THE AUSTRIAN BUSINESS CYCLE THEORY: A DEFENSE OF ITS GENERAL VALIDITY

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ABSTRACT: The paper aims to defend the general validity of the ABCT against the assumption that the theory does not hold if entrepreneurs are able to anticipate correctly the inflationary effects of a fiduciary credit expansion. Hülsmann (1998) raises this critique and puts forward a general theory of error cycles centered on government intervention in the economy in order to overcome the perceived shortcomings of the traditional ABCT. The paper analyzes the main implications of this critique of the ABCT in terms of entrepreneurial foresight and the optimal course of action necessary to prevent a monetary induced business cycle, in particular in the context of fractional reserve banks operating under fiat currency. It concludes that within the general framework of human action, entrepreneurs cannot arbitrage away clusters of errors, and the ABCT remains valid. This paper also questions whether Hülsmann's essentialist approach can be a viable alternative to the traditional ABCT, and find that, despite its merits, the approach can be refuted as a stand-alone theory.

KEYWORDS: business fluctuations, credit and money multipliers, interest rate, rational expectations, government intervention

JEL CLASSIFICATION: E32, E51, E43, E03, P00

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INTRODUCTION

The Austrian Business Cycle Theory (ABCT) represents one of the most important contributions of the Austrian School of Economics to economic science. The originality and merit of the theory reside in using monetary factors, and particularly the flawed arrangements in the monetary and banking areas, to explain recurrent clusters of errors that trigger business cycles. The ABCT was primarily developed by Ludwig von Mises and received subsequent contributions from other prominent Austrian School economists, such as Friedrich von Hayek, Murray Rothbard, Jesús Huerta de Soto, Roger Garrison and Joseph Salerno.

Hülsmann (1998) questions the general validity of the ABCT in the form elaborated by Mises. He does not refute the theory *per se*, but rather its consequentialist explanation of how the entrepreneurial cluster of errors comes about. Hülsmann believes that the theory does not apply in the particular situation when entrepreneurs anticipate correctly the effects of an increase in the quantity of money on prices, in which case a business cycle can be avoided. In order to restore the general validity of the ABCT, Hülsmann proposes a new approach based on an essentialist justification of "error," arguing that it represents an intrinsic characteristic of government intervention. The latter reduces the stock of capital in the economy leading to recurrent economic breakdowns and business cycles as long as members of the society are not aware of this error. The paper investigates the soundness of Hülsmann's critique of the traditional ABCT and whether his essentialist approach represents a valid alternative to it.

THE ABCT RESTATED WITHIN AN ESSENTIALIST FRAMEWORK

Hülsmann does not challenge the main thrust of the traditional ABCT, and agrees with the sequence of events that make up the theory. According to him, the current monetary organization based on fractional reserve banks and a central bank operating as a lender of last resort for a fiat currency system explains the recurrent errors in investment decisions that lead to business cycles. A systematic error occurs when commercial banks unexpectedly increase the

quantity of money substitutes and push interest rates below the level which would prevail on a free market.[1] Due to this artificial credit expansion which is not backed by real savings, more projects are started that can be finalized or profitably carried out.[2] When the error is discovered, the boom turns into crisis. Unfortunately, the systematic error is bound to repeat as the current monetary arrangements are built to generate such behavior.

At the same time, Hülsmann claims that the traditional ABCT cannot provide a general explanation of how the recurrence of clusters of entrepreneurial error takes place. He disputes what he calls the "consequentialist" approach of the ABCT which explains the error of investors as a consequence of the increase in the quantity of money in the banking system and a decline in the bank interest rate below the natural interest rate. According to him, in the reasoning chain of the ABCT, one possible scenario is missing, i.e., the one under which investors are able to anticipate correctly the effect of an increase in the quantity of money on prices and interest rates. In this case, the cluster of errors would not occur anymore as "entrepreneurs would bid for higher interest rates; that is, they would create a higher price premium on the gross market rate of interest," driving up the interest rate back to its free market level. Therefore, under these assumptions, the ABCT is not generally applicable anymore.

Hülsmann backs his claim with the argument that people can definitely anticipate correctly future events and that includes also the effects of inflation: "If it is possible that the effects of inflation are correctly anticipated then inflation does not necessarily lead to error." He disagrees with Mises that a business cycle is unavoidable whenever the entrepreneurs do not refrain from using the additional fiduciary media and believes that an increase in the money supply does not imply an interest rate that is too low.[3] In Hüls-

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[1] Called the "free-market (interest) rate" by Rothbard or the "natural interest rate" by Wicksell. See Rothbard ([1962] 2009), p. 1003, note 112.

[2] Hülsmann dwells only briefly on the mechanics of the boom and bust in the real economy. For a comprehensive clarification of the essential features of the original ABCT (including the "overconsumption" and "malinvestment" determinant characteristics of the inflationary boom) see Salerno (2012).

[3] Mises's argument was twofold: (1) the price premium lags behind the changes in the purchasing power of the currency because of the delayed effects of the change

mann's view, the ABCT, although correct, is not generally valid and an alternative approach is necessary to correct the perceived shortcomings of Mises's "consequentialist" approach.

Hülsmann proposes an "essentialist" approach to the analysis of the business cycle, which does not investigate how the error is committed, but rather identifies a framework of action or an institution in which generalized error is inherent. He argues that the best candidate to induce widespread error in the actions of the people is the government, seen as a permanent violator of the property rights of its subjects. For Hülsmann, "government and recurrent clusters of error always go hand-in-hand" and "no consequentialist argument is needed to establish this connection" (p. 11). According to him, government intervention leads to general economic breakdowns as it reduces the capital stock of individuals. People are usually not aware that the capital stock has diminished, but when this error is uncovered, the crisis will begin. In case the error is not discovered in the short run, government arrangements are still bound to fail together in the long run, as part of a general economic breakdown. This is because socialistic government intervention lacks the capacity to perform proper economic calculations, and therefore the society cannot maintain a developed structure of capital.[4]

As a final step, Hülsmann proceeds to reconstruct the ABCT as a specific case of his general theory of government intervention in the economy. He explains that the inflationary process initiated by fractional reserve banks with the help of the central bank represents not only an aggression against the property of market participants, but can also lead to malinvestments. If the impact of the credit expansion on prices is not anticipated correctly, a business cycle as the one described in the traditional ABCT will ensue. However, if entrepreneurs anticipate correctly the conse-quences of the artificial credit expansion they will take up the new credit and bid up the bank interest rate to the free market

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in money supply upon the price structure and (2) it is not possible to quantify in advance the extent of the price changes brought about by the changes in the money supply without having perfect foresight. See Mises, ([1949] 1998), p. 540 and 545.

[4] This theoretical strand is built on Mises's famous theory on the impossibility of economic calculation in a socialist economy. See Mises ([1920] 2012).

rate. Thus no business cycle would emerge, but rather a mere redistribution of income via inflation. Under the new essentialist approach, the narrative of the business cycle is different: even if the inflationary effects are correctly anticipated, the redistribution of income defrauds certain market participants of their capital, and therefore initiates a business cycle where the entrepreneurial error is inherent in government intervention. In Hülsmann's view, the inflationary and redistributive activity of the government backed fractional reserve banks will not be tolerated *ad infinitum* and the boom would eventually come to an end.

In the remainder of the paper we will try to assess whether:

1) entrepreneurs can form correct expectations about the effects of an artificial credit expansion and act upon them by bidding-up the bank interest rate to its free market level in order to avoid the emergence of a business cycle;

2) a general theory of the cycle based on the essentialist approach can have a general applicability and be indisputable on its own;

3) a monetarily induced business cycle, as depicted by the ABCT, can take place in the absence of government intervention, in which case Hülsmann's essentialist general theory could not explain a monetarily induced business cycle.[5]

CAN ENTREPRENEURIAL ANTICIPATION PREVENT THE ABCT?

The main criticism brought to the traditional ABCT by Hülsmann targets its assumption that entrepreneurs cannot anticipate the inflationary consequences of the artificial lowering of the interest rate. He believes that if this were the case, entrepreneurs would be able to avoid a business cycle by bidding up the bank interest rate to its market level, so that the credit expansion would only result in price increases. Hülsmann thus disagrees with Mises that an increase in the money supply affects prices first and only afterward leads to an increase in the price premium of the interest rate.

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[5] Hülsmann states in the concluding paragraph of his article that an increase in the quantity of specie on the free market cannot be a source of business cycles.

Hülsmann's assumption of entrepreneurial anticipation in the case of ABCT bears certain similarities with the decades-long rational expectations critique of the ABCT, but the two differ in their essence. Hülsmann contends that it is possible that entrepreneurs may anticipate correctly the effects of inflation, whereas the rational expectations theory holds that the anticipations of economic actors are not systematically wrong—a much stronger position. According to Lachmann ([1943] 1977) and Tullock (1988, 1989), the most famous proponents of the rational expectations critique of the ABCT, if entrepreneurs had rational expectations, they would not produce systematic errors. That is, the forecasted outcomes would not differ systematically from the market equilibrium results. This argument represents the basic assumption of most macroeconomic models today and therefore, the theory of rational expectations can be better regarded as a statistical hypothesis or modeling technique rather than a school of economic thought.[6] Taken to its ultimate logical conclusion, the theory denies the possibility of the formation of clusters of errors and implicitly of business cycles. In his assumption about the entrepreneurs' capacity of anticipation, Hülsmann certainly does not go that far—he himself tries to develop a general theory of error cycles. This paper does not dwell on refuting the rational expectations critique of the ABCT, because this has already been done by several economists, such as Evans and Baxendale (2008), Barnett and Block (2005), and Carilli and Dempster (2001). For those interested, Cachanosky (2015) provides a good review of their arguments. However, some of these arguments will prove useful also for assessing Hülsmann's assumption of the entrepreneurs' ability to arbitrage away clusters of errors. In addition, our analysis will integrate them in the praxeological framework of Austrian economics, and also deal extensively with the appropriate course of action in case the entrepreneurs' correct expectations materialize.

First argument

If all entrepreneurs were able to anticipate correctly the price premium of the interest rate, it would mean that they all had perfect foresight,

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[6] See Sargent (2008).

which is not plausible. Hülsmann himself concedes in his article that not all market participants can anticipate the effects of inflation and credit expansion.[7] There is also a time dimension of human action that cannot be ignored, which means that at least a part of the entrepreneurs, i.e. those who do not anticipate correctly, would still engage in malinvestments and trigger a business cycle because the foresighted ones cannot bid up the interest rate overnight.

The importance of expectations in the economic theory was recognized quite early by many economists, including Mises, who developed a theory of expectations within the praxeological framework of Austrian economics. He made use of an analytical instrument called "thymology" which allows us to understand how people value different conditions and form their expectations and actions.[8] In his expectations theory, Mises explains that every human action is intrinsically speculative because it requires time from its initiation until its completion. Economic actors adapt their actions to the events experienced in the past and try to anticipate the future actions of other market participants. As there are large differences between human beings, their economic and social background, and their capacity to interpret past events, it means that there are also large variations in their capabilities to anticipate and adjust to evolving economic conditions. Lachmann ([1943] 1977) puts forward a similar view when he claims that even in a stationary world the interpretation of a situation will always be different for individuals confronted with similar observable events. This is much more so in the case of a world in motion, wherein each individual forms the link between observable events and expectations by integrating his beliefs regarding "the major forces operating in this World, causing and governing change" (p. 72). The wide range of individual differences leads Evans and Baxendale (2008) to argue that since entrepreneurs are heterogenous, marginal entrepreneurs are still going to commit cluster errors, even if the representative entrepreneurs enjoy rational expectations. Hülsmann himself agrees in his article that not all

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[7] "Let us admit that it is impossible that all market participants anticipate the effects of inflation on all commodities…. Similarly, for a price premium to be established in advance, it is not necessary to stipulate that all market participants anticipate the effects of inflation." (Hülsmann, 1998, p. 5)

[8] Mises ([1957] 1985), p. 265.

entrepreneurs are equally capable of developing correct infla-
tionary anticipations.

Moreover, as we explain further in this argument, the assumption
of rational expectations is more plausible in the case of simple
economic phenomena in contrast with more complex ones. As
regards the complexity of economic phenomena, Garrison (1986,
p. 444) notes that even trained economists cannot agree on how
the economic system functions. This means that in a complex
situation, such as the one described by the ABCT, there will be
a non-negligible number of entrepreneurs that are going to be
misled into malinvestments by the artificially depressed bank
interest rate. At the same time, it is not plausible that the fore-
sighted entrepreneurs can bid up the price premium of the interest
rate overnight, because any human action takes time.[9] Thus, the
formation of a cluster of errors and the ensuing business cycle
cannot be stopped by a handful of entrepreneurs that may benefit
from almost perfect foresight.

As regards business cycles, Mises (1943, pp. 251–252) noted that
it is more intellectually demanding to understand the intricacies of
their workings in comparison with more simple interconnections,
such as the running of the printing press and inflation. Indeed, as
regards the ABCT, the formation of correct expectations about the
moment when the bank interest rate slips below the level prevailing
on the free market seems much more difficult than forecasting
an upcoming general increase in prices. According to Mises, the
bank rate is composed of three components: the originary interest
(reflecting the discount of future goods as against present goods
and the social time preference),[10] an entrepreneurial component
(related to the credit risk of the project) and a price premium (based
on the forecast of the evolution of future prices). If entrepreneurs
notice a decline of the gross market interest rate charged by banks,
it may reflect a legitimate move in any of the three components and

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[9] In the real world there is an unavoidable lapse of time between the beginning and
outcome of every human action. Moreover, in this specific case, the bank interest
rate can be maintained below its free market level for prolonged periods of time
under the contemporary monetary arrangements, as shown later in the paper.

[10] The originary interest is not a price determined on the loan market, but a human
action category which determines both the demand for and the supply of capital
and capital goods. See Mises ([1949] 1998), p. 524.

not an artificial expansion of credit. The interest rate decline may result from a favorable change in the time preference in society which lowers the originary interest rate. At the same time, it could also reflect an improvement of the credit risk or lower inflationary expectations. Moreover, the lowering of the interest rate does not need to occur in absolute terms, but rather as a relative decrease vs. what the free market level would have been without credit expansion (de Soto [2012], p. 349). Thus a rising bank interest rate may still be set below the natural interest rate if the latter were rising faster. In particular, in an inflationary boom, when the price premium of the interest rate advances as well, nominal interest rates may not appear unusually low to entrepreneurs any more.[11]

The above arguments explain why a majority of Austrian economists consider the interest rate as an "indispensable signal, in the time dimension, to the urgency of consumer wants" that "tells entrepreneurs how much and for how long savings are available."[12] This is a price which can only be determined correctly by the unhampered free market and cannot be "calculated" by market participants based on other market signals. Mises argues that entrepreneurs are not capable of computing in advance the effects of a monetary injection upon the various prices in the economy because they "would not be in a position to know beforehand whether and to what extent the demand for money for cash holding would change and in what temporal sequence and to what extent the prices of the various commodities would change" (Mises [1949] 1998, p. 540). In his opinion, this impossibility of quantifying correctly the inflationary effects applies also to the calculation of a price premium on the interest rate, whose increase could counter the credit expansion. He argues that "such computations cannot be established because their performance would require a perfect knowledge of future conditions and valuations" (pp. 540–541).

There is no doubt that the praxeological framework of Austrian economics operates with "human" and not with "superhuman"

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[11] See also Salerno (1995).

[12] Rothbard ([1962] 2009), pp. 997, 1003. Similar positions can be found also in Friedrich von Hayek (1933), pp. 126, 140–141; in Mises ([1949], 1998), pp. 394, 550; and in de Soto ([1998], 2012), pp. 351–352.

action, and correct anticipations in the sense of perfect foresight are hardly plausible within the ABCT framework.[13] Even under mainstream economics, the "rational economic actor" is not expected to have perfect foresight. Ordinary entrepreneurs are not able to calculate in advance the price changes brought about by fluctuations in the money supply—which require almost perfect foresight—and are even less able to "guess" the level of the interest rate that would prevail on the free market. O'Driscoll and Rizzo ([1985] 1996) emphasize this point very well by distinguishing between "micro" and "macro" prediction. For them, even though entrepreneurs may understand at an abstract or macro-level a business cycle, they still cannot predict the exact and unique sequence of events of the next cyclical expansion or contraction. Only perfect foresight would allow them to make accurate "micro" predictions, because it would imply "perfect prediction of the action of all other relevant parties" (p. 222–223). In the real world, this is close to impossible.

This last reflection concludes our argument that it is not plausible to assume perfect foresight for ordinary entrepreneurs, in particular as regards anticipating levels of market prices under complex economic phenomena. Even if we concede that a majority of entrepreneurs anticipate correctly the economic trends, there will still be the marginal ones that are more error prone and would engage in malinvestments. In the next argument we will focus now on what would be the appropriate reaction of foresighted entrepreneurs that anticipate correctly the effects of inflation, in particular as Hülsmann seems to differ again from Mises on this point.

Second argument:

Assuming that an entrepreneur is able to guess correctly that the bank interest rate is artificially lowered by the credit expansion, he still needs to take the right course of action in order to benefit or at least not lose from the anticipated inflation. If the foresighted entrepreneurs take up the additional fiduciary media, as argued by Hülsmann, the question is how they are going to use it without distorting the current structure of production.

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[13] In expounding the principles of human action, Mises is quite clear: "Economics deals with real man, weak and subject to error as he is, not with ideal beings, omniscient and perfect as only gods could be" (Mises [1949], 1998, p. 97).

They are bound to pass it via market exchanges to marginal entrepreneurs that may be more easily misled into expanding their activities and make new investments due to increased demand for their products. The increase in the money supply, which according to Austrian economics is not neutral, cannot take place without modifying the structure of production and investment, thus triggering capital misallocation. Unlike Hülsmann, Mises and Huerta de Soto argue that the right course of action to avoid a business cycle by foresighted and prudent entrepreneurs would be to refrain from taking the new credit. But the profit-maximization behavior of competing businesses may still push them into getting credit and making risky investments, hoping to cash in their profits before the boom turns into a bust.

Hülsmann believes that entrepreneurs would be better off by tapping new loans in a credit boom in order to keep abreast of inflation. In the process, they would also push up the bank interest rate to its market level, while avoiding the malinvestment of their capital. It is peculiar that he does not elaborate on how the borrowed money would be used in order to increase the price level without changing the consumption and investment patterns and affecting the allocation of factors of production. We believe that except for hoarding the borrowed money (not a wise decision if inflation is anticipated), all other investment alternatives are likely to lead to a distortion of the demand schedules and the structure of production, revealing a misallocation of capital once the credit expansion has stopped.

Let us assume that, while indulging in the new fiduciary credit, foresighted entrepreneurs wish, at the same time, to avoid capital misallocation by refraining from making new investments and expanding their capacity of production. What other investment choices would they have? The most straightforward utilization of a business loan would be to purchase raw materials or intermediary goods used in the production process of their businesses in order to hedge against inflation. In this case, entrepreneurs from the higher order industries would be faced with increased demand for their products and a favorable economic environment—low interest rates and rising prices—and it would not be realistic to assume that they would not expand their activity either.[14] We have shown

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[14] According to Mises, this ideological factor that rising prices and low interest rates are a prerequisite for prosperity is deeply ingrained in the minds of the

in the previous argument that not all entrepreneurs can benefit from perfect foresight. Ordinary businessmen cannot just continue their activity "business as usual" and wait for prices to increase to the maximum level they could attain, because each entrepreneur tries to increase his market share and maximize profits. Shostak (2003) notes that the ABCT is not only about variations in the interest rates, but also about changes in the monetary policy and in the money supply which are reflected in relative changes in the demand for various goods and services. Businessmen are bound to react to changes in the demand for their goods if they want to stay in business. For Shostak, not participating in the boom means "staying out of the business altogether." Therefore, entrepreneurs are likely to distort the structure of production by increasing investments in the industries for higher order goods, leading to capital misallocation. For more risk-prone rational entrepreneurs, a second option would be to invest in real estate or the stock exchange. Again, these investments could fuel a boom in construction and other lines of economic activity that would benefit from the increased demand.[15]

The artificial reduction of the interest rates applies not only to business credit but also to consumer or mortgage loans. Households are obviously less equipped than entrepreneurs to judge what the inflationary consequences of credit expansion would be, and one cannot realistically expect them to anticipate correctly the unfolding of a business cycle. And yet, by borrowing to finance long-term and capital intensive consumption goods such as real estate and durables, they are likely to distort consumption patterns and the allocation of factors of production. Again, it is difficult to see how all the businessmen whose products benefit from an increased demand are going to refrain from expanding their activity and avoid committing errors of capital misallocation that is an intrinsic

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entrepreneurial class and makes it very difficult for those economic actors untrained in economics to perceive the link between the artificially lowered interest rate and malinvestment. See Salerno (1995).

[15] The only investment that would probably not result directly in an expansion of economic activity would be the purchase of a store of value such as gold, art objects, etc. But again, as a second round, the sellers of these goods would use the money for other purchases, increasing the money supply in the economy and changing the relative demand for various goods and services.

characteristic of the ABCT. Even if the new household credit goes primarily into consumption, it will still increase the relative demand for consumer goods in the economy. In turn, this may put pressure on the supply of real savings necessary to complete the on-going capital projects.

In our view, a credit expansion cannot take place without engendering the business cycle, i.e. without bringing about a misallocation of capital. If that were not the case, the non-neutrality of money would be seriously challenged. Richard Cantillon was the first economist to suggest that inflation occurs gradually, with first recipients of the increase in the money supply enjoying higher wealth at the expense of later recipients. In addition to the wealth redistribution effects, inflation causes a disproportionate rise in prices among different goods in the economy. Thus, the concept of relative inflation leads to the "non-neutrality of money" theory, which explains how any monetary injection is punctual and distorts relative prices in the economy as prices adjust sequentially over time. Hülsmann seems to focus exclusively on the cyclical effects of inflation which are caused by errors of anticipation due to the manipulation of the interest rate, while overlooking the distributional consequences of inflation due to the "Cantillon effects." Shostak (2003) and O'Driscoll and Rizzo ([1985] 1996) make the point that monetary injections alter the patterns of consumption, drawing the attention of entrepreneurs who also change their investment schedules and production. Once the monetary injection stops, the demand patterns will change again, revealing the early distortion in investment patterns and the waste of capital. The cyclical effects of changes in the money supply are reinforced by the distortion of the interest rate as a secondary effect. According to Mises, the distortion of the interest rate occurs via the changed time preference of the new money holders which results from the process of redistribution of real income and wealth (Mises, [1949] 1998, p. 552). A similar position is held by Hayek when he argues that price changes are not "general," i.e., they do not impact all prices at the same time and in the same proportion. The money injections appear at "certain individual points," bringing about deviations in the individual price relations and shifts in the structure of production (Hayek, 1933, p. 123).

All these arguments support the position of Mises ([1949], 1998, p. 791) and Huerta de Soto ([1998], 2012, p. 422) who claim that only

by refraining from taking up the fiduciary credit entrepreneurs can avoid triggering a business cycle. Mises acknowledges the fact that entrepreneurs may learn from past experience and react differently to future credit expansions. The change in behavior would be that "they will avoid using for an expansion of their operations the easy money available." However, this seems to be a very remote possibility, because profits are always uncertain and temporary and entrepreneurs are not likely to forgo them in an inflationary episode. Several Austrian economists argue that even if entrepreneurs had perfect foresight, they would not make use of their correct expectations and would still engage in the boom because of the inherent competition between businesses to expand profits and market shares. Huerta de Soto explains that entrepreneurs have no reason to refrain from participating in the boom if they believe that they can withdraw in time and possibly count on receiving government support in case things go wrong (Huerta de Soto, [1998], 2012, p. 394). Therefore, they participate in the expansion of credit and, inevitably, commit to projects which later are proved to be unprofitable. Using a *prisoner's dilemma* type of analysis, Carilli and Dempster[16] make a similar point that both banks and entrepreneurs are likely to engage in the artificial credit expansion due to profit maximizing behavior even if they are aware that the boom is not backed by real savings and will eventually end up in a bust.[17]

Even assuming perfect entrepreneurial foresight, a correct anticipation of inflationary effects is no guarantee that the business cycle will not take place if the credit expansion is allowed to go forward. Monetary injections always trickle down in the economy and distort consumption patterns and relative prices—including interest rates as a second round effect—and eventually modifying investment patterns and the structure of production. In the next argument we are interested in finding out whether entrepreneurs could indeed bid up the interest rate ahead of the increase in prices by borrowing the additional fiduciary credit, which seems to be another point of contention between Hülsmann and Mises.

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[16] Anthony M. Carilli and Gregory M. Dempster, "Expectations in Austrian Business Cycle Theory: An Application of the Prisoner's Dilemma," *The Review of Austrian Economics* 14:4, 319–330, 2001, p. 322–327.

[17] The *prisoner's dilemma* is a canonical example from the game theory which shows how individual reward outweighs advantages stemming from a cooperative behavior.

Third argument:

Hülsmann's assumption that entrepreneurs can bid up the bank interest rate to the level prevailing on the free market may be consistent with the basic laws of economics, but it may break down under a very elastic supply of credit which the contemporary monetary and financial arrangements are able to produce. By creating money out of thin air, fractional reserve banks can pyramid credit on the liquidity provided by the central bank at virtually any cost, keeping the bank rates below their free market levels for prolonged periods of time regardless of an increase in demand. Under fractional reserve banking and fiat money, the power to set the bank interest rate rests with the bankers and central bankers and not with the borrowers. The latter must first exhaust the fiduciary credit that is ready to be supplied at a certain interest rate level by monetary authorities and banks before the interest rate can start rising. This is a powerful argument in favor of Mises's claim that changes in the price premium of the interest rate lags changes in prices.

Fractional reserve banking does not operate in accordance with property rights and economic laws when it expands credit out of thin air rather than intermediating real savings. Mises argues that fractional reserve banks can expand credit almost for free and keep the interest rate artificially depressed to very low levels that would merely cover their working expenses. He calls this phenomenon "the gratuitous nature of credit" and considers it to be "the chief problem in the theory of banking" (Mises, [1912] 1981, p. 390). In order to place the newly created credit, banks must decrease the interest rate below what a free market level would be. Mises explains how all borrowers are able to get credit at the free market interest rate corresponding to the riskiness of their projects and therefore "(a)dditional loans can be placed only at a lower gross market rate" (Mises, [1912] 1981, p. 549). Fractional reserve banks increase their market shares and profits in line with their credit expansion, given the very low cost of the creation of fiduciary credit. Accordingly, they have no interest in increasing the interest rate and its price premium before they have fully granted the additional fiduciary credit that the market demands. Therefore, the credit market finds itself in the odd situation of a highly elastic supply of credit which prevents the interest rate from reacting to increases in demand. Hayek takes a similar position when he notes that banks do not raise the interest rate when they expand credit before they are fully loaned up (Hayek,

1933, p. 174–175). Competition forces them to keep the interest rate close to the cost of funds, which is a fixed deposit rate unilaterally determined by banks based on the price of money supplied by the monopolist central bank.

In the absence of a monetary authority, the size of the expansion of fiduciary credit by fractional reserve banks is limited by the competition between themselves and the risk that a bank expanding too aggressively could go bankrupt (Mises, [1912] 1981, p. 788). The scope for credit expansion increases greatly once a second element of government intervention is introduced, i.e. the existence of a central bank that sets the interest rate and acts as a lender of last resort for the banking sector. Under a fiat money arrangement, the central bank sets the key policy rate at which banks can refinance themselves on the inter-bank market, implicitly coordinating the credit expansion and the uniform reduction in the bank rates to artificially low levels.

The contemporary monetary and banking arrangements are based on the full array of instruments of government intervention: fractional reserve banking, central banks, and fiat money, which has replaced commodity money. The checks and balances provided by the threat of gold outflows and bank runs disappear and the supply of credit in the economy can be increased without limits while interest rates are fully controlled by the monetary authorities. Even the mainstream economic literature admits that the focus of the central bank monetary policy has gradually shifted (starting in the 1980s) from a desired quantity of reserves and monetary aggregates to a specified level of the policy interest rate.[18] Nowadays, the main central banks such as the Federal Reserve System and the European Central Bank set an interest rate target, at which they accommodate all the demand for liquidity. Under fiat money, even the limit of banks being fully loaned up mentioned by Hayek does not operate anymore, both in terms of liquidity and capital ratios. Money is fungible and the liquidity injected by the central bank in the economy can easily be converted either in bank liquidity (deposits with the central bank) or capital, on top of which banks can pyramid additional credit.

In this context, the supply and demand relation between the supply of credit and bank interest rates breaks down completely.

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[18] See also Edwards and Sinzdak (1997).

Even if entrepreneurs had perfect foresight and tried to take loans until the bank interest rate reached its market level, they would first have to exhaust the entire supply of credit that the monetary authority and fractional reserve banks are ready to supply at a certain interest rate level before interest rates start to go up. As a result, the inflationary effects of the credit expansion are bound to hit the price of goods in the economy before the price premium of the interest rate would start to increase. This is a direct consequence of the process by which the current monetary arrangements ensure a maximization of the credit expansion in the economy in line with the governmental political aims. We consider it a strong argument in support of Mises's claim that "price premium always lags behind the changes in purchasing power," probably more insightful than his own explanation describing the formation of anticipations and prices and the lack of perfect entrepreneurial knowledge (Mises, [1949], 1998, pp. 541–542).

Hülsmann disputes Mises's claim that inflation impacts first the prices of goods and only later the price premium of the interest rate by referring to the period of the crack-up boom, i.e. the turning point from boom to bust, when Mises himself describes the increase in the price premium above all measures of inflation. In our view, Hülsmann's argument does not hold, because it fails to interpret correctly price developments in the two different phases of the business cycle. At the stage of the crack-up boom, inflation is slowing down and usually turns into deflation as the credit stops growing, and may even contract because banks go bankrupt or suffer heavy capital losses. The high price premium that exceeds in nominal terms the slowing rate of inflation can only be explained by the fact that its variation lags the variation of prices. Basically, the two variables are changing in trend, and the price premium of the interest rate is again reacting with a delay. Mises's argument that inflation always precedes changes in the price premium seems correct in both phases of the cycle, precisely because borrowers have only a marginal influence on setting the interest rate.

CAN THE ESSENTIALIST APPROACH BE AN ALTERNATIVE TO THE TRADITIONAL ABCT?

According to Hülsmann, a general theory of the business cycle based on the government intervention in the economy as the

main trigger for malinvestment would solve the perceived short-comings of the traditional ABCT. Hülsmann's general approach opens up the possibility of expanding the business cycle theory to the entire sphere of government activities, beyond the monetary one. He describes how government intervention leads to recurrent clusters of errors that induce specific business cycles when the errors are uncovered. The errors result in capital misallocation and economic breakdowns which are not necessarily followed by an abolition of government, thus making them recurrent. If the error is not uncovered or the course of action chosen to correct it is the wrong one, i.e. more government intervention, then the end of the road could be "total government." This scenario is part of a "long business cycle" that would end with the crisis of the entire governmental monopoly of power. This general case could be seen as an application of the progression theorem of political unification and government enlargement elaborated by Hülsmann shortly before writing this article (Hülsmann, 1997, pp. 81–96). If people do not abandon government as a monopoly on violence after such a collapse, then a new cycle can start again.

There are obvious merits in Hülsmann's new essentialist approach. It is an elegant way to explain the cyclical economic evolution of human communities as led by changes in the economic freedom of individuals with a direct impact on their capital accumulation. Nevertheless, Hülsmann's approach invites two questions in our view: (i) whether this theory can withstand criticism also from schools of economic thought that openly advocate government intervention in the economy, and (ii) whether specific cycle theories, among which we find the traditional ABCT, can be successfully integrated into this general approach without the support of a consequentialist demonstration.

As regards the first issue, we doubt the general validity of Hülsmann's essentialist approach. In the economic sphere, there are very few schools of economic thought, among which the most prominent one is the Austrian School of Economics, which consider that the government intervention in the economy reduces personal freedom, welfare and capital accumulation. At the same time, the majority of mainstream economic schools consider government intervention as welcome and necessary in order to correct all sort of alleged market failures. Under the assumption that error is not

inherent in government action, the theory of the business cycle proposed by Hülsmann loses its general validity. Therefore, it is difficult to see how the essentialist approach can be irrefutable without being backed by a concrete demonstration embedded in a consequentialist argumentation. The majority of mainstream economists would most likely dismiss the assumptions of Hülsmann's general theory out of hand, whereas the ones questioning the validity of the traditional ABCT could not come up with convincing counter-arguments based on deductive reasoning.

As regards the second question of integrating specific business cycles in the general theory, we note that except for the ABCT, Hülsmann only mentions two other possible examples, such as the "military-imperialistic cycle" and the "social security cycle." He does not develop them further in order to explain their workings, which is a clear shortcoming in terms of expounding a theory that claims to be general and all-encompassing. If we turn our attention to the concrete example of the reconstructed ABCT, we notice that Hülsmann explains the turning point of the cycle by arguing that "sooner or later [market participants] must discover their errors" and the cycle will end up with the elimination of the "unjust" institutions. In our view, this is a possible course of action, but by all means not a certainty that would lend general validity to a theoretical framework. Either the economic actors may not discover their error, or they may not be able to change the faulty institutional arrangements that generated it. One possible explanation for the solidity of the current monetary arrangements, despite recurrent failures, lies with the fact that the capital wasted and the welfare losses recorded so far have not been high enough to compel market participants to take serious action to understand the cause of the error and change the specific institutional framework in which it occurs. In general, the specific cycles of the essentialist approach may not materialize if the capital loss generated by government intervention in a specific cycle is outpaced by the capital accumulation in the rest of the economy free from intervention. In such cases, the error may remain hidden and uncorrected. It is also necessary to acknowledge that in the real world, the recognition and correction of an institutional error is a very cumbersome and painful process given the vested interests that sustain all institutional arrangements.

Moreover, Hülsmann's assertion has not been empirically validated so far. Despite recurrent business cycles that have

plagued economic activity for centuries, it appears that the main-stream ideologists and the majority of the market participants have not yet discovered where the fundamental error lies. The error prone monetary and banking arrangements are not only firmly in place, but the degree of government intervention in this sector has even increased over time. These are theoretical and empirical observations that question the validity of the essentialist approach as applied to the concrete case of the ABCT.

In conclusion, we believe that the new essentialist approach in explaining a monetary induced business cycle cannot attain general validity outside schools of economic thought that consider government intervention as detrimental to economic welfare. Such an approach would immediately be refuted on ideological grounds, whereas this is not the case for the traditional ABCT. Moreover, the theory still needs to be complemented by a specific consequentialist support in order to be valid as a stand-alone theory of government induced business cycles. The validity of each specific cycle theory depends on a thorough examination of the mechanism that uncovers the error and determines a change of the flawed institutional arrangement. Another way to test the validity of the theory of specific cycles is to analyze whether the traditional ABCT can be integrated consistently into the new essentialist approach. We will do it in the next sub-chapter when we investigate whether the traditional ABCT would hold also in the absence government intervention.

CAN THE ABCT ALSO HOLD IN THE ABSENCE OF GOVERNMENT INTERVENTION?

The traditional ABCT is incompatible with the new essentialist approach developed by Hülsmann in one instance, e.g., if the ABCT would also hold on a free market. As the essentialist framework is founded on government intervention in the economy and assuming that the business cycle could also take place without the error induced by government, it follows that the monetary theory of the business cycle could not be a specific case of the general essentialist approach. Hülsmann himself recognizes that the entire essentialist approach would be futile in this case and concludes his article by stating that "it is not money, but government intervention

that accounts for the business cycle." This is tantamount to saying that the monetary theory of the business cycle is not validated under free market conditions. We will look more closely into this issue, because the Austrian school has yet to give a definitive answer to this question.

Hülsmann's claim appears rooted in the Rothbardian tradition denying the possibility that a business cycle could derive from an increase in the stock of specie on the free market, although neither of them elaborates on their rationale. When defining inflation, Rothbard excludes increases in the stock of specie even though they lead to an increase in prices, because they do not represent an intervention in the free market that has redistribution effects and moreover "they do not lead to the processes of the business cycle" (Rothbard, [1962] 2009, p. 990).

Unlike Rothbard, both Mises and Hayek consider that an increase in commodity money can also lead to business cycles. Although Mises believes that credit expansion is without any doubt a problem of government intervention, he does not exclude the possibility that an increase in commodity money could also engender business fluctuations.[19] First, at a more theoretical level, Mises states clearly that the issues surrounding the business cycle theory should not be discussed in a government intervention framework, but rather in the context of the pure market economy, because this is primarily an issue of the relation between money supply and the rate of interest. Second, Mises goes a step further and claims that an increase in commodity money can also cause a business cycle (Mises, [1949] 1998, p. 571). The only differences he perceives in relation to bank credit expansion based on fiduciary media lie in the magnitude of the increase in the money supply and the temporal sequence of its effects on the market prices. We would also add that the frequency of recurrence of such a phenomenon on a free market would also be much lower because large shifts in the supply of commodity money happen only rarely.

> …What differentiates credit expansion from an increase in the supply
> of money as it can appear in an economy employing only commodity

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[19] In order to prevent business cycles Mises recommends free banking that would limit the expansion of bank credit based on fiduciary media and a return to the classical gold standard. As fractional reserve banking had survived mainly due to government support, he did not consider it as a free market institution.

money and no fiduciary media at all is conditioned by divergences in the quantity of the increase and in the temporal sequence of its effects on the various parts of the market.

Hayek also believes that an increase in the quantity of gold can lead to a distortion in the interest rate and the structure of production that are prerequisites for a business cycle (Hayek, 1933, p. 149). In keeping with Mises, Hayek doubts that on a free market, in general, the deviations in the interest rate triggered by an inflow of gold can be large enough to cause strong and problematic fluctuations in the economic activity, but does not exclude this possibility in theory.

We note these diverging views among various high-caliber Austrian economists on this issue. The argumentation by the two sides is not overwhelming, which makes it difficult to give a clear-cut answer. The position held by Mises and Hayek follows naturally from other theoretical strands of Austrian economics, such as the already mentioned principle of the non-neutrality of money. Different scenarios can be envisaged as regards the points of entry of the money injection in the economy and the succession of impacts on the market prices. Undoubtedly, the increase in the supply of the commodity money would produce Cantillon effects, i.e. changes in relative prices and in consumption patterns, therefore distorting the structure of production and the investment schedules.[20] There is a high probability that some of the newly created commodity money will enter the credit market at some point, artificially depressing the interest rate and affecting the inter-temporal coordination of the structure of production as well. When the monetary injection stops, individual demand schedules and the structure of production will change again, resulting in capital misallocation, which is the key characteristic of the business cycle. Even if the newly created money goes predominantly into consumption, it is still likely to reduce the amount of savings necessary to complete ongoing investments. One can also not exclude the fact that even under free banking rules there may be cases when banks operate on fractional reserves. In such situations, the business cycle occurring due to the expansion of

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[20] Such as, for example, the large inflow of gold in Europe after the discovery of the New World.

fiduciary credit would also take place on a free market via the mechanisms described so aptly by the ABCT.

In practice, one has to concede that business cycles on a free market and under commodity money are likely to have low recurrence and low magnitude, but it does not mean that they can be excluded altogether. Despite the fact that further research on the workings of the ABCT on a free market seems necessary, the arguments advanced by Mises and Hayek seem more robust than the line taken by Rothbard and Hülsmann. As explained above, one can imagine scenarios where the monetary theory of the business cycle can be valid in the absence of government intervention. In this case, the general validity of the essentialist approach based on error inherent in government intervention would be compromised.

CONCLUSIONS

Hülsmann tries to develop a general theory of error cycles centered on the government intervention in the economy in order to overcome a perceived shortcoming in the reasoning chain of the traditional ABCT. We presented three main arguments why this critique is not well-founded and why the traditional ABCT remains generally valid in our view.

First, the capacity to anticipate correctly future events depends on the complexity of the economic process analyzed, and it differs widely among economic actors based on their experience and innate abilities. Business cycles are clearly among the most difficult phenomena to anticipate. Mises and other Austrian economists bring convincing arguments that ordinary entrepreneurs cannot have perfect foresight as to determine whether the credit expansion is artificial or genuine and to calculate the interest-rate prevailing on a free market. Even if one concedes that some entrepreneurs could anticipate correctly the business cycle and increase their demand for fiduciary credit, they still cannot bid-up the interest rate to its free market level instantaneously, because any human action takes time. In the meantime, less foresighted businessmen are likely to engage in malinvestments that end up in a capital misallocation.

Second, Hülsmann does not elaborate on how rational entrepreneurs are going to engage in the credit expansion without

causing distortions in the structure of production and capital misallocation. The fiduciary credit is likely to be passed on to both foresighted and less foresighted businessmen that are not going to miss the opportunity to expand their market shares and profits. The patterns of consumption and investment and the structure of production will be inevitably altered, leading to capital misallocation once the monetary injection stops. In this respect, refraining from taking the additional credit would be the right course of action to avoid a business cycle as argued by Mises and other Austrian economists.

Third, bidding up the interest rate by demanding extra credit may not have the expected results when borrowers face the abnormal situation of a highly elastic supply of credit manipulated by fractional reserve banks operating under fiat money. By creating money out of thin air, fractional reserve banks backed by a central bank can pyramid credit at virtually any cost, keeping the bank rates below their free market levels for prolonged periods of time until the demand for credit is fully met. In such a case, correct expectations cannot help avoid the formation of a business cycle. Moreover, this particular characteristic of the process of expanding fiduciary credit explains why Mises believed that the increase in the price of goods occurs before the price premium of the interest rate changes, thus misleading entrepreneurs into the wrong investment projects.

A brief analysis of the essentialist approach proposed by Hülsmann reveals its merits in terms of linking the cycles of economic development to the degree of government intervention in the economy. At the same time, its general validity will undoubtedly be rejected out of hand by the majority of mainstream economic schools that deny the negative role played by government intervention in the economy. This is not the case for the traditional ABCT, which held its ground well in the face of mainstream criticism.

As regards the specific cycles identified by the essentialist approach, Hülsmann does not explain why market participants would always recognize and dismantle the scheme behind the government intervention. If the capital loss generated by a specific cycle is small compared to the capital accumulated in other parts of the economy which are free from government intervention and

the cost of changing the existing institutional arrangements is large for a small number of interested parties, the identification and correction of the error are not straightforward. Therefore, the argumentation behind the "reconstructed" ABCT is not irrefutable. In our view, the essentialist approach is useful, but lacks convincing arguments to become a general theory of business cycles and needs to be complemented by a specific consequentialist support.

As a last observation, the traditional ABCT is incompatible with the new essentialist approach developed by Hülsmann in one instance, i.e. if the ABCT would also hold on a free market. There is no clear-cut answer to this question and the views among various high-caliber Austrian economists on this issue differ. Unlike Rothbard, both Mises and Hayek do not exclude the possibility that the mechanics of the ABCT can unfold also in the absence of government intervention. Indeed, several scenarios can be imagined where large fluctuations in the supply of commodity money can distort the structure of production and the interest rate, resulting in capital misallocation and business cycles. We believe that until this theoretical issue is settled without any doubt in favor of the Rothbardian position, Hülsmann's essentialist approach to explain monetary induced business cycles cannot be regarded as generally valid.

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