

Is the Austrian Theory of Economic Business Cycle in Crisis?

The debate between Lucas and Mises continued in the actions of the Federal Reserve

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Abstract

After the financial crisis of 2008 in the United States – and subsequently in Europe – the Austrian Theory of the Business Cycle had a revival in the academic world, and even in the news. In fact, in 2008 the Austrian Theory of the Business Cycle was the only one which held some explanatory power over the crisis.

The actions taken by the Federal Reserve and the European Central Bank in response to the crisis were, according to the Austrian Theory of the Business Cycle, the beginning of a new cycle. After 7 years of expansionary monetary policy, and interest rates close to zero (and in some cases negative), the economic agents have failed to respond to the monetary stimulus; the volumes of loans granted in the United States and Europe have been growing at rates close to 1% – too low to be considered an expansionary economy. There are no signals indicating expansion in the capital structure of those economies.

The facts regarding the economic situation in the United States have begun a debate, with observers asking whether this is the moment in history when Lucas's rational expectation theory manifests itself, or if the Austrian business cycle theory simply cannot explain what is happening in contemporary economics. New theories trying to expand the canonical version of the Austrian Business Cycle Theory have been developed; these new theories include new versions of Garrison's account of business cycles and try to incorporate risk modeling. Still others are trying to revive the theories of the old London Banking School of the 19th century. Are these seemingly nascent theories, which incorporate some Austrian foundations – but at the same time new approaches – enough to get the canonical version of the trade cycle out

of its own crisis, or are we facing a major paradigm shift in our understanding of the monetary component of the business cycle?

Introduction

Nearly a century since the introduction of the Austrian Theory of Business Cycle (ABCT) many new and conflicting theories of economics have evolved; the horizon of meaning today is very different than it was for Mises and Hayek. Garrison has sought to update the ABCT for use in the 21st century, but it seems the world may have changed so quickly, and so radically since its introduction, that the theory may no longer apply, as many intellectuals now openly question the applicability the ABCT in today's modern economies. As such, it is worth investigating the validity of the underlying assumptions critical to ABCT – chief among them the assertion that economic agents do not learn of government monetary policy intervention. One must also question whether natural interest rate manipulation by excess fiduciary media (created by banks, or by the government, or both) necessarily expands production. Like Keynesian models, the ABCT was created in the early 20th century for an industrial economic landscape; perhaps these models are inadequate for a postindustrial society, their meaning lost over time to the shifting sands of economic modality. Since 2008 the Federal Reserve has repeatedly taken actions which should – theoretically – produce a stimulus for the economy; one might expect to see exactly what the ABCT predicts, but without the bubble. The results however, are widely different than expected. So, either the ABCT in crisis, or we have reached Lucas's rational expectations crossroads.

Austrian Theory of Business Cycle

One of the debates inside the 'Austrian School of Economics' is whether an Austrian School of Economics exists at all, and this debate is far from being settled, as major methodological differences exist among the authors of this school, for example between Mises and Hayek. But, it didn't stop there, Rothbard and Don Lavoie present bigger differences than the original differences between Mises and Hayek. Peter Boettke has addressed this topic in its *Elgar Companion to Austrian Economics* as follows:

There are various strands and subcultures within the contemporary Austrian School. There are, for example, those who think of Austrian economics as a branch of mainstream neoclassical economics, there are those who see the school as representative of a radical alternative to the mainstream, and there are those who see the school mainly within a broader program of social theory. (Boettke, 1994, p.1)¹.

This debate is not simply over methodological differences either, but reflects an ongoing process across many studies, including the topic of this paper, the Austrian Business Cycle Theory (ABCT). The ABCT is usually considered by mainstream economists to be a distinctive feature of Austrian economics, and it has many variants. Among the most modern and well known adaptations of the ABCT is the geometrical analysis of Roger Garrison; this version is known to some academics as the canonical version. One such academic is Young, who has expressed what he sees as a need for some variation of the ABCT, as described by Garrison, in order to process the events of the 2008 crisis, and the economic activity that followed (Young, 2015, p, 186). Similar sentiments have been expressed by Horwitz, for even when straying from the canonical ABCT, he states that “Austrian Business Cycle Theory is necessary but, not sufficient” (Horwitz, 2015, p.733). Always opened to the events of the Crisis of 2008, the ABCT in the eyes of these authors did not have a satisfactory explanation.

Garrison states in *Introduction: The Austrian Theory in Perspective*, that “the offering of these four essays on the Austrian theory carries the message that there is not a single canonical version of the theory” (Garrison, 1978, p.13). It could also be stated (in Boettke’s style) that despite the variety of opinions, this working theory has some distinct points that which allow economists to identify it ABCT. For the purpose of this paper, the ABCT could be summarized with the explanation of Roger Garrison (2001), *Time and Money*.

One of the most controversial concepts of the ABCT is the concept of Natural Interest Rate. Even when Austrian economics attempts to manage, in theory, the concept of heterogeneous

¹ Peter Boettke is very precise when he points out that even though Austrian economics is diverse, it has some key points which differentiate it from the Mainstream Neoclassical Economics. According to him “(1) it was not mathematical, (2) it was often philosophical, (3), the dynamic nature of economic activity took center stage, and (4) it dealt with social and political issues beyond market and exchange production” (Boettke, 1994, p.2). This could be interpreted to mean that every characteristic of Austrian Economics could mean a diverse way of doing economics. For example, when one says that Austrian Economics is philosophical we might find an *a priori* Austrian economics, phenomenological Austrian economics, or hermeneutical Austrian economics.

capital, with different maturity terms – and therefore with different rates of profitability – the canonical version of the cycle uses a single (aggregate) interest rate. This is probably the most common criticized point of the canonical version of ABCT².

In summary, what can be called the canonical version of the ABCT has internalized the concept of natural interest rate, prices information as mean of coordination in the economy, price distortion through state intervention (mainly through monetary and interest rate manipulation), heterogeneous capital and its widely varied maturity terms, capitalization as result of a saving process that consumes time (more consequentially, heterogeneous capital implies that later stages of production consumes time). Further, it postulates that as a result of investments in later stages of production, the early stages of production (or the level of consumption) will increase permanently.

Obviously, this summary of key concepts is articulated in the interpretation of Garrison, but by no means was he the creator of all these concepts. One can trace these concepts to Menger's *Principles of Economics* (1871), where all the precepts of heterogeneous capital, upon which Hayek would model his theories of *Price and Production* (1940), may be found. The circuitous notion of the later stages of invested capital could be track to Bohm Bawerk (1930), in *The Positive Theory of Capital*; the natural interest rate, widely used by Mises in *The Human Action* (1949) comes from Wicksell (1898) in *The Interest and Prices*. In addition, the coordination problem originates with Hayek's idea of *Cosmos* stated in *Law, Legislation and Liberty* (1973), and the *Use of Knowledge in the Society* (1945). While a historical review could go on, it is not the purpose of this paper. In general terms, it could be said that what is called today canonical version of the ABCT is a *hermeneutical approach* to the contributions of many economists, considered part of the tradition as Austrian Economists³. This canonical version is not unique, and can be added features and another features can be taken away.

² UFM Market Trends and Institute Juan de Mariana have developed an alternative explanation of the theory of Business Cycle through the idea of miss matched maturity terms between assets and liabilities of a banking system. The novelty of this idea is that by acknowledging the widely different maturity terms of heterogeneous capital, the theory of the business cycle can disjoint itself from aggregate interest rates.

³ As theorized by Derrida in the *Of Grammatology* (1967), and in *The Dissemination* (1981) one can argue that many other concepts in the canonical version could come from Schumpeter, Wiser, Adam Smith, or David Ricardo. This means only, that, there is no pure theory. All theories are in certain sense contaminated in the horizon of meaning that they were created or interpreted in hermeneutical sense.

For the purpose of this paper, the ABCT will be understood as follows:

No individual economy may rest at equilibrium, but always trend thereto; entrepreneurs make new businesses according to the information given by prices that they find in the markets, including interest rates; interest rates reflect the temporal preferences of the economic agents (this indicator could be taken as an aggregate); wealth influences the consumption level, in conjunction with the interest rate; the level of investment and time to maturity for those investments is determined by the interest rate also; the amount of savings, and the amount of consumption, is given by the temporal preferences of the economic agents; the amount of wealth in conjunction with temporal preferences, determines the relative levels of consumption and savings; the credit markets work through the financial system and are influenced by the amount of fiduciary media in circulation; any amount of money may be the correct amount of money at a particular time; and finally, that throughout this process, there are businesses going into bankruptcy and new business are arising in this creative–destructive process of the entrepreneurial activity.

The business cycle is initiated when monetary policy starts to supply new money; new money is usually introduced through the financial system. The financial system reduces the interest rate, in order to more quickly utilize such capital in the creation of new loans. This reduction of the interest rate has two major effects; that lower interest rates lead to lower savings and greater investment, as individuals seek to maximize returns. In addition, those new investments have the interesting characteristic, of being more capital intensive, with maturity terms that tend to be longer than the average (of all investments) at that time. This situation is unsustainable for a couple of reasons: the new consumption, and the new investments are uncoordinated from the natural rate of interest, from the wealth level of the society, and most importantly, those new investments backed, or underwritten, by new savings. In fact, these increases on consumption and investments at the same time produce *unsustainable* growth in the economy. (Garrison, 2001, p. 57).

Theoretical implications of the Federal Reserve Policy

The Federal Reserve has manipulated the level of liquidity in the financial markets for many years, and through many economic cycles. After the “dot com” crises in 2001, the Federal

Reserve followed a low interest rate policy until 2006, when it started to increase federal funds rate. This policy may have contributed to the most significant economic crisis in the last half century or more; in 2008 many banks went bankrupt, and the Federal Reserve rescued many others. The response of the Federal Reserve was a traditional one; again lowering the interest rate of federal funds, and injecting liquidity into the financial system - the unemployment rate climbed to 10% and the GDP grew at negative rates. The Federal Reserve tried to stimulate the economy and save the financial system, and in the latter it may have succeeded, but in the former it failed miserably. In 2008, the Bush administration issued a rebate on taxes with the Economic Stimulus Act⁴; the fiscal policy was not successful in creating positive economic growth. In the years that followed, continuing to the present, the Federal Reserve has carried out an expansionary monetary policy. So, are the results of these policies (both fiscal and monetary) the expected ones; can the ABCT explaining what is happening in the world's largest economy, or are there other theories which can better explain what is has transpired, such as Lucas's Rational Expectations Theory? For a suitable answer, we must turn now to empirical evidence.

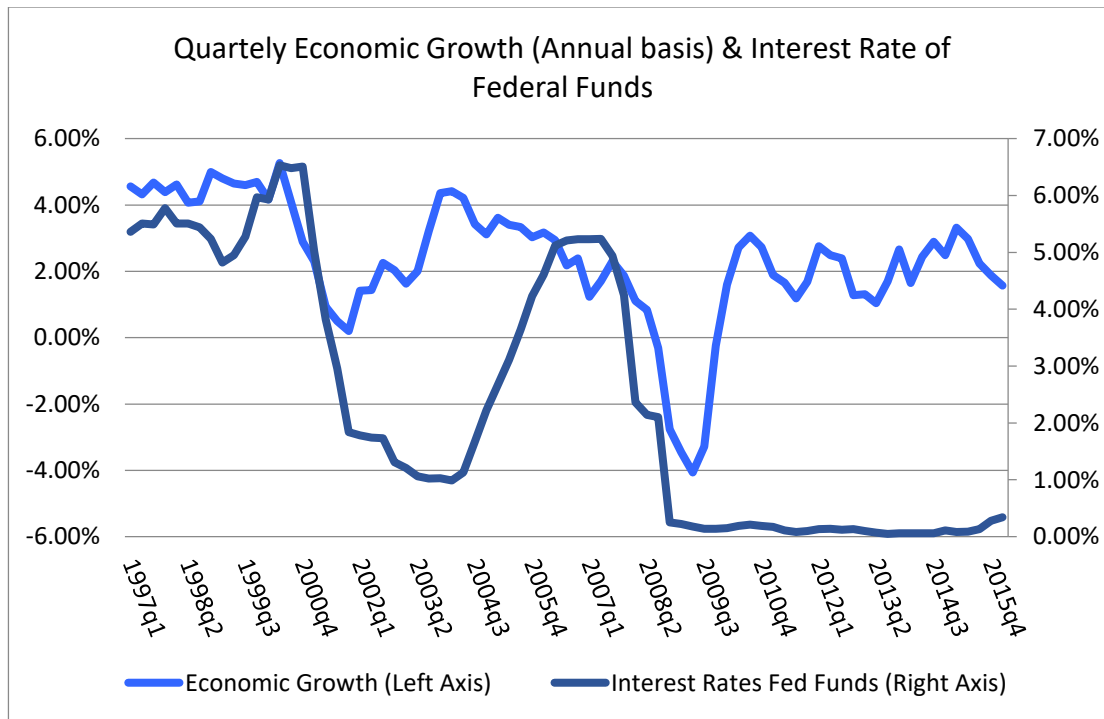
Empirical Evidence

The Federal Reserve has long carried out monetary policy mainly through the level of interest rates of the federal funds. This policy brought gains in economic growth in the years after the 2001 crisis of dot com, but these seem to have stagnated following the 2008 financial crisis. Graph 1 shows the evolution of interest rates (fed funds) and the evolution of the GDP (quarterly, on annual basis). Actions following the crisis of 2001, the reduction of the interest rates specifically, produced the results one might expect – increased economic activity. An unintentional consequence (according to the ABCT) is the discoordination of the intertemporal decision of the economic agents -which has the potential to produce “bubbles” in some sectors of the economy. Theoretically speaking, these bubbles would be created first in a later stage of production (more investment in a sector that is more intensive in capital,

⁴ Congress of the United States, <https://www.gpo.gov/fdsys/pkg/BILLS-110hr5140enr/pdf/BILLS-110hr5140enr.pdf>, 2008. Seen on August 16, 2016.

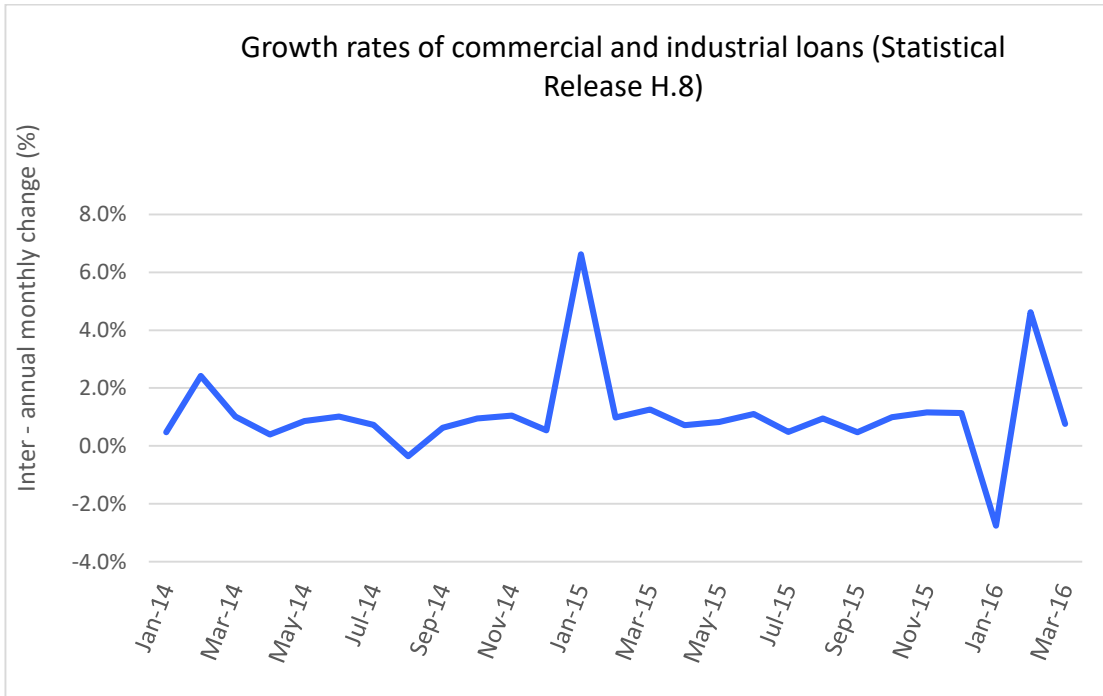
and less direct) and would have other consequences as well (like greater initial consumption). The 2008 crisis originated in the house market, but could not have been created without the help of the financial system. To evaluate the efficacy and predictive value of ABCT, one must also examine the volume of loans issued during that time. In 2008 the number of mortgages created had shattered all previous records; but what is the current state of lending, eight years of low interest rates for federal funds? In Graph 2, the growth rate of loans in industrial and commercial business are shown from the last 3 years; even though only two months have shown negative growth rates, the levels of growth are far from having seen the wide expansion which would have otherwise been anticipated. Graph 3 shows a comparison between the relative paths of economic growth and sales growth in the automotive industry. This last variable is very cyclical, and the graph shows that the economy far removed from an expansive path. Graph 4 shows the evolution in the last three years of inflation in the United States; the last three years have been below the inflation target of 2%.

Graph 1



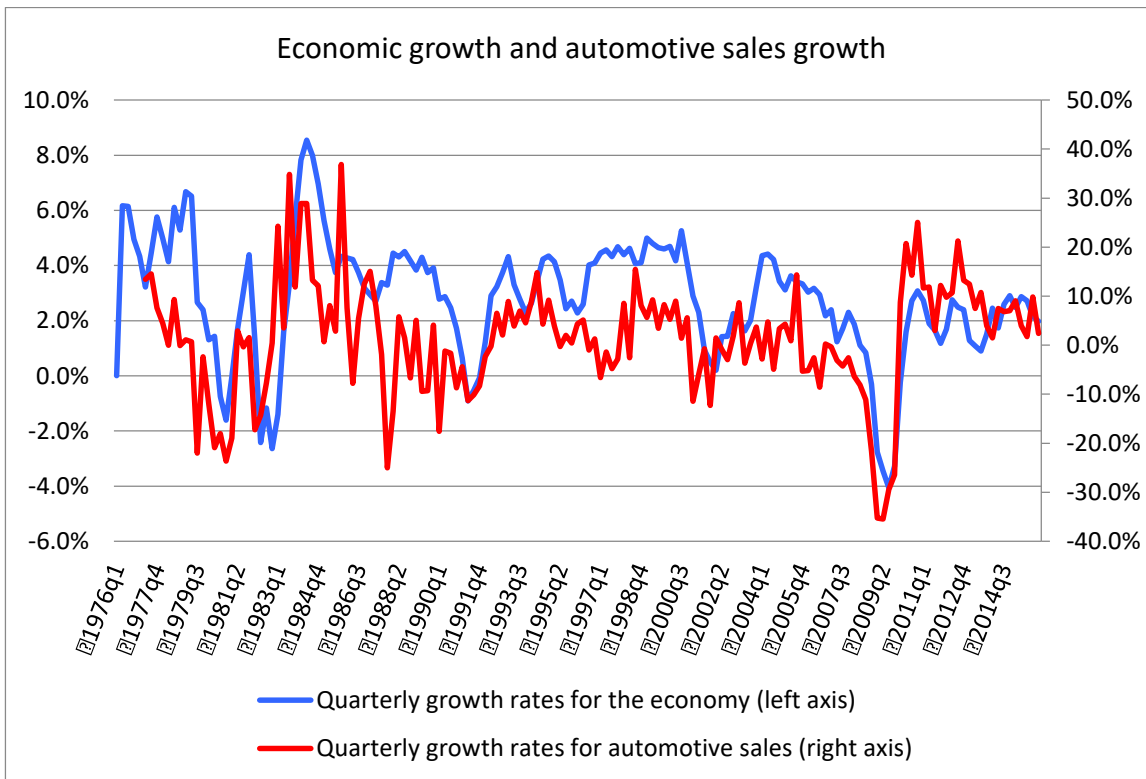
Source: Compiled from the US Bureau of Economic Analysis and US Federal Reserve of Saint Louis.

Graph 2



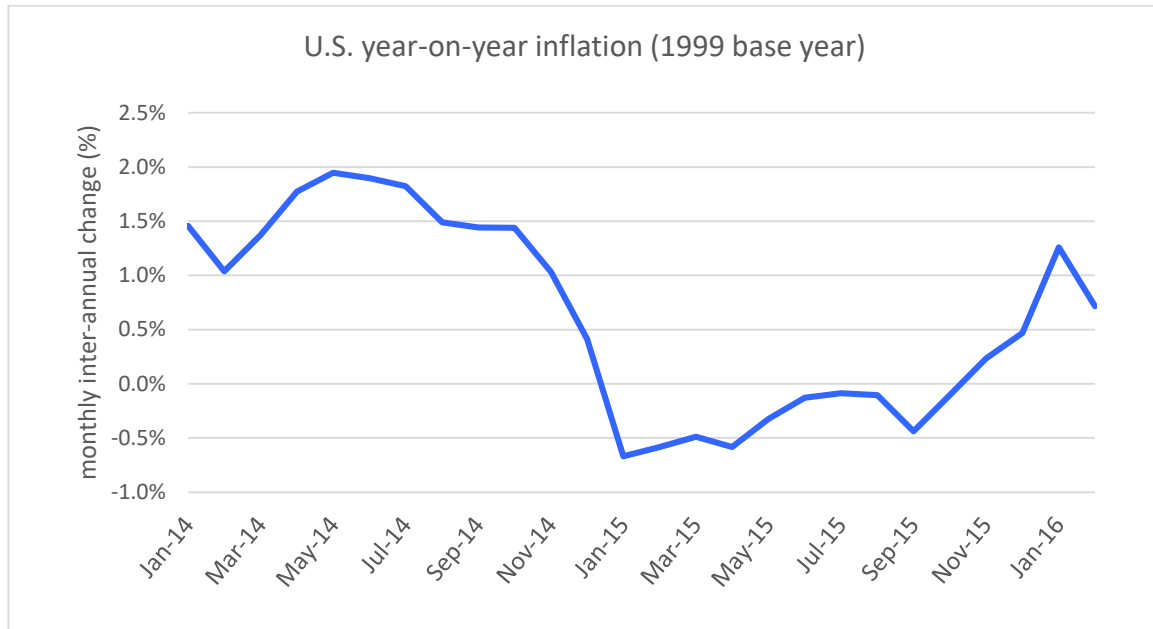
Source: Compiled data from the US Federal Reserve

Graph 3



Source: Data compiled from the US Bureau of Economic Analysis and the US Federal Reserve of Saint Louis.

Graph 4



Source: US Bureau of Labor Statistics

In some sense, prices are not going up – relative prices are not changing; the consumption is not going up, the loan market is cold, and inflation is below target (<2%). Why then are economic agents not responding as supposed?

Lucas Theory of Rational Expectations. Is the Austrian Theory of Business Cycle in Crisis?

Lucas's rational expectation theory, first introduced by Muth in 1961, means, in practical terms, that all economic agents make choices based on the information available to them, both past experiences and current economic data. This usually contrasts with the kinds of expectations with which theories like monetarism or Keynesianism or even Austrian School of Economics are concerned. Lucas expresses the idea of the "neutrality of money" in the following way:

The central predictions of the quantity theory are that, in the long run, money growth should be neutral in its effects on the growth rate of production and should affect the inflation rate on a one-for-one basis. (Lucas, 1995, p. 249).

According to Lucas, all the various theoretical investigations initiated in the 60s and 70s, reached to an interesting conclusion:

The main finding that emerged from the research of the 1970s is that anticipated changes in money growth have very different effects from unanticipated changes. Anticipated monetary expansions have inflation tax effects and induce an inflation premium on nominal interest rates, but they are not associated with the kind of stimulus to employment and production that Hume described. Unanticipated monetary expansions, on the other hand, can stimulate production as, symmetrically, unanticipated contractions can induce depression. (Lucas, 1995, p.262).

All the data seem to suggest that the economic agents anticipated the movement in monetary policy. In practical terms, a plausible interpretation could be that the changes in money supply has been more than neutral in the last seven years, because even nominal changes have been rare in this period of time.

This investigation should be expanded, and continuously be updated because the 'horizon of meaning' changes constantly, and the theories should internalize the notion that their influence explanatory powers are temporally limited. This recognition of temporality is not the traditional Hegelian, but is instead the Heideggerian analysis of time. Time is where constitution of meaning emerges, but this new concept of temporality is not teleological (as was the Hegelian concept before it). Humans should be willing to accept randomness, or at the very least, chaotic organization, in the march of history.

Conclusions

The ABCT gives a great explanation about business cycles, but it cannot explain every crisis, or predict the results from any particular monetary policy.

The ABCT has a particular problem using an aggregate single interest rate. The theory assumes that there are different types of capital, and that the capital has different time to maturity,

but it works only with one single interest rate. This oversimplification regarding the capital markets can produce a distortion in the possible answer of the economic agents to a specific monetary policy.

Over-simplification – with a single interest rate representing capital markets – is likely what produces the potential crisis of the ABCT theory, because the response of the economic agents to a single variable is relative easy to predict, but forecasting the actual behavior of individual economic agents is elusive without higher dimension analysis.

The hypothesis of rational expectations proposed by Lucas (who won the Nobel prize in 1995 for this work) has a powerful explanation for the period of economic tribulation that United States is going through. The economic agents probably have learned to anticipate the monetary policy movements and they are not acting like expected in order to avoid further losses⁵.

The ABCT could be improved adapting it to the new ways of understanding in the postindustrial economies. In addition, creating a new way of interpreting the ABCT could be a very Austrian way to approach to the potential crisis of not explaining what is happening in the US economy.

A hermeneutical approach, as suggested by Don Lavoie in the 70s, would be a very Austrian way to continue being philosophical, and at the same time incorporate many other theories

⁵ Professor Hayek says: “More important, however, is the fact that if future prices were correctly foreseen, inflation would have none of the stimulating effects which it is welcomed by so many” (Hayek, 1978, p.99). This could be understood as Hayek getting close to rational expectation hypothesis, but couple of pages after he states “But if prices do not rise more than expected, no extra profit will be made. Although prices continue to rise at the former rate, this will no longer have the miraculous effect on sales and employment it had before. The artificial gains will disappear, there will again be losses and some firms will find that prices will not even cover costs. To maintain the effect inflation had earlier when its full extent was not anticipated, it will have to be stronger than before (...)” (Hayek, 1978, p. 101). Hayek predicts that for a period of time increases in rate of inflation will produce gains for some, and only eventually the inflation will produce unemployment and losses. What Hayek is not taking into account (according to Lucas) that some level of neutrality of money will not produce inflation if people have learned the monetary movement of the monetary authority and its power to produce harm to the economy and the economic agents. In the following pages Professor Hayek writes, “There is of course, no doubt that temporarily the production of capital goods can be increased by what is called forced saving – that is, credit expansion can be used to direct a greater part of the current services of resources to the production of capital goods. At the end of such period the physical quantity of capital goods existing will be greater than it would otherwise have been”. (Hayek, 1978, p.105). This last quote implies that the expansion of fiduciary media will create more physical capital. The current situation in the United States implies something different.

regarding business cycles. This hermeneutical approach could be the answer to surpass the potential crisis of the ABCT, but may run counter to the threads of fundamentalism present in some branches of the Austrian Economics; this fundamentalism is prevalent in all the economics schools because they derived from philosophical postulates of modernity (the philosophy of fundament).

The potential differences between Mises and Lucas could be that beyond the methodological differences, both understand the surrounding world in a different way. Probably none of them are mistaken but, for sure, none of them have the complete understanding of the world. Putting them together in a hermeneutical approach would create a powerful theory that explains more situations in the complex postindustrial economies.

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