³ W. H. Hutt pointed out that money holdings do however have a prospective yield, and that interest rates are not to be seen as dependent on this yield exclusive of the yield on other goods or assets.

Conventional economics maintains that the interest rate is determined in the market for financial instruments such as bonds, with savings/investment decisions centering on disposition of current income. For Austrian economists it reflects allocations between present and future choices dominated by the capital structure where most of the real wealth resides, with short term rates, rather than long, responding to temporal monetary policy.

Interest rates (other than short-term) reflect the whole of economic activity, of buying, selling and investing in the productive real goods markets which includes decisions about which investments to choose based on the expected shape of the discounted flow of future returns, risk, and other pertinent expectations.

Overall we see that interest rates and the equity markets can both change when time preferences change. An income producing asset owned as shares of stock can lose value when higher rates of return are desired, the future value of the income stream coming under greater discount. This time preference change will also be reflected in higher market interest rates in the loan market, but it is not the loan market that governs basic moves in the interest rate.

That the stock market appears to react to interest rate expectations has led to general acceptance of this relationship as a predictive rule, another example of substituting statistical regularities for sound reasoning. Marginal speculators in these markets who can affect daily prices no doubt do react to daily news about the direction of the interest rate (higher interest rates being negative for stocks). But underlying the important longer-term trends of interest rates are the decisions by individual and corporate owners of the vast wealth in the structure of production. The reactions in loan markets and the stock market to news about interest rates are as waves on the surface of a rising or falling tide, a tide resulting mostly from bouts of government credit expansion and contraction made more elastic by a central bank fractional reserve system.

The stock market is also thought to respond to changes in profit rates. Again, causality is not so simple—high profit rates would correspond to higher interest rates which generally portend lower share prices.

The Business Cycle

A widely acknowledged and well-recognized relationship has been observed between tightening credit conditions and the onset of recessions. Typically, in recession the ratio of consumer goods prices to producer goods prices increases (the more durable consumer goods prices rise less in a downturn than other consumer goods prices because of the greater stimulus for these longer term or lower return investments that the previous easy credit climate created). Up until the 70's the overall tendency of prices to fall in recessions resulted in no noticeable price rise in consumer goods. Then as price inflation became built in to the economy consumer prices continued to rise in recessions. Thus we experience the less well-recognized inflationary recession, caused by a reduction in the rate of increase in credit rather than an absolute reduction so that prices in general kept rising, albeit disproportionately more in the consumer goods sector. This salient insight was made in 1971 by Murray Rothbard (1973).

Standard economics found such stagflation puzzling. There was supposed to be a (Phillips curve) trade-off between economic growth and price stability; the more willing we were to allow prices to rise the better could be the economy. In addition the disproportionate price adjustments between producer and consumer sectors was disregarded and unexplained.

That is until the Austrian business cycle theory began to be applied (for instance, Rothbard, 1972). There are observed disparities in price adjustments during recessions between stages or sectors. Those sectors close to the consumer, and those furthest away experience contrasting price changes. The structure of production had been distended due to the preceding distortions caused by disproportionate investment throughout the structure under easy money and credit policies. This effect was fully predictable out of the theory. Mises (1912) revealed these effects from artificial easy credit policies. These included malinvestments in the production structure. It was as if a railroad company had been overly optimistic in its first stages of construction of a railroad and constructed the tracks at a gauge greater than it could later justify. It simply could not go to a smaller gauge without irrecoverable losses from wasted expenditure on the wider gauge track.

Because Keynesian and Monetarist business cycle theories were linear and lacked multi-dimensional sophistication, they saw the problem as one of a deficiency in (aggregate) effective demand. Their limited one-dimensional capital theory erroneously assumed that consumer demand produced investment demand according to a multiplier corresponding to the historical ratio between consumption and investment. By contrast, and 180 degrees from this, the Austrian theory was consonant with the commonsense conclusion that more spending on consumption reduces the availability of spending on investment. Thus, in the end exactly the wrong prescription for a depression came from the dominant non-Austrian schools of economics.

The prescription was for stimulation of government consumption rather than saving. So tax increases that went to government spending programs during the great depression (along with new barriers to free-trade such as the massive 1930 Smoot Hawley tariff) simply extended the depression. Note that consumption of past savings that has been stored as capital (capital consumption) can temporarily increase measures of final goods and services (GNP), at the expense of future productivity. Certainly output can be made to increase by massive government expenditures after much of an economy has fallen idle such as was the case going into WWII. This was not to say that life improved for Americans because of war, what did improve was officially measured output, which was not deflated properly due to wage and price controls suppressing price indexes used to calculate output.

In fact the market outperformed all economists' expectations after the war economy ended, which accompanied drastic cuts in government spending. Markets were able to clear once price levels had caught up to shortages and rigidities imposed on the markets during the Thirties. This is another reason to question the use of NNP or GDP as an exclusive measure of economic performance (see Money in Aggregate Economic Theory below).

Aggregation hides the significance between types of spending, the importance of investment and the importance of the microeconomic dislocations that are the result of tax, expenditure and credit policies. The Keynesian aggregate supply and demand model incorporates the fallacies

of composition exposed by good economics in the Nineteenth Century. Twentieth Century journals have been replete with defenses of special cases that were supposed to verify the expenditure-output relationship during underemployment.

Money in Aggregate Economic Theory

Textbooks also define an aggregate supply and aggregate demand market which supposedly measures the interplay between spending (real output) and the price level as discussed in the previous section. We may take a fresh look at this relationship by re-defining the aggregate supply curve as the money demand curve, and the aggregate demand as the money supply curve, with the values on the ordinate (y-axis) inverted i.e. prices rather than $1/p$ (or purchasing power of money).

Uses of the aggregate supply and demand economics (AS/AD) failed to advance understanding among the financial press, academia, and the public. It reversed gains made by classical economists who refuted the notion that consuming promotes economic performance.

Since consumption is the majority of the defined national income, and statistically strongly related to net national product or NNP, today the standard belief is that we each help the economy by spending more, and further, because war means spending then the economy is helped by war. Under this confused reasoning, it would be of benefit if all houses, cars, bridges, etc.,—all physical capital were made of inferior material and depreciated in half the normal time causing us to need to spend more on replacement. Supposedly we need more work to do. Yet in this world of scarcity there is always more work than can possibly be done where not inhibited by lack of access to resources.⁵⁴

Textbooks inappropriately neglect to mention that the majority of spending in the entire economy includes spending by businesses in the structure of production between stages of production including spending on capital and investment, all of which outweighs consumption spending.

⁵⁴ This is not the same as applying capital in ways that may engage more or less labor.

Final output is what GDP (Gross Domestic Product) measures, for which GDP is a useful concept, but it is purported to be a measure of total economic activity. It necessarily omits most of the important spending and economic activity employed to produce the end result of net output. Rather than using a measure of final output, a better approximation of economic activity would be a measure of expenditures at each stage on the way to the final goods produced; then what is spent by retailers, wholesalers and a myriad of contributors in the production process would be a more appropriate measure of economic activity. (See use of aggregates)

Common sense alone tells us that we can't improve our economy simply by increasing our consumption at the expense of investment. Following Mises' learned exposition on capital in *Human Action* we see that capital embodies time, and that progress depends on foregoing consumption to lengthen or enhance productive processes.

Another related concept in economics is the government spending multiplier. Whether one properly classifies the various government expenditures as consumption or as investment is open for debate, but to employ the concept of a government multiplier where increased government spending automatically induces increased income fails to stand up to scrutiny. It reveals the treachery of confusing a mathematical ratio for a causal relationship. If one has spent 10% of her income on entertainment in the past, an increase of one's spending on entertainment would not be seen to result in causing an increase in her income.

The AS/DS model is yet employed in conventional economics to account for the failing of Keynesian explanations of stagflation (see Austrian Business Cycle Theory). Purportedly inflationary recessions result from supply shocks such as the oil crises in the 1970's. Yet increases in spending in one sector (oil) leaves less spending potential for other sectors and so cannot explain aggregate price inflation. A theory of recession based on diminished aggregate demand fails to account for the fact that recessions are periods of readjustment, not to reduced consumer demand, but to misapplied capital.

Use of Aggregates

Use of economic aggregates introduces loss of important detail in analysis. Income velocity of money refers to the ratio of the money supply to overall money income. Velocity is presented as the inverse of the demand for money to be held. Under a growing economy with a stable propensity to hold money balances, rising measured incomes or GDP requires additional money in the economy. No rising nominal (i.e. money) income level can occur without an increase in the supply of money even though productive output and economic well-being are improving. Under a fixed money supply rising productivity and standards of living are not discernable in aggregate income measures. NNP is not an independent measure.

This fact is why measuring money output in an economy has limited usefulness as a measure of its social welfare or productiveness and why simple comparisons of NNP, GDP etc. are invalid for this purpose. Indexing these measures with flawed deflators, such as the GDP deflator, subject to measurement circularity, have not produced reliable results. For instance two quarters of declining inflation adjusted (real) GDP is required to define a recession. But prices move differently for producers goods and consumers goods, are affected by productivity and cost efficiencies, and weights given to them are selectively manipulated as adjustments are made in the basket of goods comprising the index.

For purposes of measurement the use of a price level is by definition unscientific and unreliable. It is in fact adding apples and oranges, the weighting of which is arbitrary, as revealed by (Labor Department) adjustments to price indexes using hedonistic factors. Yet economists can't be faulted in striving for some rough amalgamation of goods prices to give us a surrogate for the general price level, provided it be kept in mind that detecting precise monthly movements is unattainable, as is also the case in using such aggregates to monitor the economy's output or activity level; the concept of a price level or output level has usefulness in conceptualizing performance of an economy or in comparing economies. Thus, for an aid to conceptualizing rather than for measuring, such constructs as the aggregate supply and demand curves for an economy as depicted in economics' textbooks will continue in use.

Unfortunately, as a concept of economic performance, looking at only net output (depicted by these curves) NNP utterly loses sight of total economic activity. Therefore when applying the Quantity Theory of Money, even when wary of information lost by aggregation, there remains the need to account for the use of money in intermediate transactions taking place in producing final goods and services. Net aggregates are useful for conceptualizing net output. But for transactions, money, employment, in short, for economic activity, we need another concept such as Gross National Expenditures or GNE⁵⁵, which allows us to conceive of the economic forces that are of more interest such as direction of movement, growth or decline etc. of variables without a need for precision in measurement.

As we see, the conventional aggregate supply-aggregate demand model falls short of aggregating all expenditures and thus all money transactions. It only aggregates measures that correspond to final goods and services produced. But money must be used in all transactions. The $MV=PT$ must refer to the larger concept of economic activity, yet we would be unaware of anything more than an “income velocity of money” going by the standard model, income being the same as net output.⁵⁶ Further, as we have seen above, no well-defined ratio of money to economic activity can be relied on due to use of bills of exchange and clearing house mechanisms that economize on the need for money, and from the changing use of a spectrum of near moneys or less active money substitutes.

⁵⁵ A similar measure GNO or Gross National Outlays was proposed by Mark Skousen to include the intermediate inputs for each industry. His calculation for 1982 revealed that “... (GNO) was nearly double GNP, thus indicating the degree to which GNP underestimates total spending in the economy.” Consumption was only 34 percent of GNO, rather than 66 percent of GNP. (Skousen, 1990, 191-192). Also see his later GDE (Gross Domestic Expenditure) measure in Skousen (2010, *Economic Logic*). George Reisman (1998) also developed a concept of gross spending as GNR (Gross National Revenue).

⁵⁶ It is not that textbooks don't have more realistic quantity theory models that include transactions. The error resides in the persistent message that *consumption expenditures* constitute the best measure of economic performance.

Aggregate economics not only eliminates important microeconomic variances, it also employs arbitrary definitions and market constructs purportedly, but not actually, determining price levels, interest rates or economic activity. These oversights have carried over into the classroom and ultimately the financial press as well as important decisions in public policy.

The unemployment rate is another aggregate economic indicator fraught with misperception. A labor market that is resilient will exhibit a lower unemployment rate than one that has rigidities. Current measured employment may rise temporarily along with major losses in productive potential from misadventures in committed capital expenditures, or from wasteful applications of labor. Thus, employment of 19 million in the armed forces in World War II produced improved employment and GDP numbers, but reduced standards of living, and impaired the long run growth path of the economy. W.W.II. continues to be touted as pulling the country out of the depression when it merely extended depressed living standards.

It should be no surprise that pro-war, pro-military industrial complex, neo-conservative politicians continue to exploit this accounting misapplication.

Economic Projections

One could speculate that public policy makers might be motivated to promote military adventures directed to affect oil competition, or to protect fiat currencies by removing threats by some countries to establish globally competing soundly backed currencies. Influence on policy need not be overt in nature when decisions are based on complex considerations of which this may be only one factor.

Recent moves in the direction of a gold backed dinar, for example, by some countries in the Middle East, would likely have alarmed global interests concerned about the integrity of the (fiat) dollar. These interests could portray geo-political proactive interventions as defensive actions.

Equations in Economics

"It is a general weakness of the human mind to regard the state of rest and absence of change as more perfect than the state of motion."—Ludwig von Mises.

It will be clear that the economic insights that are helpful to understanding the workings of a monetary system don't emerge from blind collection and analysis of data. The reasoning mind directs the application of relevant data. Truth in this arena cannot be found by making simplifying assumptions before theory determines the relationship between variables; it cannot be found by first looking for regularities between variables to find which variables are important, as all too often these relationships turn out to be illusory. Laying out statistical relationships with equations has the appearance of sophistication but can skip over important steps in the real effort of economics. While mathematics is indispensable in allowing concise expression of behavioral variables and in dealing with mutually causal phenomena, it can be applied inappropriately. Use of mathematics may be a source of weakness. This is the case for some multi-equation models derived from the relegation of theory to the superficial task of rule-based but thought avoiding manipulation of symbols.

Although having the appearance of scientific precision, equations relate variables to each other without the need to explain how they relate to each other causally. They can be misused to imply causality when they only record ex-post quantities or tautologies.

Simply formulating equations from statistically correlated variables does not produce economic conclusions. Variables may be causally understandable without equations, but in equations can be manipulated oblivious to the existence or direction of causality across the equal sign. Thus in using the equation: $Y=C+I$ economists commonly commit the error of concluding that consumption (C) causes output (Y). And the further error that (C) is more important than investment (I) for output because it

is larger than (I). (See: **Money in aggregate theory**) This also applies to equations of exchange $MV=PT$ which is true simply as a tautology.

This result does not deny the use of mutual determination on a subjective individual level. For example, decisions to save or consume should not be separated from decisions to hold money balances, as all three decisions are made at once. We don't first save, then determine how much to hold in cash balances and how much to invest.

And even though the use of simultaneous equations helps to understand possible complex interactions among variables in the entire economy, statistical inferences arrived at by observing variables can be all the more misleading. Working with cause and effect makes use of axioms of action that help to deduce economic laws much as is done in geometry. Statistics has produced correlations that by induction give incorrect conclusions.

In contrast to economics, manipulation of equations in the physical sciences allows for useful results because causality may not be known. The economic error is in ignoring already known causes of each variable. Thus $F=MA$, (Force=Mass x Acceleration) can be mathematically manipulated to achieve meaningful results. $Y=C+I+G$ cannot.⁵⁷

Competing Currencies

Governments have found that it is initially no feat to demote a commodity based currency to a fiat status while maintaining popular undiminished acceptability of the currency.

⁵⁷ In the words of a former president of the American Economic Association and an early contributor to Austrian economic thought:

Macro-theorists...have repeatedly been misled into thinking that they could deduce consequences from an ex post definition, for example, that they could deduce the effects of an increase in investment from the definitional equation $Y=C+I$. This is logically impossible, and therefore equally inadmissible in macro-theory and in micro-theory.

Fritz Machlup, (1967), *Essays in Economic Semantics*, New York: W.W. Norton & Company Inc. p.120.

A fiat currency may reflect past usage with little loss in trust. Once a currency is established, such as with the U.S. dollar, it retains monetary qualities through custom. Unless prohibited by law from use in contracts or for payment of debts it predominates over sound commodity money as the currency of choice of the holder in making purchases.

Hence, it is unlikely that gold coin or gold certificate money would replace customary fiat money from simply allowing a free-market in money choices. Establishing legal tender status, i.e. requiring a currency's acceptance by law will only be successful if it can be applied to a price structure. To define its value requires an existing price structure—only one of which normally exists at any time, this being at present that of the fiat dollar. Defining its value is in fact the act of official convertibility at a fixed dollar price of gold in the case of gold currency.

Some confusion arises out of the intuitive sense that under free competition the best product should prevail. But Gresham's law applies. In order for a better currency to rule it must be better on both sides of an exchange both for the buyer and seller. A legal tender currency requires the seller of a good to accept the currency. But if there is any alternative to sound currency such as using fiat money or customary fiat money then the buyer of goods will want to make payments in fiat money. In an exchange the best good one can obtain with acceptable money prevails, but because money ultimately is only for exchange it can be of inferior quality, at least until some general move away from it takes place.

We should keep in mind that if gold contracts and gold clauses were allowed, with gold ownership legalized, no new array of prices in ounces of gold would be likely to be established outside of the existing dollar denominated price structure; it is always easier to think in terms of a dollar/gold ratio for dollar prices of gold first before exchanging certain weights of gold for goods. There is no need for the market to grope for an independent array of prices with gold alone as it once did over the ages when no other price system existed. Money constitutes the one good that remains in a state of barter. Since any established money must have been and still is priced by barter, the market has no reason to waste effort on establishing a second system of barter derived prices.

Hence, should the dollar be lost, then the difficulty of achieving a workable price system in a few days with a new money might be insurmountable. One only needs to try to change to Centigrade from Fahrenheit but without the formula for conversion to appreciate the difficulty of establishing new relationships between money and an entire economy of goods and services.

Gold in the U.S. has been legal since 1975, and gold clauses since 1977. It has not been released from capital gains taxation. It would still require removal of legal tender status of the fiat dollar, as well as any perceived government bias for the fiat dollar, to allow for the operation of a free market competitive process. This paradox, that free markets don't arrive at the optimum monetary arrangement, is only apparent. Gresham's Law (bad money drives out good), after all does not apply to free markets. A true free market in money means a true free market not only in ownership, but also to be thoroughly applied to the fiat dollar. Without government intervention in the market, with every government relationship to the fiat dollar removed, it would not remain viable. But this means more than is usually conceived of as a free market. The relevant government functions must be eliminated outright—left only to the anarchic free market. Then, without any government backing, and no longer any legal tender status, a true free market would likely transition to gold as a currency as confidence in the fiat dollar certainly rests in confidence in the ability of the government to exercise its legal monopoly and support of money. But to expect to first remove government to that extent, which would likely result in a collapse of the economy due to the immediate loss of value in the fiat dollar, is a bigger step than is necessary to repair the standing of the dollar. Absent first achieving separation of money and State, the greatest barrier to gold (or silver) competition with the fiat dollar as the predominant currency in the U.S. remains the inconvenience of

adopting an additional price system using gold or silver grams or ounces instead of dollars and cents.⁵⁸

Some hard money advocates assume that the problem is in getting gold into the hands of the public and the Treasury, and so offer reforms that would require use of gold for partial payment of taxes, or for new expansions in the money supply. This approach again assumes that some smooth transition to a gold currency would emerge on the market. But no second set of prices will be desired when dollar prices have not been dissolved; everyone will keep thinking in dollar prices, and in dollar prices of gold.

It only makes sense to link gold by structuring a plan for future dollar conversion to gold. That requires setting a price of gold in dollars. Granted the more gold the Treasury holds the easier this would be, but instead of collecting it in taxes it can well buy gold with tax receipts, there is no economic difference to the gold market. It is just missing the mark to think in terms of gradually having the public think in gold, or use more gold. We already have a money that is the product of gold: the gold-dollar, its functioning reflects this past tie to gold, even if it is now customary fiat money. In this sense people already accept gold, in fact some even think that the gold in Fort Knox yet gives the dollar its value.

“...all correct economic theorizing is a gradual progress form short-run to long-run effects.” --Ludwig von Mises.

Protectionism and Free Trade

By the mid 1800's the world was largely under a gold standard and with some exceptions under minimal barriers to trade. Economists of the day were mostly free-trade oriented. Free trade promoted interdependencies that made war more costly to commercial interests. Free trade fostered an unprecedented period of relative world peace.

⁵⁸ This point was brought to the present writer's attention in conversation with David R. Webb.

Popular attitudes often overlook advantages of trade and fail to account for the fact that protection of one industry increases costs of products for the rest of the economy: Protectionism is not just a zero sum game but because it impedes efficiencies of division of labor is a negative sum game. In theory barriers to trade among countries parallel barriers erected by prejudice, racism and religious intolerance between neighborhoods and families refusing to do business with one another.

Suppose an inventor made a technological discovery and opened a warehouse on the river at the edge of town. Magically resources went in one end and certain products out of the other but at half the price produced elsewhere. Over time the money saved on these purchases could then be spent on other businesses in town, businesses switching out of providing the products produced cheaply and into those priced normally. We can readily see what a benefit the owner of the warehouse provided. The town would have more value for the same purchasing power.

Now, suppose we sent in the police to find his secret. At night it was discovered he was shipping out bulk commodities and resources and taking in products produced cheaply abroad. Yet it occurred with no one forced to do business with him. Rather by doing business they must have benefited. Does it make sense to impose tariffs and quotas to stifle such activity? We don't see cheap voluntary work as harmful, neither should we see harm in cheap foreign labor. If it is harmful to use cheap labor from abroad why isn't it harmful to allow cheap volunteer labor in such projects as Habitat for Humanity, or cheap clothes at a Salvation Army store, or various acts of charity?

Ricardo's Law of Association relates to the advantage of trade, both with one's neighbor and among nations. Economists learn the Law of Comparative Advantage which by simple logic shows why, for instance, a doctor, who is also a champion typist benefits by specializing as a doctor and paying for a mediocre typist so that each person engages in his/her comparative advantage. One point being that everyone has work to do regardless of relative abilities, and that both parties are better off by co-operating in a trade.

This implies that no country need worry that it cannot engage in productive work even if another country can do that work at a lower cost,

since the second country will be at an advantage to concentrate in what it does best, leaving room for the first country to thereby enjoy a comparative advantage in what it can do best.

The Riddle of Prices Solved

Why does a bottle of water cost less than a diamond when the value of water to the individual where it is available as all or nothing is greater than diamonds available as all or nothing? This paradox was solved by the Austrian, Carl Menger in 1870 by reflecting on the human aspect of economics, i.e. subjective value. In 1776 Adam Smith had earlier posited that prices of goods reflected the labor that went into them. But this obviously can't be, simply applying effort doesn't make value; one could spend a week painting his house purple and have it go down in price. Marx also used the labor theory of value and attempted a solution with the proposition that what imparts value or price was socially necessary labor. This however is circular. A higher price defines higher socially necessary labor, but what caused the high price?

Menger pointed out that a person values units of each good in a descending order, higher for the first bottle of water then lower for each successive bottle. Thus prices don't reflect total value of the entire supply of a good but only the value of the last unit available. So all prices reflect the scarcity of goods. Goods are priced based on their last (marginal) units of supply because we don't make all or nothing decisions in the market, we decide on one bottle of water at a time out of the total supply of water. Since air is abundant we don't normally see a price for air. A price settles where the supplier values his last unit of a good less than the price, and the buyer values his next unit of the good higher than its price. Thus underlying supply and demand and price are governed by subjective valuations.

Taxation

Taxes impede markets from providing the means for people to achieve economic goals.

Taxes are thought to reduce government deficits, yet usually reduce economic activity and thereby can produce higher deficits, (Laffer curve effect).⁵⁹

Taxes on capital gains or sales and trade (tariffs) all reduce economic activity. Taxes on land and resources do not meet with reduced activity to the extent that other taxes do since a tax on original factors of production are not transferable or shiftable and not easily avoided. Taxes on labor are also taxes on original factors of production but obviously 1) directly reduce the laborer's proceeds and 2) discourage labor over other alternative non-market or black market endeavors.⁶⁰

Taxes could be ideally returned to taxpayers in benefits from programs but in practice are often used for wasteful or even harmful purposes due to the expenditure no longer being under the control of those taxed, or only very tenuously so.

The problem under present consideration is of monetary policy pursued to combat deficit costs arising from interest payments. Employment of blunt measures to lower interest rates artificially, with expansion of the money supply, results in depreciating the dollar and constitutes a tax.

⁵⁹ Rather than maximizing tax revenue (the Laffer curve argument) it would seem that the appropriate concern would be to enhance productivity in the economy for which additional benefits arise when reducing taxes even beyond this so called optimal tax level.

⁶⁰ Some anti-tax movements interpret the word "income" as used in the 16th Amendment to mean only returns that are net of exchanges of labor services, entrepreneurial effort etc. Presumably windfall land and resource rents or proceeds would be income. Such an interpretation could be a first step in reducing overall tax burdens.

The Single-tax movement of Henry George championed replacement of all taxes with a tax on the value of land, specifically its unimproved value increment. It has been referred to as a land value tax (LVT). For those who see no justification for any tax at all, a consistent opposition to state power would seem to necessitate opposition to taxes on land. Acknowledgement of common ownership in land has been seen as inimical to a true free market economy. Complete privatization has been seen as the cure.

Clearly, such a tax would be unfair to present owners of land who would face a loss in value in the raw (ground) component of their holdings. Any positive results of even a tax phased in over a number of years, must be weighed against the negative impact on present owners, or may involve some measure of compensation to owners during the phase-in period.

Some Geo-economists take the position that socializing the ownership of land, to the extent of applying a tax on land improves efficiency in the market by forcing better use of land, and at a lower price. Further that site value fees are based on the underpinnings of a free society as expressed in the John Locke libertarian law of equal freedom as stated by Herbert Spencer.⁶¹ They maintain that labor and productive effort certainly provide a justification for private property in the works of man, but that raw, unimproved land and resources should belong equally to all. Spencer (1970, 281), referring to socialist theories, mentions that they are ..."nearly related to a truth. They are unsuccessful efforts to express the fact that whoso is born on this planet of ours thereby obtains some interest in it, may not be summarily dismissed again, may not have his existence ignored by those in possession."

Geo-economists tend to regard these outcomes as market failure. But can a case be made that attributes these problems not to market failure

⁶¹ ..."every man may claim the fullest liberty to exercise his faculties compatible with the possession of like liberty by every other man."(Spencer, 1970, 69)

but to consequences from imposition of statutory or administrative interference in long established social norms? There are considerations surrounding the justification for land titles enforceable by the State.

One prominent writer, Murray Rothbard (1962), has maintained that no violence to equal rights results when ownership is claimed through application of labor to unowned land. This homestead principle then explains the origin of appropriate grounds for absolute title to land. It also avoids the problem of tragedy of the commons, where unowned land can be over-exploited by a multitude of users who have no stake in its future productivity.

Moreover, it would seem that Rothbard has easily countered another claim made for common ownership. Some LVT advocates point to external benefits that land owners enjoy from development in proximity to their property, especially in urban areas, that enhance the locational or site value of land. But external benefits accrue to all persons in a capitalist world where past capital formation has raised the standard of living for all. It should be evident that there can be no obligation on the part of beneficiaries from such a general source of benefit since they result from voluntary association. Certainly land owners who do not recognize a debt of this nature are not guilty of theft as some LVT advocates would have it.

But there remains an argument on the side of LVT advocates regarding origin of titles that seems plausible. It has to do with unwarranted imposition of a system of private titles gained by capture of political power through the State.

Free market proponents often tire of defending positions they take that avoid fixing problems with government regulations wherein problems could be better solved by removing a prior government intervention, even though not easily visible as an originating cause. For instance, Rothbard (1963) has amply illuminated the culprit in business cycles as the boom produced by money and credit infusions orchestrated by government central banks allowed to expand credit beyond what would be allowed by social convention.

Accordingly, where the free market position fails to point to the cause of a problem due to interference by the State, it would seem that proponents would be eager to correct such an oversight adopting the explanation that lays the blame on prior government intervention.

Advocates of the single tax or LVT see the problem with the present state of affairs as three-fold: First, the harm done by other forms of taxation that could be practically eliminated with some other form of revenue (i.e. the LVT); and second, unfairness in exclusive private use of land to those not endowed with property in land; and third, by easily demonstrated widespread gross inefficiencies in markets.

Even Rothbard has acknowledged the masterful treatment of the first problem in Henry George's *Progress and Poverty*. We will not have space here to elaborate, but suffice it to say that both Paul Samuelson and Milton Friedman voiced their belief that the least bad tax was the LVT.

Not so evident to the free-market advocate is why there is any essential difference between private property in material goods--an essential condition for a prosperous economy--and private property in land. Free market advocates would most likely accede that joint ownership, such as with a corporation or any other voluntary association also has its place in the free market. Other forms of common ownership are also possible.

It may be true that the ability to use land (to have some place to stand or work) is a prerequisite for the enjoyment or even the right to life. But this does not prove that absolute title to land is necessary, nor the other way around, that the government must possess the ability to hand out rights to everyone, so that no true private rights to land can exist.

Rothbard contends that prior use is sufficient grounds for absolute private title to land. But even if we assume that all titles to land were appropriately acquired through first use, or purchase, or default and abandonment on the part of an unknown earlier owner, there are yet major efficiency problems to resolve.

If the exclusive use by an individual, or corporation of a parcel of land enjoys significant external benefits, simply from location, not from entrepreneurial foresight or improvement to the land, then is private ownership the most efficacious means of handling the property from a social

welfare perspective? For any parcel there is a market valuation related to its future rental income stream, or to prospective income. It has been shown that these valuations have as a rule increased during booms to the detriment of the economy, and have been repositories of wealth to the extent that owners have been unmoved to allow others to put the property to use. In any case, higher valuations exclude a number of uses.

For almost any urban location a fixed rate tax on the appraised site value of the property subtracts from the rental accruing to the owner without any means of shifting the tax to other factors of production. Hence, speculative rises in property values would be moderated. Even if the ownership title were considered just, so would the recovery of a fee to the community for the amenities and services that apply. Without the provision of all of the amenities, not only would the property be less valuable, the owner would almost certainly not be able to alone afford to defend the property from every possible threat without an association for adjudication that would certainly not be provided free of charge. Moreover, an owner would likely face an insurance policy that could be prohibitively expensive. The enjoyment of entitlement to the property has not been seen as free from obligation to the municipality in the form of a fee for roads and amenities such as utilities and protection by a police presence.

What is missing in the discussion is that land has qualities that uniquely set it apart from the other forms of property. This may explain why the evolution of property titles in land were not parallel to other private property titles. The differences were manifest in the normal form of entitlement that arose in early societies—communities throughout history were anciently rooted in forms of common ownership in land.

It should not matter what specific legal designation of titles to land are claimed. In the U.S. and Britain the fee simple title implies some original and superior reserved rights in the Crown or State. attached to grants of land, this includes the right to tax and eminent domain. Only Allodial title would be free and independent from the State. But, since the State acquired its rights through conquest, (in Britain in 1066 by William the Conqueror, and in the U.S. by British land grants, railway grants, and

homestead grants), no ethical grounds exist to allow one to trace a property history to an unclouded past.

Hence, any exclusive title would have devolved from past organized violence. Here, the institution of voluntary social exchange is absent. This was not the same for other possessions. Mises expounded the regression theorem of money that demonstrated how titles to specie based money developed apart from government. Others explained how labor and effort mixed with natural materials established ownership (but not necessarily value) in goods.

But the work by Henry George and Franz Oppenheimer, uncovered an aristocratic or oligarchic form of ownership overturning anciently rooted convention. They revealed the historical link of commonality in land, and how titles privately bestowed were usurpations thrust on communities under duress or subjugation. Oppenheimer details how pre-Roman, or early Roman law was eviscerated by landlord interests vested in Roman politics. It was government through and through that nurtured the developed Roman law that was adopted down through the ages and then throughout the world by landlord cronyism. So the end result is that the form of ownership in land that exists today, not at all from a freedom based emergent order, undoes the basis of the homesteading principle; even purchase of land titles cannot be said to be free of indisputable ethical encumbrances.

Some would disagree. One (Public Choice) perspective would see ownership as private whether in the hands of single landowners or whether publically managed, that it can never be managed for 'society' as a whole, because governments necessarily concentrate disposition of assets under the purview of bureaucrats and private influences through the political machinery where influence peddling is the norm, 'society' is not regarded.

But such an encompassing view fails to account for institutions that have prevailed for ages where dispersed control and power over land holdings coexisted. The church, in the Middle Ages in Europe was vested with tithes required of landed aristocracy, and had duties to provide for the indigent and infirm. The Crown was vested with vassal obligations of

military service tied to the granting of a fief (land). The Yeoman in England had rights for use of the vast commons up until the enclosure movement.

Land titles were thus not sovereign titles of ownership. Hence, title to land was never private title in the manner that private ownership for other material (chattel) property has been understood. And so the principle of homesteading cannot rest on the claim of a lack of pre-existing rights to seemingly unowned land simply because those rights are not recorded as a title at a local government courthouse. Governments, no more than private individuals, would have had no precedent in historical social convention to hand over absolute title to land. That could arguably be a form of unwarranted government intervention. Land should never have been deemed as unowned simply from government edict or statutory act. Native Americans had a form of common ownership, slaves were certainly due some rights to lands they worked. Clearly, the difficulty of establishing specific property rights in land justifies the institution of a system that recognizes shared ownership in some increment of the rental income that raw land and resources produce. To such an end Alaska shares its permanent fund accruing from State owned resources that amounted to over \$1,600 per person in 2018.

Some Geo-economists have posited a form of proprietary community as the answer to providing a solution that would envision fees instead of taxes, but only marginally capturing rent, and allowing market forces to continue to work so that entrepreneurial allocation of land to its most productive use could be combined with its increased affordability and insulation from speculative excesses. Whether common ownership might be exercised through any existing government of jurisdiction remains to be resolved. But that original juridical grounds exist for disenfranchising any person of some entitlement to use of the earth is unproven. Legitimate exercise of State power to enforce titles seems to never have been demonstrated. These are the considerations leading Georgists to propose a tax or fee on the value of land attributable to its site value that yet preserves most of the benefit of ownership to the title holder, known as the

single tax or LVT.⁶² Clearly if the state is granted any form of taxable power the dilemma of the likelihood of its lack of proper use of that power remains. If, however the Georgist principle were applied in a world that retained sovereignty at the community level, this concern would be minimized.

Good Intentions vs. Free Markets

Economics as a discipline can demonstrate outcomes from premises without applying ethics and judgments. Just as with the discipline of geometry, conclusions deduced from premises can be derived objectively. This is not to say that those practicing the discipline should be unconcerned with implications of these deductions.

But sometimes analysis arrives at faulty conclusions. The danger arises from unrealistic assumptions. We might under estimate the importance of protection against theft or depredation of ownership rights. We might wrongly assume a world of perfect competition as a measure of the efficacy of the real economy rather than a quite different model—the free market condition of legal or laissez-faire competition that produces practical rivalry. We might apply free market analysis and private property assumptions when ownership of land and resources are protected by law but perpetuate forceful unfair privatization of the ancient custom of a commons, and so unwittingly embrace elements of feudalism, or neglect to recognize any titles at all and so embrace a failed system of socialism. We might wrongly assume free markets in finance and be surprised when a purely political monetary structure disrupts our economy. We might not see how highly productive projects often never get started from lack of a source of financing. And that lack of savings could be the cause.

⁶² Geo-economist professor Mason Gaffney (2009) expanded on the economics of a Land Value Tax with a critique of current macroeconomic policy. The book uses Austrian capital theory focusing on land and real estate malinvestment supplemented with insightful employment implications of circulating capital vs. fixed.

A fundamental mistake in thought follows from misperception of how coordination of complex social cooperative activity requires decentralization. Success is not a matter of good intentions at the political level. We don't arrive at better political results simply by being better persons. The debate over communism vs. capitalism would be a case in point.

Usually the perception encountered with respect to communism vs. the market is that communism was a better, or more ideal system than competitive capitalism, but impractical because humans were not virtuous enough to live in a world where sharing and equality would be required in order for the system to work. Leaders, it was assumed, failed because of lack of integrity and from self-interest.

Let's pursue this common and arguably harmful misperception. With the rise of civilization came the adoption of modes of behavior that allowed for the extended order of impersonal markets, trade, specialization and division of labor etc. These modes of behavior included the necessary suppression and abandonment of traits that worked for small groups: viz., altruism, group identity and loyalty to the affinity group. Indeed these traits dominated human cultural evolution for most of its history and characterized humans as cooperative and motivated towards small group goals. (F.A.Hayek, *The Fatal Conceit* chapter 1.) To be sure, smaller groups lend themselves to interactions on a personal level that was lost in larger groups. In larger groups social cohesion from personal knowledge of members of the group broke down as they become too numerous or distant to be known and understood; familiarity was lost.

Anthropologists have shown by computer model, that an affinity group roughly averaging 25 members achieves maximum efficiency in a hunting-gathering economy. Larger groups were more difficult to supply. The group needed to be small enough to not over-use its territory, an area limited to a size that allowed for daily trips out and back from the encampment. Humans evolved and developed for thousands of generations under such natural regimes. We still retain those longings for a socialist order that worked in small groups.

Relatively recently communities took advantage of learned techniques, cooperation etc., such as farming, that offset some of the lost ad-

vantages of small group cohesion. For civilization to emerge other customs were gradually passed on by successful cultures. With a large population, resulting only from the ability to engage in trade, and individual division of labor and individual rather than common ownership, humans no longer relied exclusively on those earlier altruistic and close cooperative traits.

Not because humans were bad did we see the use of a private ownership market economy. Rather, this socialization evolved because humans were adaptable to the needs of an extended order that now requires that honesty and trust be practiced outside of a familial group. This would mean that humans, at least in cultures that were successful (i.e. which adopted market systems) have shown a remarkable ability to be virtuous in respecting the individual and property rights of others they personally don't know.

In communal groups, private ownership makes things easier. In a group house, separate shelves in the refrigerator work better. Even for married couples, record keeping is easier if checking accounts are separate.

State communism (and state socialism) didn't fail because of the lack of people's instincts to pull together, but simply because it was a system that could not physically marshal the economic information necessary to run a large economy, i.e., information that could not be handled in any other way than through decentralized decision making based on market prices, and allocation of resources requiring a personal stake, or risk with rewards as feedback for correct entrepreneurial insight. A unified decision making process was always inefficient. This being conceded by the academic economic community as the impossibility of successful central planning became decisively evident in 20th Century Eastern Europe. Humans couldn't go back to small-scale economies without giving up a system that supports large populations and produces civilized life, even though primitive lifestyles may, for some, provide for more happiness where the urge to be included in an affinity group was more often fulfilled.

Human nature then was not the limiting factor that kept state communism from succeeding.

Not that centralized power corrupts, but virtuous leaders trying to run an economy fail regardless of their intentions or abilities. The technical nature of complex systems demands that dispersed information be acted on by the numerous decision makers, no one of which needs to, or would be able to, comprehend the overall picture, whether as an individual, a ruling group, or a democratic electorate.

Ownership of the means of production by those who stand to lose or gain means that allocation decisions provide for reward and loss to the decision maker. State communism could not succeed even in a virtuous world even if human nature were changed so that incentives of ownership were no stronger than dedication to the collective. They would also need to be coordinated by an omniscient agent.

While it is true that small communities can function with less formal or less developed coordinating institutions than can large societies, it does not follow that the only sophisticated institutions that manage disputes, common needs etc. are governments. Markets provide for these needs through competition in a way that precludes the need to grant monopoly power to one entity.

Markets then provide the only practical means to progress. Civilizations were successful to the extent they were oriented away from rigid despotism. It was seen by those responsible for the enlightenment that the nature of our world (natural law) dictates this result. Peaceful rather than predatory behavior allows progress. The State, being erected upon involuntary predation (i.e. monopolized centers of force) was almost always traceable to some previous military conquest.

A different perspective warns that what are seemingly shortcuts to dispelling concentration of power through legislation tend to backfire. Use of the same means to correct outcomes that resulted themselves from those means is ineffective. In other words appealing to institutions to correct themselves rather than dismantling them can only be stop-gap at best.

Another misperception deriving from lack of understanding information technology provided by market systems sees organized market entities such as corporations as tending naturally to monopoly and unlimited growth. But the inefficiency of size also applies to firms. Vertical

or horizontal integration can make use of economies of scale only so far because such integration eliminates the pricing structure.

Smaller firms allow for coordination of supply and demand throughout the structure of production because each player utilizes price signals that encompass aggregate production needs. No studies are needed for a small firm to know which input to switch to when prices change. Prices also dictate which mix of outputs to produce. Thus the need for prices dictates the need for decentralization, providing a natural law check on size of corporations exactly for the same reasons state socialism is checked.

That corporations avoid these market strictures by taking advantage of governments to impose predation through special interest influence, lobbying, laws etc. is true; the legal privilege of limited liability and personhood included. But these extra-market tools at the hands of private corporations and individuals could be circumscribed by limiting availability to government. The debate over whether government can be successfully used to limit corporate power is beyond the scope of this discussion, but evidence abounds of the support for regulatory legislation during this period by those firms already entrenched in those industries to be regulated. Historian Gabriel Kolko (1963) put it this way: "...the essential purpose and goal of any measure of importance in the Progressive Era was not merely endorsed by key representatives of businesses involved; rather such bills were first proposed by them." What has become clear is that government intervention is the easy way to personal gain for those in or outside of government and that government excesses of power emerge smoothly and naturally in an environment hostile to free market ideas. Nowhere are these excesses resulting from the negation of the market more pervasive but less visible than in our current monetary system. Kolko maintained that the early 20th Century Progressive Era was characterized by the coopting of the movement towards a more socialist outcome by passing regulatory legislation that, far from promoting fairness and decentralization of economic power, resulted in the opposite. "National progressivism was able to short-circuit state progressivism, to hold nascent radicalism in check by feeding the illusions of its leaders—

leaders who could not tell the difference between federal regulation of business and federal regulation for business.”(285).

Returning to our question regarding the importance of how systems work, and not finding fault with individual behavior, obtaining results that conform with being virtuous need not go as far as altruism. Disrespecting other's by interfering with their activities that aren't interfering with others is not virtuous. The possibility of success without repressive interference in personal matters reflected libertarian social characteristics in early democracies.

....our constitution[s']... administration favors the many instead of the few; this is why it is called a democracy. If we look to the laws, they afford equal justice to all in their private differences...The freedom which we enjoy in our government extends also to our ordinary life. There, far from exercising a jealous surveillance over each other, we do not feel called upon to be angry with our neighbor for doing what he likes...

Pericles, (Athens, 5th century B.C.)

Terms

Austrian School of Economics: This body of thought followed from the Austrian economist Carl Menger. Overshadowed by Keynesian and Monetarist economics in the Twentieth Century up until recent decades--but the most consistently free market approach to economics. The most quoted members of this school are Ludwig von Mises, Friedrich A. von Hayek, and Murray N. Rothbard; Carl Menger and Eugen von Böhm Bawerk were the primary Austrian figures in the 19th Century.

Credit cards: Credit cards are only accounting instruments. All final payment must be made with money transfers. Credit cards allow for automatic borrowing. They economize on money through clearing transactions. Credit card charges do not add to total money balances. With credit cards, since total money balance needs are lower, the overall secular effect of credit card use should be for price levels to be higher ('velocity' of money higher, or money demand lower) than otherwise.

Both bank and credit card companies use a clearing process for account transactions. A merchant account, for instance, might be credited when a customer charges a purchase.

For credit card transactions, participants can run a net zero balance (or even a negative balance)--their deficit periods covered by the credit card company. The company meets these needs with interest charges and with other participant's payments that on the average provide funds to adequately cover obligations.

Participants that carry a negative credit card balance do so at the high cost of this convenient form of borrowing. An advantage of credit cards over bank accounts is that on a credit card account those who run a negative balance avoid being charged with writing bad checks, or even charged interest if the balance can be paid by the end of the billing month. Interestingly, bank account overdraft protection was commonly offered only after customers began being allowed this flexibility by credit card companies.

Debt Financing: Borrowing in the commercial loan market. Credit financing of productive projects is the engine of capitalism. Developed credit markets increase productivity and standards of living. For example,

the discovery of a new technique, such as the use of nets for fishing. Competitive bidding permanently increases the return to labor as the return to capital eventually is reduced to a normal return for the investment. Without borrowing, fishermen, for example, may not be able to devote their time and efforts to net production, for instance, that would return to them many times the loan cost over time. Uses of Treasury borrowing escape market discipline and so may not be beneficial to the economy.

Debit cards: Issued for checking accounts—are a substitute for checks that allow instant debiting. Merchants increasingly make use of instant electronic debiting even for checks to avoid delay before the payment can be used (reducing float). Debit and credit cards economize on use of currency.

Debt money: Though Federal Reserve notes are not strictly debt, the bulk of the money supply (defined as the means of payment) constitutes a form of credit. Dollar accounts in commercial banks, demand deposits and time deposits, are liabilities (debts) for those banks and only a fraction are kept on reserve, most of the deposits being loaned out. These deposits are redeemable only in Federal Reserve Notes.

Economics encompasses the study of how individuals, both alone and in groups, use scarce means to obtain ends, including analysis of the outcomes, intended or unintended, as they affect prices, production, consumption and wealth. Economics is a science of purposive action by individuals and is employed in working through the logic of market actions not understandable otherwise. It is best defined as a deductive science.

Federal Reserve System (the Fed): The U.S. central bank comprised of the Board of Governors, in Washington D.C. and twelve Federal Reserve Banks and their branch banks.

Fiat Money: Money that by custom carries a residual status of acceptability even though backed only by government granted legal tender.

At first the legal tender requirement that it be accepted at par with an already established currency is necessary. Then these units of demarcation can become money even though their value diverges from the original commodity currency. Once established as money on its own even legal tender status for private transactions might be removed as public acceptance of the currency would no longer necessitate enforcement. Fiat money relies on a government imprimatur, and public (government) legal tender (i.e. accepted in payment of taxes etc.

Gresham's Law: *Bad money drives out good*--whenever by law a currency is given legal tender status, any other currency that has a greater value on the market is driven out of circulation. Usually a currency that is convertible to a commodity like silver or gold, is held rather than used for payment. Under a free market the reverse applies.

Inflation, Money: Increasing supply (number of units) of money.

Inflation, Price: Increase in prices. The CPI (consumer price index) an official measure limited by the somewhat arbitrary choice of goods selected.

Another measure is derived from the yield spread between the 10-year Treasury note and the Inflation indexed Treasury note. The indexed note yield should be lower by the expected rate of inflation.

Interest Rate: The premium paid for present use of money (or what it can purchase) over the same nominal amount of money in the future, calculated on a yearly basis. A *term structure* of different rates reflects various maturity dates for loan instruments.

Keynesian School of Economics: Developed during the Great Depression of the 1930's out of the perception by academia that the government could restart an economy plagued by idle workers and resources. Its

tenets include the importance of stimulating consumption spending, use of fiscal (government spending) policy, and a fiat money regime all of which remain as the dominant paradigm today.

The Keynesian model failed to account for the lack of massive unemployment following the downsizing of government spending after World War II. It failed to explain stagflation (inflationary recession), an embarrassment in the 1970's. The latest explanation put forth by Keynesian's employs deficiencies in aggregate demand from supply shocks as responsible for cyclical disturbances. But the strong aggregate demand levels before the 2007-8 Great Recession belies such a causality and exposes the paucity of Keynesian business cycle theory.

Law of Equal Freedom: Formulated by **John Locke**. *"Every man has freedom to do all that he wills, provided he infringes not the equal freedom of any other man."* –Herbert Spencer

Libertarian: One who eschews use of aggressive force. One who is unafraid to not use aggressive violence. A coherent libertarian position supports free markets and thus the separation of the monetary system from the state.

Money (functional): *That medium of exchange or currency in which the array of prices is expressed in a market venue.*

Money is usually defined as that which is used as a final means of payment having functions of a unit of account and store of value. For von Mises: *"money is a commodity whose economic function is to facilitate the interchange of goods and services"* (1971, 34). It always resides in someone's money balances at any given time and thus is a stock concept. Fiat money can be considered a commodity in terms of usage, albeit of inferior station compared to a commodity currency. Certificates fully tied to money commodities are money substitutes that stand in for the physical quantity held in readiness. Fiat money bills, unlike certificates, indicate no promise for convertibility.

Monetary aggregates:

MB: Monetary Base. Level is set by policy (monetary authorities). Includes currency outstanding and bank vault cash and reserves at Fed.

M1: Cash and transaction deposits.

M2=M1 + Savings and MM Demand accounts + Money market mutual fund shares + Small T.D.'s.

M3 = M2+ (large time deposits), discontinued in 2006. (2006= \$7.8 Trillion.)⁶³

AMS: Austrian Money Supply = (M1+Savings and MM Demand accounts), includes financial assets such as savings accounts instantly convertible to cash, excludes other credit, (uses economic, not legal criteria).

MZM: Money of zero maturity. = M2 less Small Time Deposits.

We can differentiate between assets that have legal tender status (and if under a commodity standard would be convertible), and assets the public treats as money based on its perception of liquidity. M1 or cash and demand deposits are in the former; savings including money market accounts are in the latter.

The essential quality of money is its use as a common medium of exchange, an indispensable vendible good (or its derivative) essential to an exchange economy. This final means of payment is confined to cash and demand deposits (M1). The level of each person's money balances are determined by ends for this purpose which subsumes use as a store of value that has liquidity or ready availability.

Wider definitions could include other assets that supplement needs for liquidity such as interest bearing accounts, money market funds etc. Substitution effects add to the difficulties for policy.

⁶³ These measures can be found on www.federalreserve.gov/releases.

Whatever measure is used we start there with our analysis of its impact on the rest of the economy. So an increase in M1, M2, or M3, or MZM directly caused by expansionary policy should be recognized as affecting the economy in a certain way. For Austrian economists it affects the economy through a transmission mechanism that lacks uniformity and thus is potentially disruptive. In contrast, other analysts make use of aggregates that smooth over or cancel out data necessary to reveal these microeconomic effects. Instead, they are concerned with cases where additions to money balances are thought to subtract from investment spending and may see the market economy as needing fiscal or monetary stimulus.

Fluctuations in M1 result mostly from manipulation by monetary authorities. Under a fractional reserve (rather than a 100% reserve) regime the banking system also contributes to additional M1 volatility. This was true from 1880 to 1914 even before the Federal Reserve existed. Wider definitions of money and credit do not invalidate the Austrian business cycle theory but rather modify it. The public may regard aggregates that include forms of credit, such as savings and money market mutual funds etc. to be money equivalents, but we should not expect regular systematic expansions and contractions from these that could disrupt markets. In contrast under a Fed controlled monetary base and a fiat system disruptions have become endemic.

Money Market Instruments: In finance denotes the market for investment vehicles with short term maturities (up to 1 year) such as treasury bills. The Capital Market denotes long term instruments. The market for money and the market for capital have much different meanings in economics.

Monetarism, or the Chicago School of Economics: Spearheaded by Milton Friedman after World War II, a largely free market oriented approach to economics except in monetary economics, with an emphasis on the importance of monetary policy over fiscal. A steady rate of money supply production under a fiat regime was thought adequate for

managing the economy. Aggressive monetary expansion is prescribed during contractions in money and credit.

Price of Money: The inverse of the price level. Some writers erroneously define the interest rate as the price of money. Clearly the price of something is what it costs to obtain it in the market. If we remember that the one good in a market economy that remains in a state of barter is money then we see that there is in fact no price of money in the usual sense. The closest we can come to a price of money is its purchasing power determined by a rough average of all exchange prices. The inverse of the average of all prices comes as close conceptually to defining the price of money as we can hope for.

It is true that the inverse of the price of one type of good, bonds, is the interest rate on bonds, but this represents only the return on money spent on bonds, only one type of good (future money costs less than present money).

Recession: A period of falling economic output as measured by the GDP for at least 2 quarters. Normally corresponds to higher unemployment and deflationary money and credit conditions.

Scrip: Economists who see no need for commodity money point to the use of scrip as a non-commodity money. For instance, a merchant might use scrip, a form of credit money good for purchases in his store, which need not be in commodity form. But scrip (that can be redeemed for merchandise) demarcated in currency units such as dollars (as are gift cards) are thus vulnerable to loss of value should the dollar's purchasing power deteriorate. Accordingly they are not independent money other than in a very confined context. Scrip that is not demarcated in a currency only exists in such limited venues.

The Quantity Theory of Money (QTM): stated as $MV=PT$ where M is the supply of money, V is its velocity or rate of turnover, P is the price level and T is a measure of total transactions. The relationship is tautological and explains little of what transpires after one variable changes. For

instance, since the total or average of prices P might increase after an increase in the money supply M , we yet learn nothing of the logically necessary disproportionate changes in prices as the money affects people in a series of new spending patterns starting with those who first receive the money and then working through the economy in an uneven fashion. This process includes some prices falling in response to demand changes. The QTM usefully demonstrates the link between money supply changes and price levels *ceteris paribus*.

The regression theorem of money relates the present existence of money, including fiat money, to its origin as a commodity used in barter as a medium of exchange, and further implies that no money can be introduced successfully unless tied to an existing market derived money. Strictly speaking there is no such thing as a true fiat money in that all of its prices (for each good) are not independently re-established by barter but rather borrow the array of prices established and denoted by its parent commodity money (see 3, 14).

Because money (utility) is forward looking, it is backward valued. Money has utility for its future use in buying goods and services. Other goods are valued to be used in themselves. We don't focus on their possible future exchange value to the extent that we do money. To be confident about the future value of money we must know its market value in the immediate past. Likewise in the immediate past we were concerned about its price or value in the previous period, and so on as we regress back to the original valuation even as a commodity without any exchange value. This neglected insight by von Mises is fundamental for monetary theory.

T-notes and T-bonds: Treasury notes and bonds are debt instruments produced for the purpose of government borrowing. In turn, these instruments are vehicles for investment by the public both foreign and domestic, and because of their history of marketability they have certain money qualities. Demarcated in dollars they are subject to price volatility as are nominal interest rates, both of which are subject to more volatility than under a gold standard.

Stylized Chronology of the Development of Money

1. Pre-barter self-sufficient isolated family sized social structures gradually develop trade by bartering of commodities to obtain goods and services they cannot make or find locally.

2. A primitive barter economy yet to develop money can leapfrog into using a currency which has been developed by another economy accessible through trade or relief.

3. Without this shortcut an economy proceeds as some commodities become acceptable to use for trade only, and certain commodities used as a medium in trade become customary.

4. Typically gold eventually becomes the most useful exchange medium.

5. Gold coin used as money. As a means of exchange, it also has attributes including use as a unit of account, and use as a store of value.

6. Out of convenience gold certificates circulate in addition to coin.

7. Banks issue banknotes redeemable in gold, but keep only fractional reserves.

8. Bankruptcies and competition force banks to keep reserves at a responsible level, and to cooperate with other banks, and to insure against possible liquidity difficulties from periodic waves of depositor withdrawals.

9. Banks push for a national central bank to pool reserves, allowing lower individual reserve holdings per bank.

10. National central banks issue banknotes, still backed by promise of full redeemability. Public becomes customized to national currency.

11. National banks maintain reserves, keep supply of notes stable, keep the physical appearance of the new notes almost identical and make the currency legal tender but withdraw promise of redeemability. The change is not noticed by the general public and often follows a change in the name of the currency from a measure of weight to another designation. This is fiat money.

12. National banks increase supply of notes to buy back new indebtedness (government bonds) of the government to avoid high interest rates and ease the process of government borrowing.

13. Greater supply of money substitutes causes prices to rise. Banks offer checkable deposit accounts backed by only a fraction of reserves and mostly of fiat money.

14. This process continues for an extended period. Fiat money, currency and checkable deposits now customary can continue as money. Enforcement of its legal tender status becomes superfluous.

15. Money supply may be accelerated to avoid asset price collapses in certain sectors of the economy but this causes uncontrollable price increases and eventually a breakdown of the currency as a hyperinflation. Then economy catastrophically reverts to (1).

16. Sometimes money supply growth is managed, only gradually increasing, causing only limited inflation of prices but not without dislocations in the economy, some of which may not be visible if average prices remain stable. Usually these dislocations become cumulative if sustained over several years, and result in readjustments or business cycles.

17. Inevitably a shock occurs to confidence in the monetary regime that causes the public to reject the currency as means of payment. A collapse of this sort can occur as fast as information can spread. As the stock market can have its black Tuesday, so also can a currency. Then without a money system the economy is back at (1).

18. If the currency is dominant globally such as the dollar, and if other unbacked currencies also fail in domino fashion, then the population that was sustainable under a money economy will be largely unsupportable by the drastically scaled down economy of self-sufficiency under pre-barter when it reverts to (2).

19. Redemption of fiat currency notes such as the civil war era U.S. Treasury notes (Greenbacks, 1897) can be resumed in favor of a commodity backed money. The Currency Act of 1900 formally established the dollar as $1/20^{\text{th}}$ oz. of gold. This usually reverts back to (11) as is the case with the dollar and domestically in 1934 and internationally in 1971.

For column components go to chart at depictionomics.com

.7	<.1	.65		3.6	.7	1	1.2	←	2006	\$ Trn
1.5	2.2	1.5		9.1	.7	.4	1.8	←	2018	2006
								M0	1.5	.7
								MB	3.8	.8
								M1	3.6	1.4
								AMS	12.7	5.0
								M2	14.0	6.6
								MZM	15.3	6.9
Set by Fed & by Banks			Varies with liquidity Preferences					Monetary Aggregate		
Monetary Aggregates rounded to \$.1 trn. Jan 2015 (Source: Federal Reserve Bank of St. Louis.)										

MB: Monetary Base. Level set by monetary policy. (F) is confined to bank reserves at Fed, not held by public, vault cash and currency outstanding. Note explosion in MB as Fed buys toxic debt, U.S. Bonds etc. with its created credit. MB constitutes Standard Money.

M0: Cash—currency in circulation.

M1: Under a fractional (rather than 100%) reserve regime the banking system can produce M1 volatility through deposit (D) money expansion. This was true from 1880 to 1914 (before Federal Reserve which further amplified the extent of possible expansion).

AMS: Austrian Money Supply = (M1+G), includes financial assets such as savings accts. instantly convertible to cash, excludes other credit, (economic, not legal criteria).

M2 = AMS + MMM fund shares + small T.D.'s.

M3 = M2+ (H), discontinued in 2006. (2006.= \$7.8 Trillion.)

MZM: Money of zero maturity. = M2 less Small Time Deposits + Inst. MM Funds.

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Readings

Human Action should be in the library of serious economists. Written by Ludwig Von Mises who developed the regression theorem of money and elaborated the ideas on methodological individualism.

For those interested in academic level economics see mises.org for publications and journals in Austrian economics.

What has Government done to Our Money? --Murray N. Rothbard (1973)-is unique in insights regarding the reinstatement of the gold dollar as opposed to relying on a free market in gold as a replacement. For other literature of the Austrian School see mises.org. For more on the economics of money see especially, Rothbard, *The Logic of Action I*, 1997, pp. 297-383. And *The Case against the Fed*.

For a thorough study on the subject of the gold standard see *The Case for Gold* by Rep. Ron Paul and Lewis Lehrman, Cato Institute 1982.

A useful introduction to economics covering 37 topics with only a few paragraphs each and from an Austrian perspective is *The Concise Guide to Economics* by Jim Cox

Walter Block's, *Defending the Undefendable* is recommended for a common sense defense of the speculator, price gouger and more.

Economics on Trial, Lies Myths and Realities, by Mark Skousen is essential for the student taking economics classes. His more recent text: *Economic Logic* is highly recommended.

Money, Bank Credit, and Economic Cycles, (2006) by Jesus Huerta De Soto is a thorough treatise on money for the serious student.

The Gold Standard, Perspectives in the Austrian School, Ed. Llewellyn H. Rockwell, Jr., 1992, Ludwig von Mises Institute, Auburn Ala. Murray Rothbard's paper treats much of the main argument made in this manual and is a must read.

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