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THE AUSTRIAN BUSINESS CYCLE THEORY, RATIONAL EXPECTATIONS AND HISTORICAL TIME

Abstract:

This paper formulates the Austrian business cycle theory in historical time, considering institutional context of the central bank policy. Since central banks intervene permanently in credit markets, entrepreneurs may be fooled by their policies and an artificial boom may be initiated. Hence, the Austrian business cycle theory is able to explain the course of business cycle of current economies even if the rational expectations hypothesis holds.

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Keywords:

Business cycle, Austrian business cycle theory, rational expectations, historical time

JEL Classification: D84, E32, E52

Introduction

Common critique of the Austrian business cycle theory by the rational expectations hypothesis proponents claims that the Austrians do not assume enough rationality of entrepreneurs who are fooled permanently by the central bank lowering money rate of interest below its natural level. This essay tries to disprove the rational expectations objection by a slight change in methodology; instead of logical time, we use an idea of postkeynesian economists and analyze business cycle theory in historical time, considering institutional and historical background of the central bank policy.

We conclude that if central banks intervene permanently in credit markets, equality between the money rate of interest and its natural level is not warranted since the economy is not allowed to return to its initial equilibrium after an increase in the amount of money in circulation. The fact that the money rate and the natural rate are not always equal may make entrepreneurs confused; they may invest in more roundabout processes after monetary expansion and hereby initiate an artificial boom. We conclude that the Austrian business cycle theory may explain business cycles in current economies and, furthermore, is more likely to explain current business cycles than cycles in time when the theory was originally published.

1. The Austrian cycle theory and rational expectations

Critics of the Austrian business cycle theory (e.g. Tullock, 1987, Cowen, 1997 or Wagner, 1999) ask why entrepreneurs fail repeatedly in recognizing artificial monetary expansion. Accepting the rational expectations hypothesis introduced by Muth (1961) and Lucas (1972) should imply entrepreneurs might be, apparently, confused several times by the central bank expansionary policy, but could not be confused permanently, since they learn systematically by experience, do not repeat their previous mistakes and anticipate future state of the economy correctly. Then, the Austrian business cycle theory presented by Mises (1953) and Hayek (1933, 1935) could explain only several artificial booms and busts, but could not be used as a general explanation of cyclical fluctuations of the economy.

An interesting contribution to the rational expectations objection is presented by Wagner (1999) who compares relevance of the Austrian cycle theory in time when it was initially formulated with its relevance nowadays. Wagner states that formerly there were only simple economics statistics and no community of central bank observers; entrepreneurs apparently could not have enough information to form accurate predictions of the state of the economy and the central bank policy and, hence, it might have been plausible that entrepreneurs were misled by the monetary authority as the Austrian business cycle theory predicts.

Current situation, Wagner continues, is significantly different. *“Statistics, observers, and pundits are everywhere. (...) The aggregate data are widely and readily available”* (Wagner, 1999, p. 71). This implies entrepreneurs might be well informed and might be able to recognize a decrease in the money rate of interest is only artificial. Hence, Wagner concludes the Austrian business cycle theory could, apparently, describe business cycle a century ago when entrepreneurs could not be informed well, but cannot explain cyclical fluctuations of the economy nowadays.

2. The Austrian cycle theory and historical time

There are several attempts to disprove the rational expectations objection (e.g. Garrison, 1989, Carilli and Dempster, 2001 or Evans and Baxendale, 2008). In this essay, we partially follow an approach presented by Murphy (2005) and change slightly methodological grounds of the Austrian business cycle theory. Instead of assuming logical time, we use an idea of postkeynesians and suggest formulating a model of the business cycle in historical time, considering historical and institutional background of monetary policy and consequences of past events and past public policies.

Traditional explanation of the Austrian business cycle theory presented by Mises (1953) and Hayek (1933, 1935) starts with an assumption of the economy in an initial general equilibrium expressed by a model of the evenly rotating economy; no changes occur and the same transactions are repeated again and again (Mises, 1998). Aim of the business cycle theory is, then, to explain how the economy deviates from these normally stable conditions (Wagner, 1999).

Assumption of the economy being in general equilibrium before the cycle is artificially initiated may, however, oversimplify complex reality. Murphy (2005, p. 10) claims that *“the government (...) has implemented a permanent intervention in the credit market by the creation of a central bank (or a centralized system of banks)”*; the same idea is expressed by Wagner (1999). Current central banks policies in the credit markets are not one-off isolated interventions; on the contrary, current central banks manipulate permanently with the money rate of interest. Since central banks intervene continually, the economy is, apparently, not allowed to return to its initial general equilibrium represented by the model of the evenly rotating economy.

In such a case, explanation of the business cycle based on assumption that the economy is initially in stable equilibrium cannot be correct. When describing current economies, we should not assume the economy starts in an equilibrium; instead, we should consider the state of the economy before an artificial boom and institutional context of monetary policy as well.

Models formulated in historical time instead of logical one, even if they are more complex and more complicated to solve, may better describe current economies since current economies apparently cannot be characterized by initial general equilibrium. Using the evenly rotating economy as a starting point when formulating the Austrian business cycle theory, as Hayek (1935) does, may be useful just for didactical reasons.

3. Implications for the Austrian cycle theory relevance

Although there are several serious objections against the rational expectations hypothesis (e.g. Boettke, 1997, Hoppe, 1997 or Basse, 2006), these claims will be ignored in this chapter, assuming entrepreneurs really form rational expectations. Our objective is to prove that even if the rational expectations hypothesis holds, the rational hypothesis objection is not valid if the Austrian business cycle theory is formulated in historical time instead of logical time. We try to prove that the Austrian business cycle theory is able to explain the course of business cycles in current economies.

Wagner (1999) is right when stating that information about the central bank policy are more disposable nowadays compared to the time when the Austrian cycle theory was initially presented. He might be apparently right as well when deducing that if entrepreneurs possess more information about the central bank policy, the course of the business cycle should be smoothed since entrepreneurs should not be fooled by expansionary policy of the central bank.

Nevertheless, institutional background of central banks policies changed in another aspect as well. As mentioned previously, central banks became much more active participants in credit markets than a century ago. Previously, central banks interventions on credit markets were one-off actions; currently, central banks intervene permanently. Let us examine the impact of this change to the relevance of the Austrian business cycle theory for current economies and whether Wagner's suggestion is right.

If the central bank performs expansionary policy, money rate of interest decreases below its natural level which is *“the rate of interest that would be determined by supply and demand if actual capital goods were lent without the mediation of money”* (Mises 1953, p. 355). Nonetheless, money rate of interest may decrease due to two different reasons; either due to an increase in the amount of money in circulation, which does not affect the natural rate of interest, or due to decrease in time preferences of consumers, which decreases the natural rate as well.

Entrepreneurs, however, do not know what the natural rate of interest is; they may recognize only money rate of interest and the natural rate must be estimated. Hence, entrepreneurs might be fooled by the central bank decreasing the money rate of interest; if entrepreneurs perceive expansionary policy of the central bank as decreasing natural rate of interest, an artificial “Austrian” boom is initiated. An important question is whether and how entrepreneurs may distinguish between these two reasons for a decrease in the money rate of interest.

The answer might be affirmative if the central bank does not manipulate the money rate of interest, thus, if the central bank is not active actor in credit markets. In such a case, money rate of interest is always equal to its natural level; hence, any decrease in the money rate of interest stands for decreasing the natural rate of interest due to decrease in rate of time preference of consumers. Entrepreneurs know this fact and, thus, assume that every change of the money rate is due to change in consumers’ preferences.

If, in such a case, the central bank unexpectedly increased the amount of money in circulation, entrepreneurs would apparently be fooled since they would expect the money rate decreases due to a decrease in the natural rate of interest. Entrepreneurs would invest in more roundabout processes and an artificial boom would be initiated. This might be simple description of the Austrian business cycle initiation in time when the Austrian business cycle theory was originally presented.

Wagner (1999) is, however, right as well that since the central bank policy is monitored and observed exhaustively nowadays, monetary expansion might not be unexpected by entrepreneurs. On the contrary, if the central bank performed one-off intervention in the credit market, entrepreneurs would have enough information about this policy and should not be fooled. Wagner’s (1999) suggestion about the Austrian cycle theory inability to explain the course of business cycle nowadays, thus, might seem to be right.

Nevertheless, the answer to our previous question might be different in situation of permanent use of monetary policy instruments. Before further analysis, let us recall that we assume entrepreneurs form rational expectations. The rational expectations hypothesis does not mean that people know everything; if people knew everything, no entrepreneur could be fooled by the central bank policy and the “Austrian” business cycle could not be initiated. We rather assume people try to improve their knowledge by searching actively for all the possible information about the state of the economy and the central bank policy.

Entrepreneurs with rational expectations should know that the central bank intervenes permanently in the credit markets. Entrepreneurs should know as well that since the money rate of interest is influenced permanently by the monetary authority, an equality between the money rate of interest and its natural level is not warranted. Thus, as

stated by Murphy (2005, p. 10), „*actors in these economies have no idea what the free market rate of interest would be in the absence of such interference*”; entrepreneurs cannot assume the money rate of interest always equals the natural rate and need to estimate what the reason for observed decrease in the money rate is.

It may happen that in case of permanent use of monetary policy instruments, rational entrepreneurs are fooled by the monetary authority. Since the central bank intervenes permanently, money rate of interest and its natural level become independent of each other; the money rate is controlled by the central bank while the natural rate is determined mostly by the rate of consumers' time preference. Then, it may happen that the money rate is permanently kept below the natural rate which permanently triggers an artificial enlargement of production process. In such a case, entrepreneurs act fully rationally since they may interpret observed stability of the money rate of interest as its equality with unknown natural rate.

Moreover, Murphy (2005) points out that if the central bank increases the money rate of interest which was initially below the natural rate, the new rate could still be lower than the natural rate. Entrepreneurs observing only an increase in the money rate of interest may interpret this policy as restrictive one, while it is an expansive policy since the new money rate is still below the natural rate of interest.

Furthermore, if entrepreneurs search actively for all the possible information about the central bank policy, these are available to them only with some time lag since the central bank board needs some time to announce its decision and economic analysts monitoring public policy need some time to prepare and release their analysis. Entrepreneurs, however, cannot wait for more information; they need to act somehow after they observe a decrease of the money rate of interest. Their decision-making is unavoidably based on imperfect knowledge since they only estimate the reason for observed decrease in the money rate of interest. In such a case, one might imagine that entrepreneurs will commit some errors since their estimates based on imperfect knowledge need not be correct.

Murphy (2005, p. 16), hence, concludes that “*the entrepreneur (...) perfectly rational in the neoclassical sense will make more mistakes when the most important intertemporal prices (...) are influenced not only by “fundamentals” but also by the changing whims of central bankers*”. Our conclusions are the same; it seems that, despite the assumption of the rational expectations hypothesis, an artificial “Austrian” boom may be initiated in current economies with central banks intervening permanently in the credit markets; the Austrian business cycle theory may explain the course of economic fluctuations in current economies.

Such a conclusion is completely different from that of Lucas business cycle model whose textbook version is presented in Romer (2006). While Lucas concludes that the business cycle should be smoothed in case of permanent use of monetary policy

instruments since entrepreneurs do not react anyhow on observed changes in prices, our previous discussion suggests the business cycle should be, on the contrary, accentuated since entrepreneurs may be fooled by the central bank.

Wagner (1999) suggesting that the Austrian business cycle theory could explain cyclical fluctuations a century ago, but cannot explain current business cycles, is, hence, apparently wrong. Since the monetary policy authorities became much more active participants in credit markets, entrepreneurs, despite their rational expectations, may be fooled by the central banks policies. Our theoretical discussion implies that because of changed institutional background, an "Austrian" business cycle is much more likely to be initiated nowadays than in time when the theory was initially presented. Hence, our conclusion is completely different from Wagner's claim.

Concluding remarks

This essay tried to disprove the rational expectations objection against the Austrian business cycle theory. We have changed slightly the methodology and considered institutional and historical background of monetary policy.

We have concluded that if the central bank intervenes permanently in credit markets, the money rate of interest need not be always equal to the natural rate and entrepreneurs, even if they form rational expectations, may be fooled by the monetary policy authority. The Austrian business cycle theory, then, may be used as an explanation of cyclical fluctuations of the economy nowadays. Moreover, as the central banks became much more active in credit markets compared to the time a century ago, the Austrian cycle theory is much more likely to explain current business cycles than cycles a century ago.

Thus, since the rational expectations objection may be disproved, the Austrian business cycle theory might be taken seriously by current macroeconomic mainstream since the Austrian school may contribute significantly to the debate on grounds and course of the business cycles.

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