

This master-class is in two parts. First, I shall go through the economic background that has led to our current problems, which with questions I anticipate to take about 50 minutes. I assume there are considerable differences of levels of economic understanding amongst you, so I will do my best to avoid jargon and to keep my reasoning as intelligible as possible. After economics we will have a short comfort break.

In the second part I shall take you through the economic relevance of bullion, the structure of the bullion markets and the motivations of governments, central banks, commercial banks and traders towards them.

Economics

To understand why gold is central to economic theory I must expose and debunk some common fallacies. But before embarking on that I want to set the scene by summarising the fundamental differences between classical economics, neo-classical, including Keynesian economics and monetarism, and Austrian economics.

- Classical economics has its origins in the Scottish Enlightenment, with philosophers such as David Hume and Adam Smith in the middle of the eighteenth century. They coincided with Britain's Industrial Revolution, when landless labour became available in increasing quantities. This labour dug canals, extending the transport of goods, and with the transport of goods came trade. And with trade came manufacturing. Adam Smith's great contribution to the way we think was he understood the nature of trade: he said that trade occurred because both buyer and seller wished it, and importantly, both benefited from it. Before this insight, people thought simplistically, that if one party benefits, it was at the other's expense.

The industrial revolution continued and spread with the railways. After the Napoleonic War trade tariffs increasingly frustrated trade itself, so they were repealed, leading to free trade. At that time, David Ricardo, James Mill, Jeremy Bentham and Thomas Malthus developed economic theory to form the bones of what we call classical economic theory today. In France, a similar revolution in economic thinking took place, led by Jean-Baptiste Say and Frederick Bastiat. Classical economists believed that it was resources – commodities, capital equipment and labour - that decided wealth, that decided demand and therefore prices.

- Neo-classical economics started in the latter years of the 1800s, with economists such as Alfred Marshall at Cambridge University, and his pupil, Arthur Pigou, who in turn encouraged and supported Keynes. Marshall in particular was interested in marginal concepts of consumer demand and production costs, themes that were echoed by Keynes in his *General Theory of Employment, Interest and Money*. In economics Marginal Concepts basically hold that values are established by the extra cost, or extra demand for one unit of product, and that it is these marginal factors that determine prices. They believed, like the classical economists, that prices were driven by costs, or physical reality. But they recognised the importance of consumer preferences. In other words they accepted a degree of subjectivity in the elements that go to make up prices that can change at the margin. But their understanding of consumer preference was based upon data; in other words consumer preferences that are known, that existed in the recent past. This is static preference, because it does not account for unknowable future consumer preferences. And it leaves no room for the effects of new entrepreneurial activity.
- The economic theories of the Austrian School started with the work of Carl Menger, whose theories also had their roots in marginalism, specifically marginal demand, but he took a more subjective view: his insight was that it is entirely human action against a background of given resources that determines prices and therefore demand. Production costs were secondary. For this reason, Menger and his adherents formed what was first called the psychological school, before the German historical school derisively termed it Austrian. But Menger never fully appreciated the importance of future consumer preferences compared with known preferences.

Menger was closely followed by Böhm-Bawerk and Friedrich von Wieser, both of whom continued to argue the Menger tradition against other economic assumptions, particularly against Marxism and the German Historical School. The second wave of Austrians was led by Ludwig von Mises and his disciple Hayek. But a vital difference arose between them: von Mises regarded neoclassical methodology to be irredeemably flawed; while Friedrich Hayek, accepted a large part of neoclassical methodology. But it was von Mises who went on to develop an understanding that it is **future** consumer preferences that determine prices. This was his great insight.

We can deduce from von Mises's insight a number of important conclusions with respect to production:

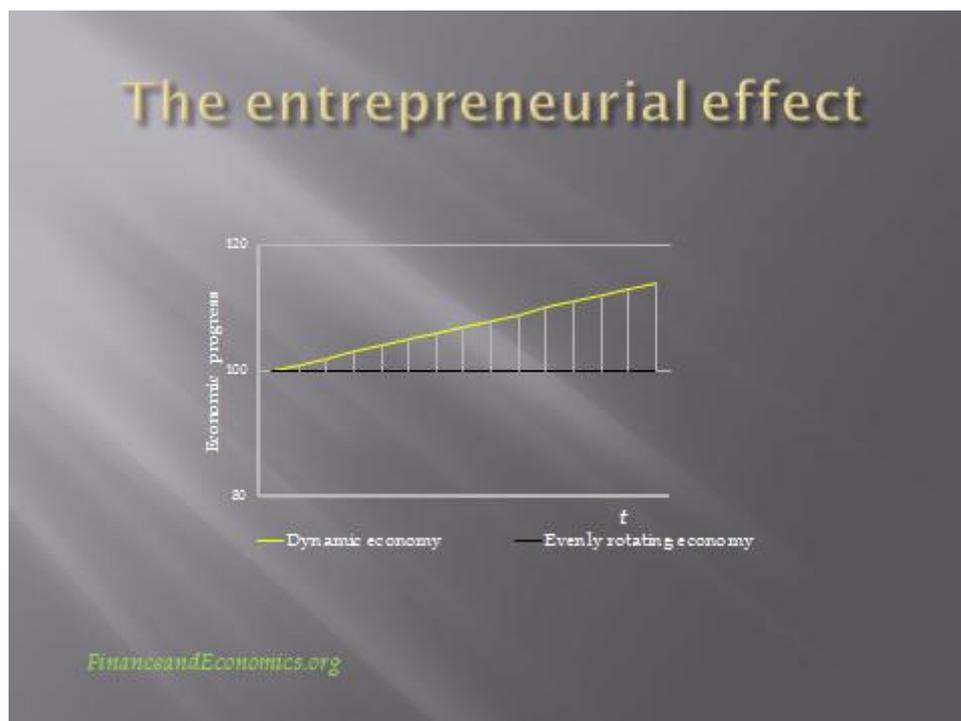
1. The entrepreneur has to tailor his costs to meet consumer preferences.

2. The entrepreneur has to have the foresight to anticipate consumer demand for at least as long as it takes him to produce a product or service.
3. The entrepreneur has to constantly seek ways of improving his product to attract and keep the consumer.
4. The entrepreneur has to be highly specialised to maximise his chances of success.
5. The entrepreneur faces a significant risk of failure, which he must reduce as much as possible.
6. He must ensure he has all the relevant information to anticipate consumer demand for his product.

You can begin to see why it is virtually impossible for government to add value to this process. Incidentally, when we refer to an entrepreneur we refer to a person whose skill is to make money out of anticipating demand. Not every businessman can do this. Some are bean counters, administrators or managers. These are different functions, though they may be embodied in the same person, and they certainly should be embodied in any business.

In short, there is a dynamic relationship between future consumer needs and wants and entrepreneurial risk-taking. It is this difference in approach more than anything else that separates the Austrians who follow von Mises's economic theory from the neo-classicists. Von Mises understood that the economy is in a continual state of unpredictable evolution, with the over-riding imperative to satisfy consumers' needs and wants, to lessen personal uneasiness as he put it. The only way this unpredictability can be discovered is through market prices, the collective result of individuals' own human actions: there is simply no other mechanism that can do this.

The neo-classicists take demand as they know it, and assume this is what people will continue to want. From there it is a small step to thinking the market is no more than an historical reference point. Neo-classicists might know, for example, the monthly demand for a product was at a certain level and at a certain price. Therefore they assume that future demand will relate to these numbers. With that assumption, they now extrapolate future sales. They assume this with all other products. They believe production can be directed to achieve these outcomes. But instead of the market telling them demand and price as time progresses, they are now telling the market.



This planned approach becomes devoid of entrepreneurial activity and assumes away any future consumer choice, because it cannot predict human action. Instead, it excludes these dynamic factors from all calculations. Neo-classicists are working on what von Mises called the evenly rotating economy: an economic model devoid of entrepreneurial anticipation, devoid of consumer creativity, and the interaction between them. It is static and does not progress. I have tried to show the difference conceptually on this graph. The static neo-classical model moves from left to right over time, horizontally. Over time therefore there is no economic progress because it cannot be quantified and is not accounted for in any statistics. By progress I mean the interplay between consumers' future purchases and how entrepreneurs successfully anticipate them. All econometric models share this fault. The dynamic version, which includes entrepreneurial activity and consumer creativity gives us this progress, and is represented by the rising yellow line, which is what free markets are about.

You can make assumptions, from which you can say the economy will grow, which is not the same thing as progress. Progress is very difficult to measure. But for your neo-classical growth assumptions to be right, you must assume that consumers are not forced to choose between one product or service and another. Why? The only way an average of the money-value of total output can increase is through absence of choice. Economic growth depends on there being extra money so consumers don't need to make a choice. You have to assume they can have this *and* that, not this *or* that. But real life is not like that: you have to choose, and you cannot have economic progress without entrepreneurs successfully anticipating how to make your money go further.

This leads me to a logical conclusion. Economic growth, measured by metrics such as GDP, is a Keynesian myth. It is growth in the quantity of money being spent. It is under-recorded monetary inflation. I say more about this later.

To get economic progress you have to have entrepreneurs and you have to understand that consumers' preferences, or choices, tomorrow are different from today. They are both rational and unpredictable. And as time goes on, what was planned by interventionists a few months ago gets further and further removed from where the economy would be if you left it alone.

Does anyone think, with the static, evenly rotating economy, devoid of consumer creativity and entrepreneurial anticipation, we would have any progress? Would we have the internet? Would we have developed semi-conductors in all their modern applications? Do you think a committee of administering economists and government bureaucrats would have planned the production of computers and other electronic equipment that doubles its power every two years or so? No: it can only be done by entrepreneurs, who put their money on the line.

Look at West Germany and Japan in the post-war decades. Their economies rose from the ashes of WW2 to be the most successful economies in the world. How? There are lots of reasons I can give you, but there is one single common feature: both countries had a strong entrepreneurial element, which grew because genuine savings were available to invest in production. The entrepreneur needs the means to carry out his predictions of future needs and wants. Both the German Mittelstand and the Japanese Zaibatsu succeeded by anticipating consumer preferences. So successful in fact that not even a doubling of their currencies, in defiance of all neo-classical price theory, stopped them succeeding in this quest.

Let me digress slightly and tell you a true story. John Cowperthwaite was sent by the British Colonial Office to Hong Kong in 1945. He was asked to find ways in which the government could boost the post-war economy, which had been ruined by the Japanese occupation. But he found that the economy was mending itself, rapidly, without any government intervention. Fortunately, he wasn't an economist. He therefore exercised common sense. Every time some meddling civil servant or politician in London suggested a course of action he found a way of not doing it. When he was appointed Financial Secretary in 1961, he even refused to collect economic statistics, because he took the view that they would only encourage his officials to interfere with the economy.

How different it would have been if anyone else had been appointed. Here was a small island, with no natural resources, flooded with refugees from mainland China, with already the highest population density in the world. These are huge problems crying out for action. It is a crisis. Instead,

Cowperthwaite said “No. People seem to be sorting it out themselves. Let them keep the resources to do it. I shall hold income tax at 15% and I will not introduce any other taxes.”

Cowperthwaite retired in 1971 and Hong Kong’s success was entirely due to its people, and one man who was determined not to interfere. It is a clear illustration that government is no substitute for society that decides for itself how to divide and apportion its labour.

I have now tried to illustrate the important difference between a dynamic economy, with the market as a place where prices are discovered, where entrepreneurs derive essential information, and an evenly rotating, or static economy, which is the sterile economic model common to all neo-classical interventions. The differences between the two grow with time, as the chart implies. The longer you lock yourself into the static model, the further away you move from the dynamic alternative, and the greater the differences between the two. It can be a very gradual long-term thing. But over time, to keep alive the illusion of success in the static interventionist model, the State inevitably starts restricting economic freedom; because freedom of action becomes the enemy of the State’s pre-determined plans. It has to prevent people from exercising their free choices, which we are becoming increasingly aware of today.

It took over seventy years of this divergence before the static model finally collapsed in the Soviet Union. With a less aggressive divergence, other major economies being run on neo-classical lines are still intact, but are beginning to finally collapse. This includes Western Europe, the UK, the United States and Japan. You can already see the distortions building up in the new economies, such as China, Brazil, post-Soviet Russia and India, but these distortions are generally less progressed, so not yet as damaging. The logical implication is that eventually the economies of the West will face the same fate as the Soviet regime, because our economies are also managed on static models. And that is something that increasing numbers of intelligent thinkers are beginning to worry about. That is why we are beginning to think of the consequences and how to protect ourselves.

Keynesianism

There is one branch of neo-classical economics that has dominated intellectual thinking, dominated government policy, and has been main-stream in our universities, and that is Keynesianism. Keynesianism has its roots in neo-classical economics. It is locked into the same static economic model. I want to take a few minutes on Keynes to help you understand Keynesianism, because it explains the motivations of the economic establishment in all advanced economies.

The social background to the 1920s and thirties was the context in which Keynes evolved his ideas. Political opinion in Europe was moving to extremes and the laissez-faire economic policies of

previous decades were deemed out of date. Intellectual thought was becoming polarised between communism and fascism. For the intellectuals in Britain, the horrors of communist repression in Soviet Russia were concealed by strict censorship enforced by terror and severe restrictions on foreigners' movements. At the same time the Nazi horrors of Germany were visible to all. Floods of refugees told their stories. The Christian ethos at Britain's universities recoiled against fascism and was driven towards socialism and communism instead. Cambridge University, one of Britain's two top academic establishments, even became the fertile recruiting ground for the Soviet intelligence services, from where they recruited their most important spies.

As a Cambridge scholar, this was the intellectual world within which Keynes developed. His father was a lecturer at Cambridge University and it was at King's, Cambridge, that the young Keynes read mathematics, in which he received a first-class degree.

We can make educated guesses at what motivated the young Keynes, and there are some pointers. He had a privileged background unsullied by commerce. He attended Eton, one of the two top English schools, where his fellow pupils were very much the sons and grandsons of the nobility and landed gentry. In those days, the eldest son inherited the estate, and the other sons went into fashionable regiments, the Church, or the civil service. Trade, or business, was above all for the nouveau riche and generally despised, and for those relegated to using the tradesmen's entrance at one's house.

So his progression into the civil service at the India Office was an acceptable career choice, and his subsequent vacillations between academe and the Treasury were consistent with the social standing of someone with his background at the time. It is true to say the Civil Service was populated with many of Keynes's type: intelligent, well-educated, principled and dedicated to public service. This probably explains Keynes's fundamental faith in government. His positive outlook on the role of government was reflected in his confidence that a solution could always be found to any problem, which is what his superiors would have looked for in a young man destined to go far.

One of his earlier widely read books, *A Tract on Monetary Reform* was published in late-1923, just after the German mark finally collapsed from hyperinflation. It was clearly the work of a statist, someone who believed in the ability and motivation of government officials to serve the Nation. But it starts off badly when in the first chapter he discusses the effects of inflation and deflation on the private sector. The lack of understanding of micro-economic factors, familiar to those with experience of commercial reality, is evident in his analysis, which is comprised of sweeping assumptions.

For example, he states that:

“The fact of falling prices injures entrepreneurs; consequently the fear of falling prices causes them to protect themselves by curtailing their operations; yet it is upon the aggregate of their individual estimations of the risk, and their willingness to run the risk, that the activity of production mainly depends.”

The opening phrase of this quote is obviously true, that falling prices injures entrepreneurs; but his subsequent supposition, that it makes them curtail operations, is only true of a severe deflation, typically forced upon the economy by a deliberate contraction in the quantity of money. This is a typical Keynesian technique. You make a statement that is obviously correct in an extreme set of circumstances, and then apply it to all cases. “If you eat too much cream you will be sick. Therefore you must never eat cream.”

This is how he dismisses the sound-money case. By taking a statement that might be true in a specific set of economic circumstances and extending it into a generality, Keynes has misled himself and those that follow him into believing the only tolerable situation for entrepreneurial activity is for prices to never fall, and that the stimulation of rising prices is vital encouragement for entrepreneurs. This flies in the face of all experience under the gold standard. And von Mises’s analysis explains that despite the tendency for prices to fall, consumers still buy flat-screen televisions and i-pads simply because they want them.

By the time in 1936 he published his *General Theory of Employment, Interest and Money* Keynes was rationalising economics mathematically. This is perhaps consistent with the static neo-classical model, the evenly rotating economy as von Mises put it, which is devoid of the arithmetically unquantifiable uncertainties of future consumer preferences and entrepreneurial activity. Keynes in common with other neo-classicists took price and monetary data from the static economic model, and projected mathematical relationships as a substitute for the real dynamic economy without comprehending there is a difference between the two. To do this, measurements have to be taken from statistics that reflect the past and cannot be a proxy for the future.

Keynes writes of the general level of wages and the general level of prices, which are meaningless phrases empty of reason. Even in his static economic model you cannot average the wages of one person with that of someone doing something completely different: the result must be devoid of useful meaning. You cannot average the prices of disparate items, a washing machine and 50 gallons of beer for example, and end up with a useful mathematical function. All Keynes’s averages are a mathematical construction, for which statistics might themselves be created and equations derived,

on the further assumption that the factors have definable relationships. Nor do wages and prices rise or fall uniformly, as suggested by the term, “level” as in “the wage level” or “the price level”. The dependence on averages is a bad and misleading macroeconomic substitute for economic reality.

Keynes seemed confused about savings. He frequently stated that savings are equal to investment and are different aspects of the same thing, and then goes on to contradict himself. This is probably because his true motivation is behind his thinking, and not a well-thought out economic theory.

This is illustrated by this quote from *The General Theory*:

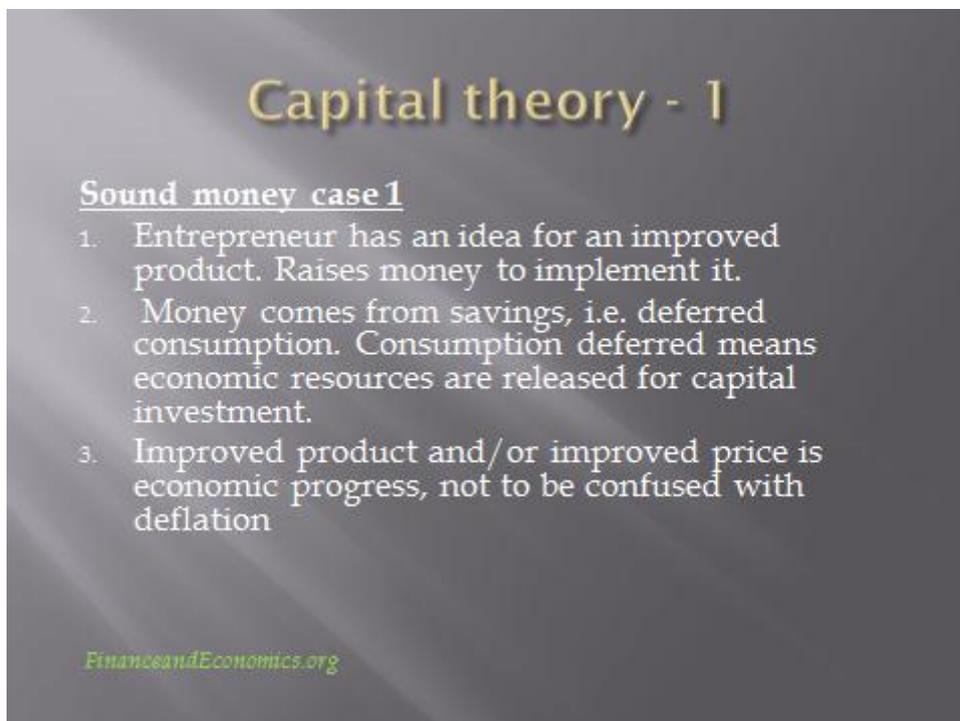
“For my own part I am now somewhat sceptical of the success of merely monetary policy directed toward influencing the rate of interest. I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of general social advantage, taking an ever greater responsibility for directly organising investment.” (Page 164 of *The General Theory*).

Let us put aside Keynes’s concept of the “marginal efficiency of capital-goods”, on the basis that it has nothing to do with his stated scepticism and it merely confuses the issue: the core of his statement is his belief that the State is better-placed than private enterprise to direct capital investment on the basis of “general social advantage”. Furthermore he tells us that direct government intervention is more effective than “merely monetary policy” without stating why. We can only deduce that it is because he believes the State should take greater control over capital investment by directing this investment in the interests of government’s social preferences rather than merely encouraging the private sector to invest. He actually states this elsewhere in the book. Therefore his objective is social engineering – he actually says so. Keynes is passing off intervention in the economy for social purposes as economics itself, which is not economic theory, but the manipulation of the economy for social objectives.

It is quite extraordinary the profound affect this very bad book has had on the economics profession. Keynes deliberately misconstrues the importance of savings, having a moralistic dislike of wealth. At the same time as he disparages rentiers, he praises investment. He even postulates that savings are bad for the economy because they restrict growth in immediate consumption. Keynes also insufficiently understood the creation and role of bank credit in the economy, and how its expansion created the boom-bust cycle that he sought to stabilise. Against all sense, this book sealed Keynes’s reputation as the most important economist of the twentieth century, probably because everyone struggles to understand it, including many who claim that they do. On the back of all these mysteries he became a cult-figure.

So the concept of Keynes's economic intervention has its origins in his prejudices. It is important to understand this, because it has been sold to us as solid economic theory. It is not. It is moralising based on the assumptions behind the static, evenly rotating economic model. It is the intellectual means by which government economists seek to influence the progress of the economy. They have been misinformed by Keynes that government spending can stimulate the economy and move it out of a recession. But as we have seen, Keynes only understood a static economy, devoid of all creativity, the interaction between consumers' future preferences and entrepreneurial action. So we can easily dismiss Keynesian ideas as having no economic validity. And now we can begin to have an idea of the dangers they pose.

Capital theory



Capital theory - 1

Sound money case 1

1. Entrepreneur has an idea for an improved product. Raises money to implement it.
2. Money comes from savings, i.e. deferred consumption. Consumption deferred means economic resources are released for capital investment.
3. Improved product and/or improved price is economic progress, not to be confused with deflation

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This brings me to another big error of Keynesianism, and its related school, monetarism as practised by central banks, which creates the credit-driven boom-bust cycle it is intended to resolve. Business cycles are actually caused by the expansion of money and credit, the result of the central banks' monetary policies. Understand this and it is easy to understand why we have cycles of boom and bust – the exact opposite of what monetary policy is meant to achieve.

Take the example of businesses operating in a sound money environment; by that I mean there is little or no change in the quantity of money, and little or no change in the level of bank credit. A business developing a new product or improving an existing one has to invest its own reserves, or find a saver willing to invest. This will tend to withhold money from current consumption,

reallocating it into deferred consumption, or savings, and from there into the proposed investment. And because this money is not spent on current consumption, the labour and raw materials required for any new project are similarly released. So there is a shift of resources from consumption into savings, from savings into investment, and from there into capital goods. A balance is maintained within the economy and there is no boom and bust. It is a non-cyclical process, driven only by peoples' economic needs and wants and the cost of supplying them. Business activity in a sound money economy is inherently stable.

The investment of these savings is reflected in improved products, new products, greater volumes, better quality, better reliability, lower prices: whatever it is the consumer judges important. And because there is more product available for his money, prices will fall, perhaps one or two per cent a year. That's progress. That's what consumers want.

Capital theory - 2

Weak money Case 2

1. Central banks lower interest rates. Whoopee! Let's borrow some money and find something to do with it.
2. Entrepreneur has to bid up for labour, capital goods, commodities (not released by shift of consumption into savings).
3. Inflation follows. Interest rates rise. ROE calculations screwed. Cut!

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Now look at the situation when business investment is financed by newly created money and bank credit instead of savings. The process kicks off with the central bank lowering interest rates and encouraging commercial banks to lend. Cheap credit makes investment appear attractive, so the businessman borrows to invest in his business. He will often bring forward his long-term plans to take advantage of cheap credit. He will certainly be tempted to find something to do with cheap money, rather than come up with a sound investment plan that stands on its own merits. But many other businessmen are encouraged by the same cheap credit to do the same thing at the same time.

Businesses start investing simultaneously. The randomness of their individual future plans has gone and been replaced by a herd instinct. Cheap credit bunches existing capital spending and encourages capital spending for the sake of it. But it gets worse: cheap money also supports consumption, because saving money is less attractive with lower interest rates. So if anything, consumers respond by drawing down on savings to spend.

So our businessman has to pay up for labour, because it hasn't been released by the businesses serving consumers and end-users, and he is in competition with the other businessmen which have brought forward their capital spending plans. He has to pay up for raw materials, for the same reasons. The combination of industry and consumers responding to cheap finance, in the short-term will drive the economy better. But with no extra raw materials and employable labour, their prices rise due to bunched demand. It is the effect that an increase in the quantity of money has, so its purchasing-power falls.

And with prices now rising, interest rates also now also rise from artificially low levels, as the central bank's priorities shift from stimulating the economy, to slowing down price inflation. Our businessman's plans are now in a mess. He got the cost and availability of labour and raw materials wrong, and because interest rates have shot up, his Return-On-Investment calculations turn out to be far too optimistic. And to make matters worse, the deteriorating business conditions that follow from rising interest rates force him to accept that his sales projections were also too optimistic.

His fellow entrepreneurs are in the same boat. Businesses start cutting back. They act as a crowd on the way up and on the way down.

The essential point is fake money has kicked off a business cycle which didn't exist before. It is never just a question of central banks getting their timing wrong, as many suppose. The basic concept is fatally flawed, serving only to destabilise the economy.

The central bank then compounds the problems it has created by again lowering interest rates with the downturn. More than anything else it is scared of a recession, so it cannot allow the distortions and false investments of the earlier round of monetary stimulation to unwind properly.

But next time round, the businessman is not so easily tricked. Perhaps he has lost his animal spirits, as the Keynesians say. He builds greater margins into his investment calculations. So the economy becomes slower to respond to a new, deeper round of interest rate cuts. The central bank has to act more aggressively to create yet more fake money, to get the result it desires. It tries to persuade the banks to expand credit.

These credit expansions work like a ratchet, becoming more destabilising over each credit cycle.

The businessman eventually wises up, overcomes any patriotic instincts and moves his manufacturing to somewhere where at least some of the factors of production are available. He needs to plan for ten, fifteen, twenty years. He cannot afford to ride destructive credit-driven cycles every three or four years. It is better for him to build a factory in the jungle and train up grateful natives. He can have his factory up and running in less than half the time it takes in the West, de-risking his capital investment.

It is unsound money that has driven him abroad more than any other factor. Over a number of these credit cycles, the economy in countries with falling savings, like the US and UK, becomes more and more dependent on consumption, and less and less on manufacturing.

And eventually, to further encourage GDP growth, as a last throw of the dice, consumers are encouraged to actually borrow to spend and abandon saving altogether. So on every credit cycle, savings diminish and debt increases, finally rising to unsustainable levels of debt. And that is where we arrived in 2007/08. That marked the end of the road for the post-war Keynesian experiment.

Gross domestic product

I now want to say a little about GDP, which is regarded as the most important indication of economic performance, but actually is the unclothed emperor of economic statistics (if you remember your Hans Christian Andersen).

An American economist and econometrician, Simon Kuznets, was awarded a Nobel Prize in 1971 for “his empirically founded interpretation of economic growth which has led to new and deepened insights into the economic and social structure and process of development”. It was Kuznets who is credited with the invention of Gross Domestic Product, which he worked on in the late 1930s.

Before his work on GDP there was no statistical measurement of the size of an economy. The problem was to reduce the diverse production of goods and services to a single measurement, so that apples and pears could be lumped in with motor cars and trucks. GDP is the money-value of all goods and services bought over a period of time. Allowance was also to be made for government provision of goods and services, many of which were provided to end-users for free. The solution was to include these at cost.

This accounting identity has become the most important statistic for assessing the effectiveness of macro-economic policy. And because it does not differentiate between the value of consumer-driven GDP and government-driven GDP, politicians and their economic advisers are in the habit of

assuming they have similar economic values. This allows a politician to spend money and delude himself that spending contributes to “economic growth” to the same degree as does an increase in productive private sector output.

This is obviously nonsense. But we can advance our criticism one step further to demolish any pretence the GDP statistic has to represent the values of production.

To do so, we need to do what we did with capital theory and consider an economy based on sound money, with no change in the quantity of money and bank credit, and a balance in trade and cross-border capital flows. If, on the last day of the previous year, GDP is one billion monetary units, what then will it be on the last day of the current year? Why, it has to be the same one billion units. Production activity can change, the ratio between consumption and savings can change, the ratio of private sector to public sector in the economy can change, but if there is no change in the quantity of money, GDP must be the same. The adjustment is on prices, so a rise in overall production leads to lower prices, and lower production to higher prices.

Having established that in a sound money regime there can be no change in GDP, it becomes clear that in a fiat money regime, GDP will change only to reflect changes in the quantity of money in the economy, and this is the key point: independently of production activity.

But there is a further difference between the two conditions. In the sound money example, prices can be expected to fall over time, making the application of savings to business investment an attractive proposition for savers. Not only does the saver get a modest interest return, but the purchasing power of his capital increases over the years. For this reason surplus capital tends to be productively invested as savings rather than speculated with, positive returns being certain, except obviously for the element that relates to individual entrepreneurial risk.

In a fiat money regime, this relationship between savers and productive investment is interfered with by the destruction of savings by inflation, and by the destabilising effect of credit-driven boom-and-bust cycles. And because savers, or financial intermediaries acting on their behalf, increasingly seek to protect savings from inflation, savings shift away from productive investment. Instead they are reapplied to more speculative activities, such as gambling in stock markets, property, and other asset classes thought to benefit from loose money. Instead of property, for example, being valued as the net present value of future income, it becomes valued for its speculative potential. This is obviously an undesirable distortion of prices.

The long-run effects are demonstrated in the contrast between economies primarily driven by savings and those driven by consumption. I have already referred to the entrepreneurial qualities of

Germany and Japan. Key to this was their strong savings culture that flourished under successive governments, which pursued an anti-inflation bias in monetary policy while not taxing savings. The benefits enjoyed by these savings-driven economies are in accordance with the Capital Theory I have already described. Stability in the cost of money and other factors of production allowed intermediate manufacturing processes to thrive, and both Germany and Japan developed into economic power-houses as a result.

The position of consumption-driven economies has been entirely different. In the post-war years the governments of the US and UK (which I take as an example) have relied on monetary expansion as the driver of economic growth, as they followed Keynesian and Monetarist macro-economic policies. The decline in the savings ethos in both these Anglo-Saxon economies has been driven by monetary inflation, discriminatory taxation and the unstable economic conditions for productive investment that is the consequence of monetary expansion. Again, this is easily understood from Capital Theory. The consequence is that manufacturing, with unstable costs of both money and the other factors of production, has declined, leaving these economies increasingly dependent on consumption.

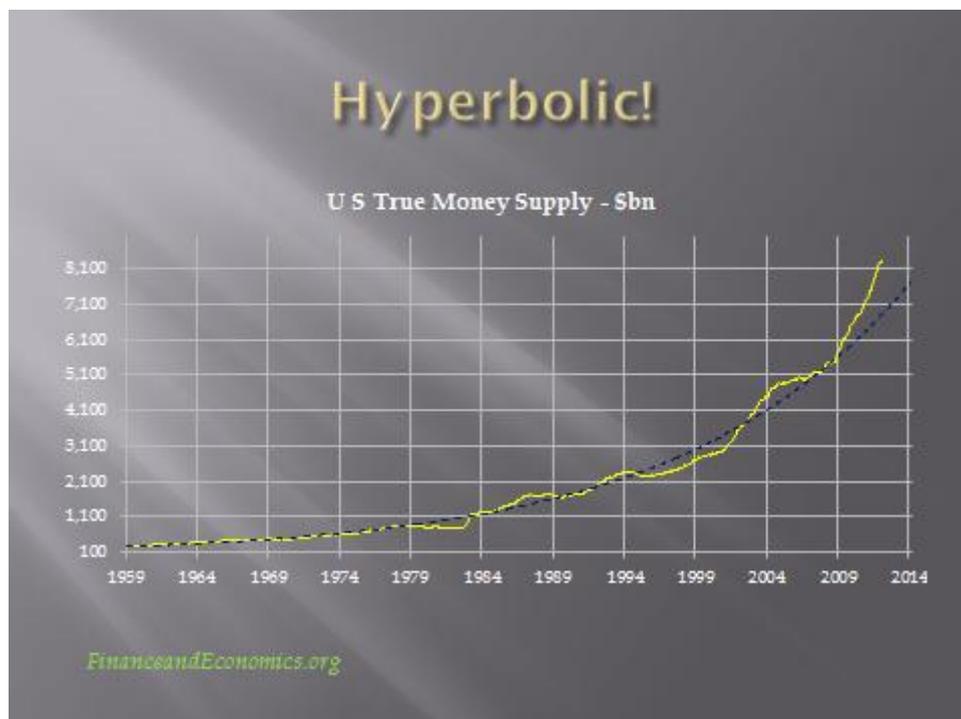
Attempts to manage the GDP statistic through injections of fiat money have not only distorted the relationship between genuine savings and productive investment, they have also led to a growing accumulation of speculative capital. For this reason, monetary expansion does not automatically feed into GDP, instead it revolves round capital markets. The result is monetary expansion has to be pursued more aggressively to boost GDP. And here a self-defeating mechanism becomes evident. The more monetary inflation is injected into the economy, the more capital owned by the private sector is destroyed, and therefore the more monetary expansion favours financial speculation over productive investment. Further injections of fiat money are simply ceasing to bolster the GDP statistic.

Not that this will stop policy-makers from continuing to try to grow the GDP: Keynesianism and Monetarism is based in large measure on the delusion that the GDP statistic is actually economic growth and not just growth in the money deployed in the economy. The only way this process will cease is when all confidence is lost in the purchasing-power of fiat money. Only then, in the post mortem, might the mistake of confusing an accounting identity for the real thing, economic progress, become clear to the economic establishment and the wider population at large.

Return to sound money

The natural state for a sound economy, one which maximises the fruits of one's labour, is to have sound money. When you have sound money, you limit government, because it cannot have recourse

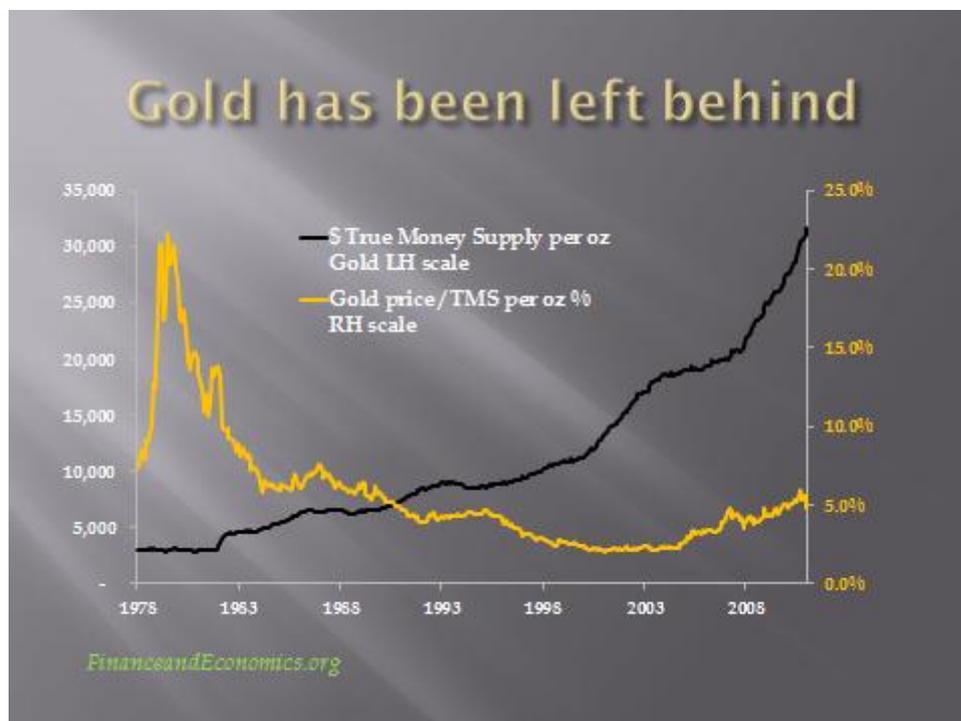
to monetary inflation. Sound money also means the absence of bank credit inflated at will. We have not had this in our lifetimes, so it seems a strange idea, but it is actually the historical norm, to which society always returns after fiat money has finally failed. We are now on the cusp of that failure, marked by the end of the debt bubble in 2008. We are now in the next stage of this failure: a crisis of government finances. We are beyond the point of no return: we are in a debt trap from which no politician has the suicidal tendency required to attempt an escape. Instead government is issuing accelerating quantities of debt that will never be repaid, because it has been destroyed, not invested. And as price inflation starts to accelerate, as it surely will, interest rates will have to rise, but always too late. We will see nothing but accelerating borrowing costs, accelerating government liabilities, cut-backs on pensions, attempts to raise taxes on the rich, which will never work, an economy falling apart. It will then be obvious that the debt trap has ensnared us, and it is the recipe for the final collapse of paper money.



True money supply has already gone hyperbolic, in other words it is accelerating faster than parabolic, which is shown by the dotted line. TMS is the sum of cash, checking accounts and instant access deposits in issue. It is instant money in the system. It has been accelerating like this for over three years: it's not an aberration any more. This understates the problem, because it includes artificially low borrowing costs, which are being rolled up. When interest rates rise, which is bound to happen sometime, the acceleration will be even greater, because borrowing costs will be accelerating as well.

So the purchasing power of fiat money is set to collapse and it must eventually be replaced by sound money.

What is sound money? It is the money that arose from society's choice – not government – government usurps society. Sound money cannot be corrupted. It is simply gold or silver – the natural incorruptible choice of people exchanging the fruits of their labour. Both of them have been chosen independently by societies with no contact with each other. They were money for the Vikings and the Chinese over a thousand years ago. They were valued in the known world over five thousand years ago. Rational economics, the understanding of human action, predicts we will return to sound money, but I believe that this will happen chaotically, and in the next two or three years. Just look at that accelerating hyperbola, and factor in proper interest rates.



Gold has been left way behind by the de-basement of paper dollars. The black line is the amount of true money supply in issue for every ounce of gold the US Treasury says it owns. The most recent figure is \$32,000, based on 8,134 tonnes. There is some doubt about the amount of gold, because we know the central banking cartel of the advanced economies have been selling gold over the last four decades, and there is suspicion the US hold less than the official number. If it is less, then the amount of True Money per ounce is correspondingly higher.

The gold price is just over 5% of that, and this is represented by the yellow line. You can see that between the years 2000 and 2004 it bottomed out at about 2.1%. The only other time it got that low was in April 1971, when it got down to 2.3%, and the gold price was at \$36.

The last time the gold to True Money relationship was at this level since gold bottomed out twelve years ago was in 1991. In other words the price of gold today relative to paper money is the same as it was then.

In a paper currency collapse, that relationship initially goes one-to-one as a minimum. After that the purchasing power of paper money begins discounting future falls in purchasing power, so the gold to TMS ratio will go over 100%. Towards infinity.

That concludes the economic background to gold and silver.