

The Monetary Economics of the Misesian School and its Current Relevance

by

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### **The Problem**

As Ludwig von Mises explained, modern capitalism could only come into existence after a number of habits of thought and the ancient economic belief system were cast away by a small group of philosophers and economists in the 18<sup>th</sup> century (Mises, Ludwig von: Capital Supply and American Prosperity, address before the University Club of Milwaukee on October 13, 1952, p. 3). Among these habits of thought that limited systematic capital accumulation and its unending process of re-structuring, were (1) the norm that it would be unjust to outdo a competitor by producing better and cheaper goods, (2) that one should not deviate from traditional methods of production, and (3) that labor-saving machines would bring about unemployment. With the addition (4) that it is a function of government to protect the less productive businesses from the more efficient one gets a world where the systematic accumulation of capital and its constant re-structuring under the guidance of entrepreneurial appraisal makes no sense. It was only after the abandonment of these inhibitions when the path to prosperity was opened up. All it took was economic freedom for entrepreneurial action and governmental restraint in order for the invisible hand to operate and set society on the path towards prosperity. It was not a lack of know how and education that hampered economic progress before modern capitalism emerged, but it is “economic freedom that creates both: capital and technological knowledge.” (Mises 1952, p. 4)

It is the great challenge of our time that new political forces are on the rise that are that are ready to throw the Misesian insight about the sources of prosperity and knowledge over board and are about to choose the path towards economic decline. As if they had been waiting all along over the past decades, the outbreak of the financial crisis

provided a starting signal for politicians to go after their prey in 2008. Across the globe the reversal of values has set in. With amazing unity politicians across different countries and across different nations preach the new creed of economic decline: the re-establishment of the pre-capitalist norms of state intervention tarnished as “help”. By the very act of using its power, politics receives its legitimacy for action automatically because all it takes for intervention to become apparently justified is intervention itself as these policies produce the evils that are claimed to get healed. It is only by intellectual insight that the apparent legitimacy of state intervention can be revealed as being without foundation.

## **Capital and Money**

Almost any of the common standard macroeconomic textbook typically confuses its readers by a confounding array of poorly differentiated concept, particularly those pertaining to capital and money. Different from this practice, Austrian economics in the Misesian tradition makes strict distinctions between money, capital goods in the production process and capital as an accounting concept. In this classification neither money nor financial assets are “capital”. First of all, a sharp distinction needs to be made between productive capital and accounting capital. Productive capital refers to the arrangements of heterogeneous capital goods in the production process while accounting capital is the monetary representation of the market value of the capital goods. As to productive capital, its structure is at least as important as its size. Both, the accumulation of capital *and* the unending transformation of the production process are the keys to future prosperity. Along with the distinction between productive and accounting capital and the recognition of the heterogeneity of productive capital, Austrian economics includes a further element in its theory of capital that is different from other schools: the integration of entrepreneurial appraisal. This way the Austrian theory of capital discusses money and capital in the perspective of human action which implies time, purpose and means.

Likewise as to capital, confusions also abound as to money. The heterogeneity of capital has an important implication for the role of money. In the Austrian perspective, money

is not only an entity that impacts on the price level, it is also an ubiquitous economic factor that impacts upon relative prices and thereby on the capital structure. Therefore, monetary policy, in so far as it determines at least to certain degree the money supply and sets the policy rates of interest, will also affect the longitudinal structure of capital. Money expansion comes along with new credit and represents additional expendable cash balances. An increase of the money supply will augment the supply of loanable funds beyond authentic savings, and, *ceteris paribus*, the monetary interest rate will fall below its natural level. With more money supplied to the market beyond authentic saving, the loan-takers are deceived about the sustainable size of funding and initiate credit-financed expenditures that are not matched by the availability of resources that would be needed in order to maintain an extended capital structure.

Without active central banking oriented toward specific monetary goals and fiat monies as their tool, and without a fractional reserve banking system, the constraints on the money supply would hold back the boom and thus bring the economy on a path to gradual adaptation. There would be no space for making economic actors think that scarcity had disappeared. The limited availability of credit would make the entrepreneur rely on generated profits, and it would force the consumer to live within his means. Loanable funds would come from the savings out of income, and thus the additional resources for investment would only be set free when savers gave up on higher consumption for some time. Without central bank intervention, the natural rate of interest is not artificially changed by central bank intervention, and the economic expansion is led by productivity gains and funded by authentic savings.

In a credit-driven boom, however, the increase of loanable funds is provided by the monetary expansion and as such it is not congruent with savings out of income. With the interest rate artificially lowered, the competitive situation forces business to expand production. Without credit expansion, the sequence is that demand follows supply; under the condition of monetary expansion, the sequence is reversed: supply is forced to catch up with higher nominal demand that comes from the credit injection. The natural path of the expansion will be transformed into an economic boom.

## **Sequence of Credit-Driven Booms**

With the inception of active economic policy and modern central banking, the natural process of economic progress has undergone a profound change. In contrast to the situation of passive central banking, modern central banks aim at maintaining a certain inflation rate (falsely called “price stability”), and together with their respective governments, they try to push economic growth (as it get falsely measured by deflating nominal national income). A persistent inflationary bias has characterized modern central banks since they were institutionalized as fiat money managers. Typically, modern central banks define “price level stability” as a positive range of the consumer price index or call their policy aim right away “inflation targeting”.

The inflationary bias of modern central banks lays the groundwork for the occurrence of boom and bust cycles. In the absence of substantial technological progress, modern central banks produce inflation, while in periods of intensive technological progress and in periods of augmented supply forces, they may achieve lower inflation rates, but thereby they produce credit-driven booms that do not show up immediately in the consumer price index. Modern central banks transform productivity-led economic expansion into credit-driven economic booms that are unsustainable. Assured that there is no excessive inflationary risk, monetary policy managers feel relieved to apply more expansive measures and thereby they will produce a monetary interest rate that lies below its natural level. This policy moves the economy to higher debt levels. Productivity gains make it possible that credit expansion comes without price inflation as measured by the consumer price index. In tune with the fractional reserve banking system, booms get extended along and are prone to reach extreme levels.

By increasing the money supply, the inflation target will be achieved, and the economy will experience additional expansion that now comes from the demand side. Central bankers then claim to be fully vindicated as high economic growth in a non-inflationary environment has occurred. However, this kind of economic expansion is quite different from a movement that would have happened without central bank intervention. By not letting deflation happen as the natural consequence of productivity gains or other improvements of the factors of production, central banks transform an

economic expansion that began on the supply side into a demand-led and credit-driven boom.

Under current central banking policies, such monetary expansions in the face of an ongoing “threatening” deflationary trend may be repeated several times. Each time when the central bank authorities fear deflationary potential, they will be inclined to augment the money supply, thereby pushing the economy to higher debt levels. The transformation of the original expansion based on productivity gains becomes a debt-driven boom. Particularly in the early stages of the boom, businessmen cannot simply opt out and renounce new credit that is offered at these low interest rates. Competition forces the individual business to invest in new capital procedures as soon as it becomes financially obtainable to do it. In the practical business situation there is neither place nor use for “rational expectations”. The interest rate works like any other price. In the same way that businesses will increase or reduce production when prices are raised or lowered by interventions in the goods markets, they must react likewise to the interest rate irrespective whether the interest rate is above or below the natural market equilibrium.

When central banks continue to expand the money supply even when the productivity increases begin to peter out or when adverse supply-side shocks occur, the excess liquidity will show up in the form of overt price inflation. When productivity increases slow down and supply side forces weaken, further expansions of the money supply will only bring about higher rates of price inflation. At this stage, monetary policy transmits directly into the price level. While savings together with new ideas as to how production could be improved improve the productive capacity of the economy and produce increased in the purchasing power of money and thus higher standard of living, modern active monetary policy together with the aspirations of government to achieve higher economic growth, pursue policies in the belief that higher standards of living can be achieved simply by spending more in nominal terms .

For modern monetary regimes, with central banks that are closely linked to highly indebted governments, deflation presents a threat. The motive to take advantage of the chance to produce higher growth without consumer-price inflation, will dominate central bank policy leading to the application of expansive monetary measures and thereby increasing aggregate expenditures.

Yet scarcity of resources puts a limit on this process and brings about a clash of plans between those economic actors that plan to increase consumption and those that plan to increase roundaboutness. Confronted with unrealizable demand, prices for the factors of production will increase and reach a point where economic plans are not attainable with available resources. Wages and prices will tend to rise. In this situation higher prices are accompanied by a falling output and stagflation happens.

By fighting deflation, monetary policy produces first an unsustainable boom that leads to price-inflation later on. A monetary policy, which produces a situation where *both* consumption *and* investment goods are in higher demand puts strains on the supply resulting in a higher price level. Because monetary expansion is brought about by lower interest rates, businesses will initiate more roundabout production, and, under modern conditions, consumers as well will ask for more loans. In contrast to a situation where the more roundabout process is being enabled through a resource shift from consumption to higher order goods as it is given by the trade-off between investment closer and further away from final consumption, a monetary expansion increases overall expenditures, including that for final consumption, while at the same time the falling interest rate calls for an extension of the production process and for more consumption.

Confronted with the visible outbreak of price inflation, central banks sometimes switch policies and initiate a restrictive monetary policy. If, however, the central bank should continue with expansive monetary policy, the economy would be pushed towards higher inflation combined with stagnation at first, followed by a recession later. It is unavoidable that at the end of the expansionary phase, central banks will be confronted with the dilemma of choosing between hyperinflation and stagflation.

By pursuing permanent expansion, central bank policies have laid the groundwork for economic decline because the exogenously imposed planning error that is put upon the business community entails a massive discoordination in the economy. Along with a physically shrinking production capacity, the economic prospect is threatened by the occurrence of failed business venture and the ensuing loss of confidence.

By instigating artificial booms, central bank policies produce maladjustments and disrupt the subtle coordination process of the market process due to false signals as to the degrees of feasible roundaboutness and the availability of savings.

The expansion phase brings about unsustainable production structures that have to be abandoned. When central bank action transforms the earlier deflationary tendencies into inflationary pressure and then applies measures to curb this tendency in order to bring about disinflation, confidence in the business community necessarily will decline. What has happened due to policy intervention has been a structural weakening of the economy's productive capacity. Together with the frustrated state of entrepreneurial spirit, discouraged consumers and the debt load that the expansionary phase had provoked sets the stage for the economic depression. By trying to produce price level stability, monetary policy has brought about destabilization, and by trying to promote economic growth, monetary policy has led to the destruction of the productive capacity.

### **Monetary Policy in the Boom Bust Cycle**

When price inflation begins to accelerate, the velocity of money circulation will also tend to increase and thereby it will amplify the original monetary impulses. Likewise, when the bust sets in, the velocity of money circulation will contract. It was this phenomenon of a collapsing money supply that attracted the attention of the monetarists. The basic error of monetary policy, however, is not the inactivity of central banking in the slump, but the active stance that was taken at the inception and artificial continuation of the boom, when central banks lowered the monetary interest rates and felt justified by an apparently stable price level. Fooled by the absence of the direct link between monetary expansion and the consumer price level under the condition of productivity gains, this relationship revives in the second stage, but in the contraction phase, the link will break down.<sup>1</sup>

The monetarist model assumes that real economic growth is determined by non-monetary factors and that the velocity of money is trend-stable and therefore that the relationship between the monetary aggregate (M) and the price-level (P) becomes proportional. In the monetarist perspective there is a direct link from the variations of the monetary aggregate to the price level. As Garrison (2001, 2005) explained, this

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<sup>1</sup> As Alan Blinder (1999:6) admitted, modern central bankers operate with an unknown model, an unknown objective social function and therefore do not possess an optimal policy rule.

model suffers from over-aggregation. Disaggregating the real side of the economy ( $Y_r$ ) opens the black box of  $Y$  by differentiating between final investment goods ( $Q_I$ ) and consumption goods ( $Q_C$ ), and among investment goods the different stages of production. The equation of exchange thus becomes:

$$(VIII) \quad M \times V = P (Q_C + Q_2 + Q_3 + \dots + Q_n)$$

Taking the Garrison version of the equation of exchange as a starting point of analysis, it is necessary to drive disaggregation a step further in order to demonstrate the effects of monetary policy. The monetary aggregate  $M$  consists of the monetary base ( $MB$ ) multiplied by the monetary multiplier ( $m$ ) while on the right side of the equation three types of transactions need to be differentiated when assets along with investment and consumption goods are included. This way the standard equation of exchange will be disaggregated into the monetary base ( $MB$ ) and the monetary multiplier ( $m$ ) on the one side, and into consumption goods ( $Q_C$ ), investment goods ( $Q_I$ ) and assets ( $A$ ) and their respective price levels on the other side (equation IX).

$$(IX) \quad MB \times m \times V = P_C (Q_C) + P (Q_2 + Q_3 + \dots + Q_n) + P_A (A)$$

It is mainly the monetary base that is under direct control of the central bank. Although the other variables are not completely autonomous, their link to central bank actions is rather loose. As shown by the equation above (equation IX), the monetary impulse coming from the monetary base can transform the original monetary impulse into various degrees of strength depending on the monetary multiplier and the velocity of circulation, and from there it can affect in different degrees the components on the right side of the equation. In turn, the performance of these components will also have a feedback on the monetary multiplier and the velocity of circulation.

The expansion of the monetary base can affect both the consumer goods and the investment goods, and within the investment goods, it can affect differently the stages of production. However, variations of the monetary base may also affect asset prices and the effect of a certain quantity of variation of the monetary base can be amplified or minimized by the monetary multiplier and by the velocity of circulation. If expansive monetary policy takes place in an environment of productivity increases or other cost reductions that are strong enough to compensate for the monetary impulses, the prices

of investment and consumption goods need not rise in a way that would be proportional to the increase of money, and additionally the asset markets could absorb a considerable part of the excess liquidity.

Analyzed by the variables of equation IX, the monetary impulse from the monetary base (*MB*) can be amplified or nullified depending on the size of the monetary multiplier (*m*) and the velocity of circulation (*V*). Even by assuming a smooth transmission, the question arises as to which degree the different variables react to the original monetary impulse. A variation of the monetary base may go into the prices of consumer goods, or it may affect mainly the prices of investment goods, or the excess liquidity may go into the asset markets. When the main impulse goes to the investment goods, it will affect the various stages of production differently. Here, as with the other two transaction classes, it cannot be determined *ex ante* how the impulse transmits from prices to quantities. In addition, there is another feedback at work among the transaction classes (consumer goods, investment goods and assets). The original impulse that comes from the monetary base will affect the different transaction classes, and have different degrees of feedback on the monetary multiplier and the velocity of circulation. Given that there are no reliable quantitative relations among the variables, central banks are unable to calibrate their policies. There is no certainty as to whether the monetary impulse will affect in a specific way a specific variable. Only in the most general form can it be said that an inflation of the monetary side will affect the “goods side”.

### **The Role of the Financial Sector in the Boom-Bust-Cycle**

Keynes identified irrational entrepreneurial decision-making as the supposed reason of economic instability, while consumption expenditure was deemed to rise and fall as a stable function of income. The decision to invest is ruled by the entrepreneur, who -- in Keynes' view -- is driven by unreliable “animal spirit”. Keynes paints a picture of the personality of the entrepreneur that in a paranoid way shifts between greed and fear like a maniac on the one hand, but resembles also a spiritless machine on the other hand, a brainless automaton that *reacts* without anticipation or purpose to present conditions (*‘stimuli’*) in a primitive way. Likewise in Keynesianism, there is no place for a far-sighted entrepreneur who envisions future demand and acts accordingly by applying resources to the production process in the present while anticipating demand for a consumable product in the future banking on the expectation that roundabout production will succeed. By projecting such a view upon the entrepreneur as

the person who holds the decision about investment in his hand, Keynes and his followers were led to believe that a market economy is inherently unstable and therefore the fatherly ("rational") hand of government is required to smooth out the economic process.

It is a fact that the entrepreneurial spirit may break down.<sup>2</sup> However, the reason for that is not inherent to the entrepreneur's personality, but it is the result of a series of deceptions that have come from the monetary data (along with the deterioration of the business climate as it is encapsulated in this generic term), which makes the entrepreneur act like a ping-pong ball. When the interest rate, as the monetary indicator of time preference, is manipulated in the hands of the government and by the central bank as its branch, entrepreneurial decisions lose their anchor (Herbener 2002). The political interest rate manipulations deceive the entrepreneurs about the true time preference that is prevalent in the economy. Additionally, the fractional-reserve banking system not only transmits the monetary impulses that come from the central bank, but serves as their amplifier. Such an economy will be characterized by instability, volatility and uncertainties that exceed widely the capacity to manage the uncertainties at the micro-level for the handling of which the entrepreneur and business manager are the specialists. The monetary impulses that come from the central bank and their amplification by the financial sector distort the interest rate as the central signal about time preferences and as the indicator of the availability of resources and thereby bring about distortions of the business decision as to the degrees of roundaboutness in production that can be maintained (Cochran et al 1998).

Under the modern monetary regimes, the loanable funds that are available in the economy do not only come from authentic savings, but also from monetary expansion and contraction. Given a certain monetary impulse from the central bank, the financial sector tends to amplify both the contractive and the expansionary impulses under an optimistic environment, while the financial sector may also abort expansive impulses and produce a credit crunch under a pessimistic business climate. Even if both, the investment and the savings functions should be stable, massive changes in the amount of loanable funds can occur due to the swings of monetary expansion and their transmission through the financial system.

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<sup>2</sup> Or, one may ask, why it was largely absent in ancient times and does not show up in a host of developing countries. In ancient times and in many a developing country the answer is robbery and political power, while the break down of the entrepreneurial spirit in modern times and in the so-called "developed countries" is largely brought about by central bank policies.

The interest rate guides the amount of investment and the degree as to which extent roundabout production processes will be initiated. However, in modern economies, credit creation takes place not just for business investment, but also is obtainable for consumption and investment in the asset markets. In this regard, it is not only the supply of loanable funds that is highly unstable, but credit demand, too. Along with the *supply* of funds for business investment, volatility is also produced even if the business investment *demand* for real capital is parametrically fixed. In the market for loanable funds not just the supply curve shifts, but also the demand curve will move around in the absence of changes in the business investment curve and authentic savings.

It is not difficult to imagine how business decisions get distorted through monetary policy when the supply of loanable funds is highly unstable as the result of monetary policy. When the interest rate signal has been suppressed and gets distorted due to central bank intervention, entrepreneurs receive no information about the changes in time preferences and consequently cannot adapt production stages to the rising demand for consumer goods.

### **Implications for Monetary Policy**

The Austrian approach to monetary policy bridges the gap between micro- and macroeconomics and between the short and the long run through the explicit consideration of time and capital. Opening up the black box of conventional macroeconomics by introducing the stages of production concept, Austrian capital theory lends itself to analyzing a wide spectrum of economic policy issues. The lack of authentic savings as the source of investment shows up as the consequence of money creation by the central bank and a financial system that is based on fractional reserves. Institutional arrangements of this kind and a policy orientation towards a set of macroeconomic goals are inherently prone to bringing about production structures that are unsustainable and which later have to be abandoned at high cost.

Under the condition of major cost reductions due to intensive technological progress or because cheaper factors of production have become available, a monetary policy oriented toward price stability is prone to initiate an unsustainable boom. Instead of allowing deflation to run its course, monetary authorities pursue expansive monetary

policy guided by the aim of maintaining the so-called “price stability”. Thereby, however, the economy is being pushed on a path to debt accumulation. The more intensive the technological advances and the cost reductions are, and the longer the period continues during which monetary policy holds down the interest rate, the more the economy will be induced to increase its debt levels. The size of the debt level relative to the productive base at the peak of the boom will make monetary policy ineffective once the contraction phase takes hold.

In periods of lesser productivity gains, the inflationary bias of modern central banks produces stagflation, as expansive monetary policy feeds directly into higher consumer prices. It is mainly under the conditions of high productivity gains or when other factors bring down production costs on a large scale that central banks have an easy shot to achieve “price-level stability” and hold the inflation rate within the established target for some time. The critical stage and the turning point takes place, when the phase of concentrated technological progress ends or when an adverse supply-shock occurs. Then, the foundation on which the pyramid of debt was erected breaks away. Debt-free growth could have been achieved if the central bank had let the deflationary episode work itself out. Instead, the monetary authorities, in their fixation to avoid all deflation, have created a credit-driven boom. At the first stage of the monetary expansion, the artificially depressed interest rate produces an economic boom; at the peak of the boom, the debt-load has made the economy ever more vulnerable to adverse shocks. Shocks that would hardly affect a robust economy now represent a threat. Central bank management becomes increasingly precarious and the tendency increases to fight as long as possible against any potential downturn with further increases of the money supply.

With monetary expansion, more savings *appear* to be available than there are in terms of the availability of resources, and the demand for investment goods, particularly at the early stages of the production process, will increase along with the demand for consumer goods. At the end of the boom phase, productivity gains peter out or adverse supply side shocks occur that no longer can be easily absorbed. With the absence of compensating productivity gains, monetary pumping now feeds directly into goods prices. If central banks should continue with monetary expansion, more price inflation results. With prices rising, the monetary multiplier and the velocity of circulation tend to increase and drive the price even faster. If instead central banks try to counter the

higher price level, a contraction of the monetary multiplier and the velocity of circulation will amplify the restrictive stance of monetary policy.

Strong economic booms are characterized by high productivity gains due to new technology and often by a concurrent increase in the supply of cheap labor. By not allowing deflation to run its course under these conditions, central banks boost the boom even when they meet a low inflation target. They provide ample liquidity in a situation where a falling price level is required. The expansion of the money supply beyond authentic savings comes along with increasing debt levels. In such a situation, manufactured by central banks, when an excessive debt level relative to the productive base has been reached, deflation indeed becomes a problem.<sup>3</sup> In a low-debt economy, the positive effects of deflation in terms of increased purchasing power outweigh its negative side and are beneficial. In a high-debt economy, deflation becomes vicious. Therefore, modern central banks will be inclined to make the debt surge go on as far and as long as they can.

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<sup>3</sup>Irving Fisher who was an exuberant cheerleader of the stock market boom in the 1920s, changed his intellectual course in early 1930s when he published his “deflation theory of great depressions”. Fisher’s analysis (1933) saw the accumulated debt of the previous boom as the main cause for the persistence of the depression: “Thus over-investment and over-speculation are often important; but they would have far less serious results were they not conducted with borrowed money ... The same is true as to over-confidence. I fancy that over-confidence seldom does any great harm except when, as, and if, it beguiles its victims into debt.” (p. 341)

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