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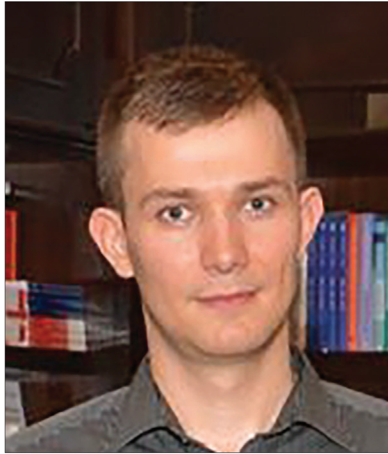

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KEYNES AND HAYEK: COMMONALITIES AND DIFFERENCES IN BUSINESS CYCLE THEORIES

Abstract

Nearly a century after the renown Keynes-Hayek debate, the two economists are still perceived as diametrically opposed. This is certainly not true in the realm of business cycle theory where for a period of time they both employed the Wicksell inspired savings-investment approach. The publication of Keynes's General Theory obscured these similarities and the IS-LM model disconnected all possible ties between the two cycle theories. However, I argue that Keynes din not succeed in the General Theory to offer a consistent interest rate theory and that his 1937 articles which were meant for further clarification were received even worse than the book itself. If Keynes's more nihilistic variant of the liquidity preference theory would be replaced which Leijohnhufvud's Z theory (i.e., the Treatise plus output modifications), Keynes and the Austrians would still have considerable theoretical points in common in the realm of business fluctuations. The two cycle theories would complement, rather than contradict each other.

Keywords: economic cycles; J. M. Keynes; F. A. Hayek; interest rate theory; liquidity preference; the Wicksell connection.

Introduction

To the economist who is not versed in history of economic thought, Keynes and Hayek are usually perceived as intellectual rivals. While this is certainly true in terms of political views, since one was an unyielding defender of laissez faire capitalism and the other a proponent of heavy state interventionism, the two economists share much more than it is commonly believed when it comes to business cycle theories.[1] Historians of economic thought generally do know better, but even here, the standard interpretation is that Keynes and Hayek *had* some similarities in the early 1930s, when Keynes wrote *A Treatise on Money*. After the publication of the *General Theory*, it is generally claimed that these similarities

disappeared. Moreover, Keynes's infamous 1937 articles are believed to have severed any remaining connection between the two authors regarding business cycle theories. After all, Keynes (1936, p. 121) himself did emphatically state in his magnum opus that he no longer believed that the concept of the natural rate of interest holds any validity anymore.

In the present paper I argue that (1) up to a certain point, there is no essential contradiction between the two economists since their theories apply to different scenarios, (2) Keynes did not manage in fact in the *General Theory* and in the 1937 articles to rid himself of the loanable funds theory (and, implicitly, Wicksell's influence) and (3) if we do not take liquidity preference seriously (as it should not be taken), similarities are still strong. In order to attempt to prove the main theses I will divide the analysis in three time periods. The first will be the early 1930s, which will generally be focused on Keynes's *Treatise* and Hayek's *Prices and Production,* the second will concern itself briefly with highlighting the modifications brought by the *General Theory* and the last will focus on Keynes's 1937 articles.

If the abovementioned claims are true ((1), (2) and (3)) in the realm of business cycle theory, Keynes and Hayek only presented specific scenarios and neither of them put forward a *general theory.*[2] Their subsequent theories are specific applications of the savings-investment approach.

Section 1 presents the *Treatise* period when the resemblances between the two business cycle theories were strong and rather obvious to the reader. In this sense we will compare the model employed by Keynes in *A Treatise on Money* (1937) with the one used by Hayek in *Prices and Production* (1931). Moreover, we will attempt to represent them graphically on the same diagram and show that rather than contradicting, they complement each other.[3]

1. The *Treatise* Period

All the present research was made possible by the existence of the works of professor Axel Leijonhufvud, especially "*The Wicksell connection: Variations on a theme*". I personally believe that his aforementioned work is one of the most underrated in modern economics and that its implications are much more far-reaching than originally anticipated. In this working paper, Leijohnhufvud (1979) essentially argues there that the Swedish, Austrian and Cambridge schools of thought are united by a

common wicksellian heritage. For all these economists, business cycles were caused by divergences between savings and investments.

What I aim to show in this section is that at the time of the publication of the *Treatise on Money* both Keynes (1930) and Hayek (2008) used the same framework of analysis. Moreover, at this stage no fundamental contradiction could appear between them regarding the business cycle mechanism[4] since they were referring to different scenarios. I will further briefly analyze both the Keynesian and the Hayekian scenarios, as presented in the original works, and later show they can be incorporated in the same framework.

Hayek (2008) has always considered, following Wicksell, that business cycles are generated when banks cease to be passive intermediaries between investors and savers and start to actively increase credit in an artificial way. This would lead to a situation where the market rate of interest would not correspond anymore with the equilibrium or pure rate of interest. The process would generate inflation and changes in relative prices. Sooner or later entrepreneurs would clash with consumers on the market and spark a squabble over real resources. Real capital would not be sufficient to support all the newly financed investments and some of them would have to be liquidated. Given that capital goods are not homogenous and that they cannot be reallocated without cost, society would clearly be worst off since a part of the country's capital stock would be destroyed in the process. To this day, the Austrian school of thought has not modified its theoretical position in any relevant way.[5]

This is nothing more than a *particular case* when *investment exceeds savings* in the savings-investment framework of analysis. Of course, in a fractional reserve banking system this can only happen if banks (orchestrated most likely by the actions of the central bank) expand credit. The scenario is similar with a standard case of maximum price fixing and it can be graphically represented as depicted in figure 1.

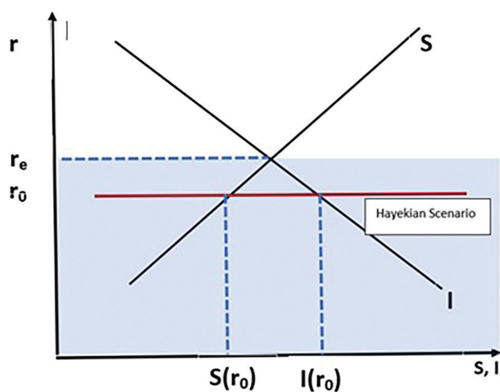

Figure 1. Hayekian Scenario, author's representation

The only difference between this and a standard graphical representation of price fixing is that the on the vertical axis we will have the quantity of *real* savings and respectively investment and on the vertical axis we have the *real* interest rate. In the Hayekian scenario the banking system will impose a monetary interest rate which is below the equilibrium interest rate (r_0<r_e in the graph). This will determine entrepreneurs to invest I(r_0) while savers will only supply on the market S(r_0). The difference between the two is artificial credit expansion. This situation is of course not compatible with equilibrium so market tendencies will be set in motion in order to correct it. The only way that the new artificially created investment structure can be perpetuated is if the banks continue to progressively decrease the market rate of interest roughly each production period. This status quo is unfeasible because at some point hyperinflation will step-in.[6]

On the other hand, Keynes focuses in the *Treatise* on another scenario, that of *deflation*. For him the situation is reversed. When there is, for whatever reason, a decrease in investment from a superior equilibrium position to an inferior one, like from I′ to I, the system would normally respond with a consequent decrease of the equilibrium rate of interest from *r′* towards r′′.

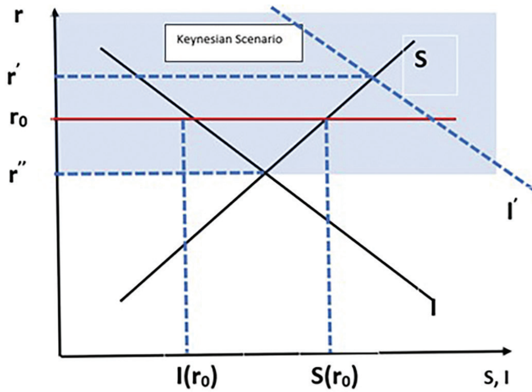

Figure 2. Keynesian Scenario, author's representation

So far this is nothing more than the application of the savings-investment framework of analysis to a standard case of a decrease in investment. Banks are taken out of the picture in the sense that they abstain from either contracting or expanding credit. But now, in the Keynesian scenario, for whatever reason, financial speculators act against the market tendency. They start selling off their stock of old securities and arrest the movement of the interest rate somewhere around r_0 (Leijonhufvud, 1979, pp. 34-38). They are "hoarders" in the sense that they sell securities for cash, which they hold on to for speculative reasons. r_0 is obviously not an equilibrium position and it can be maintained only until the speculators deplete their old stock of securities. Sooner or later the system must move towards r''.

If the way in which we presented the two business cycle theories is correct, there is no theoretical discrepancy between them and there need not be, since they refer to different scenarios. Hayek explains what happens when investment exceeds savings because of artificial credit expansion; Keynes explains what happens when the investment goes below savings because speculators are acting against the wishes of entrepreneurs. *Neither is a general theory.* The general theory is the savings-investment framework of analysis. If we would try to represent both scenarios on the same graph, it would look something like figure 3.

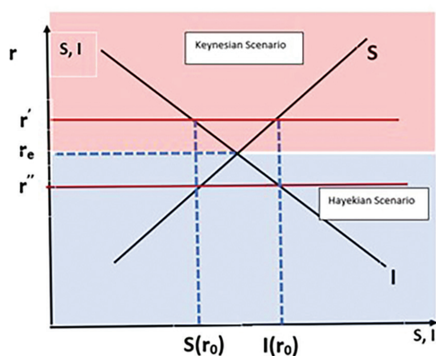

Figure 3. Keynesian and Hayekian scenarios in a savings-investment analysis framework, author's representation

Disregarding the many particular complexities of each individual theory,[7] we could interpret the two scenarios in the following way: if the market interest rate is artificially fixed (by the fractional reserve banking system) above the equilibrium rate society would find itself in a Hayekian scenario and if the market interest rate is fixed below the equilibrium rate (by hoarders) a Keynesian scenario would prevail. Both cases represent disequilibrium models and both lack *direct* automatic equilibrating mechanisms (Laidler, 1999).[8] However, this does not mean that the models are *incompatible* with economic equilibrium. As we saw above, in both cases pressure adds up on the economic actors who generate the disequilibrium. Hayek's banks are limited in their ability to expand credit by inflationary pressure and it is highly unlikely that they could continue to pursue their actions *ad infinitum*. In the same way, Keynes's speculators will be unable to go against the tide each time by selling securities since their accumulated stock must run out at one point in time.[9] Austrian and Keynesian scenarios were both in the early 1930s transitory phases. The inconsistent believes based on which the economic agents act must converge at a certain point in time because market forces, although not instantaneously, will do their job.

2. The *General Theory* Period

When one argues that Keynesian and Austrian cycle theories *do* have common points and that they *are* relevant, the general reaction is: What about the *General Theory*? Did he not explicitly reject Wicksell and the concept of natural rate of interest? It is of course true that Keynes attempted to introduce a new interest rate theory, but that does not mean that he succeeded in his endeavor or that all his (rather bombastic) claims should be taken at face value.[10] I argue in this second section, following Leijohnhufvud (1979), that liquidity preference theory of interest (in its full nihilistic form) should not be taken seriously and that, in its absence, Keynes's model remains a particular case of the loanable funds framework of analysis. Moreover, the reactions of Keynes's peers to the *General Theory* and to his later 1937 articles further supports this point.[11]

Keynes himself would of course have objected to the present endeavor, since he considered liquidity preference one of the essential components of the *General Theory*.[12] He also did not make his book easy to read. The *General Theory* was not well received by the intellectual community of its age (Laidler, 1999) and some chapters of it, such as chapters 16 and 17 are particularly obscure. Ironically enough, these are exactly the chapters that describe the nature of capital and interest[13] and many historians of economic thought consider them as mere detours which can be sacrificed without losing the central message (Hansen, 1953; Blaug, 1985).[14] Keynes's inability to provide a coherent theoretic system in the *General Theory* and his failure to consistently defend his "new" interest rate theory in the 1937 articles are precisely the reasons for which liquidity preference ought to be rejected as the final determinant of the rate of interest and replaced with Leijohnhufvud's "doctrine historical fiction (1979, p. 3) entitled *the Z-theory,*[15] which will be shortly discussed below.

There are, generally accepted, two main differences between the *Treatise* and the *General Theory*: the ability of the economic system to react to a decrease in MEC trough *an adjustment in income* (i.e., variable output) and *the liquidity preference theory of interest* (Leijonhufvud, 1976; Leijonhufvud, 1979; Blaug, 1985).

Let us for the moment take liquidity preference out of the picture and assume that the *General Theory* would employ the same model as the *Treatise* plus variable output. In this case we would have the same scenario as the one explained above, where the initial point of departure from equilibrium would be when the system is confronted with a decrease

in the marginal efficiency of capital. Essentially, if we would represent it graphically, it would look exactly as figure 2 above. The money rate of interest moves down towards its new natural level, but it is arrested on its trajectory by the action of the speculators who, by selling securities, fix it at a level *above the equilibrium one*. But this time, instead of adjusting through price, the system will adjust by decreasing output and employment. Price adjustments are substituted by quantity adjustments. In this particular scenario the reduction in investment generates a decrease in income and moves the system towards a suboptimal position as compared to its full-employment value.

It is true that society is, so to speak, in the same point where it was in Keynes's *Treatise* scenario. However, the situation there was transitory. Pressure would build up on the ones acting based on inconsistent beliefs (i.e., the speculators) and equilibrium would sooner or later be achieved. The interest rate would eventually drop to its full employment equilibrium level. In the case of the *General Theory* the main difference is that this situation is stable and there is no more pressure on speculators to modify the behavior. The market "clears" at false prices.[16]

How exactly did society end up into a stable position with lasting involuntary unemployment? Leijonhufvud (1976, pp. 81-91) explains the process in some depth in his book *On Keynesian Economics and the Economics of Keynes.* The first phase of the Keynesian process takes off with a decrease in entrepreneur's expectations and hence the marginal efficiently of capital. They would, as in figure 2, decrease investment while the public would maintain its current level of savings. This would automatically lead to an *excess supply of commodities* coupled with an *excess demand for securities.*[17] The former would be caused by the inability of businesses to sell off their inventories, while the latter would be caused by the fact that in the first phase, the income of households did not yet drop and hence their saving plans are roughly the same. Looking back at figure 2, businessmen would float securities to the point of $I(r_0)$, while households would be willing to buy securities up to $S(r_0)$. The demand for securities is compensated by the actions of the bearish speculators who exchange income earning assets for money, while the excess supply of commodities (and any residual excess demand for money) is swept away through a reduction in output. This would push society in a situation in which all other markets are in equilibrium except the labor market, which would exhibit in this case *excess supply*. Normally, in the classical models the excess supply of labor would put pressure on wages which, if they are

perfectly flexible, would act to absorb the unemployed. This would not happen in the short run Keynesian scenario since (1) wages *do* manifest rigidities and (2) even if they were flexible, the initial decrease in output would open the way for the multiplier to step in and generate a situation in which a decrease in the wage rate would only lead to further *pari passu* decreases in aggregate demand.[18] Cumulative income-constraint processes are common in Keynes's models and they generally are deviation amplifying tendencies (Leijonhufvud, 1976).[19]

How would Keynes's model look *with* liquidity preference? Well, things are much more mechanical (and less complex) this time. If savings and investment are identical, there is no need for any type of graphical representation as presented before since no discrepancy could possibly develop between the two magnitudes. The reason for Keynes's premise is that he prefers to refer to observed (i.e. ex post) magnitudes and not planned (ex ante) ones. If savings and investment are by definition equal, they cannot possibly *determine* the rate of interest, which is now left without a (real) determinant. Productivity and thrift play no role in the formation of interest. The only thing left here is the speculative element, i.e., liquidity preference, which could set a level for the interest rate.[20] The causal chain is simple from there: interest determines investment/savings, investment then determines output and output determines the level of employment. As Leijohnhufvud correctly points out (1979, p. 44-48), it does not make sense any more to talk about *the correct* level of interest.

Thus, in the *General Theory* model there is no unique natural rate of interest, but a multitude of interest rates, each corresponding to a predefined level of unemployment.[21] Practically any interest rate is potentially "to high" since a lower one would imply greater investment and a superior employment level. Also, real forces are not ultimate causes in determining the interest rate, since speculators can just fix it at whatever level they agree.[22]

3. The post- General Theory Period: The "Infamous" 1937 Articles

It is a known fact that the G*eneral Theory*, which was published in 1936, was not well received by the economic community at the time and there was a lot of confusion regarding what Keynes actually wanted to prove with it (Laidler, 1999), especially regarding the determination of the interest rate.

Some of the most renown economists, such as Hicks, Ohlin, Robertson or Hawtrey, wrote reviews on the book where they expressed their concerns regarding the different problems raised by Keynes's "radically new" interest rate theory. The British economist felt obliged to reply.

In 1937 Keynes wrote an article entitled *Alternative Theories of the Rate of Interest* which was meant to further elucidate his "liquidity preference theory of interest" and alleviate some of the concerns raised by his peers. In a certain sense, it can be argued that it created even more confusion than before.

In the article mentioned above, Keynes (1937, p. 242) went to great lengths to further differentiate himself from other schools of thought. He rejected the Swedish school's interpretation because he considers that it fell back on the classical position and also discarded Wicksell (again) for "trying to be classical". He wrote (1937, p. 245):

> Thus we are completely back again at the classical doctrine which Prof. Ohlin has just repudiated-namely, that the rate of interest is fixed at the level where the supply of credit, in the shape of saving, is equal to the demand for credit, in the shape of investment.

He also contradicts his compatriots, Hicks, Robertson and Hawtrey, who were arguing that his theory is in no sense new, but just an alternative version of the loanable funds theory. Hicks (1936, p. 296), in reviewing Keynes's book, emphatically stated that: "*This looks a most revolutionary doctrine; but it is not, I think, as revolutionary as it seems*". Robertson (1936, p. 183) claimed that:

> Ultimately, therefore, it is not as a refutation of a common-sense account of events in terms of supply and demand for loanable funds, but as an alternative version of it, that Mr. Keynes' account as finally developed must be regarded.

Hawtrey (1937) argued that Keynes's definitions of savings and investment are identical and that therefore they can be substituted for each other. Moreover, he even mentioned that identity so established does not prove anything:

> The idea that a tendency for saving and investment to become, different has to be counteracted by an expansion or contraction of the total of incomes

> is an absurdity; such a tendency cannot strain the economic system; it can only strain Mr. Keynes's vocabulary (Hawtrey, 1937, p. 186)[23].

Keynes found that none of the above-mentioned claims do justice to his theory. The reasons behind this are somewhat ambiguous. He argues that savings and investment are equalized not by the interest rate but through income. This is to a certain point understandable, but as Keynes (1937, p. 250) himself realized, it leaves the interest rate without a determinant. The answer we get in the article is in a way disappointing. Bluntly put, the supply and demand for "hoards" determine the interest rate, but it is unclear what Keynesian hoarding is. The reader's first instinct would be to associate hoarding to that part of saved cash that people are holding at present idle. But Keynes quickly points out, leaving the reader perplex again, that:

> Moreover, no amount of anxiety by the public to increase their hoards can affect the amount of hoarding, which depends on the willingness of the banks to acquire (or dispose of) additional assets-beyond what is required to offset changes in the active balances.[24]

It is true that Keynes (1937a, p. 252) added at the end of his article "*To speak of the "Liquidity-preference Theory" of the Rate of Interest is, indeed, to dignify it too much*", but even so, confusion persists in the article exactly at its core, namely the formation of the interest rate.[25]

The reaction to Keynes's article was in a sense even worse than the feedback on the *General Theory*. It really has to be read in order to be fully grasped. For instance, Ohlin, Robertson and Hawtrey all wrote rejoinders which were published in *The Economic Journal* under the title *Alternative Theories of the Rate of Interest: Three Rejoinders* in 1937. Among other things, they claimed that Keynes did not understand the difference between ex-ante and ex-post concepts, that he did not understand the classics, that he used bad (and inconsistent) terminology and that he did not manage to differentiate himself from the loanable-funds theory (Ohlin, et al., 1937). Just regarding the last of these claims, Robertson (1937, p. 432) writes: *"Thus I remain of opinion that Mr. Keynes' apparatus and the "loanable funds" apparatus are not "radically opposed to one another" (p. 241), but are alternative pieces of machinery"*.

Seeing all these negative reactions, even from his colleagues and friends at Cambridge,[26] Keynes came up later that year with another article

entitled *The "ex-ante" Theory of Interest*, which he published in the same journal and which clarified his position on the issue to some extent. He there correctly pointed out that from the moment an entrepreneur *decides* to make an investment to the moment the investment is actually *made*, he needs to be supplied with a stock of cash (or, in more general terms, liquidity). Keynes baptizes this fund *"finance"*. However, he argues that while ex-ante investment is a relevant phenomenon, ex-ante savings is not and, moreover, ex-ante investment *is not* financed by ex-ante savings. He writes (Keynes, 1937, p. 666):

> […] the finance required during the interregnum between the intention to invest and its achievement is mainly supplied by specialists, in particular by the banks, which organise and manage a revolving fund of liquid finance.

So essentially the interest rate is determined by the interplay between the supply of "finance", i.e., the banks, and the demand for "finance", which is represented by the need of the public for both active and inactive demand.[27] In that case any increase in economic activity, either *planned* or *actual*, must necessarily come about if the *ceteris* are *paribus* at an increase in the rate of interest. He (1937, p. 667) further mentions that this theory is superior to the loanable funds theory since the latter *"remains only half-a-theory, inasmuch as it allows for changes in the supply of money but not for changes in the liquidity-preferences of the lending public"*. So, for Keynes (p. 668): *"in general, the banks hold the key position in the transition from a lower to a higher scale of activity"*. He finishes his article with the bombastic claim that: *"The investment market can become congested through shortage of cash. It can never become congested through shortage of saving. This is the most fundamental of my conclusions within this field"* (ibidem). However, this is most likely just another terminological quibble since one never knows exactly how Keynes defines (or operates with) the notion of "savings". Serious questions such as whether there is a physical stock of goods to which savings is attached in the long run and whether increasing aggregate demand puts pressure in the present on that available stock are not treated. His reformulation given in this article still focuses only on the monetary side of things and is *still* another variant of the loanable fund theory.[28]

4. Conclusions

The similarities between Keynesian and Austrian business cycle theories are remarkable in the early 1930s. As section 1 shows, the two theories are neither conflicting, nor generally valid. They are applications of the saving investment framework of analysis to different scenarios. Keynes focuses on the case of deflation, when investment goes below savings, while Hayek focuses on the situation when banks artificially push investment above savings. In this sense, we can say that to a certain extent the two theories complement each other. Even more so, at this stage of their development, both scenarios were transient phases which would sooner or later be corrected by market tendencies.

The publishing of the *General Theory* in 1936 complicated matters substantially and blurred the similarities between the two. If Keynes's liquidity preference theory would be taken at face value, a rather mechanical chain of causation would govern the workings of the economy. Liquidity preference would determine the rate of interest, the rate of interest would determine investment which would further fix output and the level of employment. There would be no natural/real/equilibrium rate of interest and any interest level would be virtually too high, since a lesser level would correspond to lower unemployment. However, as previously argued in section 2, we strongly believe that Keynes's liquidity preference theory should not be taken at face value since it would be retrogressive as compared to the theoretical model presented in the *Treatise*. Instead, we would opt for Leijohnhufvud's "Z theory" of interest, case in which the *General Theory* would be only the *Treatise* plus modifications in output. The main difference between this position and the one presented by Keynes in his earlier book would be that now there is no more systemic pressure placed on speculators to revert their position and the economy is sucked in a rather stable position with persistent unemployment. The workings of the multiplier would be the main culprit for this situation where although the economy does not maximize output, unused resources (especially labor force) still exist.

Keynes himself would not agree with the Z theory and he would of course stress the importance of his liquidity preference theory of interest. However, we consider that the negative reaction of the economic community to the *General Theory* and the feeble attempt put forward by Keynes in 1937 to defend it are arguments which further sustain the idea that his claims should not be taken at face value. The two articles written

in 1937 to clarify his position on the issue of interest were not received any better than the General Theory. One could argue that they were actually received even worse. In this sense, his liquidity preference theory of interest could at best be seen as another variant of the loanable-funds doctrine or at worst as an untidy and partially incoherent piece of economic theory.

These are the reasons for which we consider that an Austrian-Keynesian synthesis in the realm of business cycle theory would be both possible and potentially beneficial and that the glue that could bring them together would be Leijohnhufvud's Wicksell connection. If we would stick to the *Treatise* version of Keynes (or even a variant of the Z-theory with output modifications), Keynesian and Austrian cycle theories could still complement (and not contradict) each other.

ANNEX

Keynes and Hayek in Romanian Economic Thought

A part of the work dedicated to the present research was targeted towards inquiring whether the Keynes-Hayek debate had any sort of repercussions in Romanian economic thought. Given the fact that the main thesis of the article was more or less an exercise in pure economic theory, while the above-mentioned research question calls for a more historically oriented approach, I choose to present these partial findings as an annex. Though the two pieces are obviously connected, the main article is of course self-standing and can be easily read without any reference to the present annex. However, both Romanian historians and economists could find the present section thought provoking, since it lays the foundation for further research that I believe was not yet done systematically in Romania.

Given the fact that most of the works of the world's renown economists have not even been translated into Romanian, it is of course highly unlikely to find such a specific topic as the Keynes-Hayek debate openly treated in a Romanian journal or book. There was an attempt made by the Romanian Academy to start a translation series of great economic books, but it was unfortunately stopped (Aligica, 2002).[29] The only option left available would be to see how the works of the two economists were received *in general* in Romania. Because the debate started, as mentioned in the article above, in the early 1930s, it is improbable that any traces of it would have been brought in the country before the beginning of the second world war. Though the Austrian school of thought was not unknown to the economic profession in the country, especially in Transylvania until the end of the first world war, since it was a part of the Austro-Hungarian Empire,[30] we found no direct reference to Hayek until after the communist period.

Because Keynes was the more renown economist at that time and he was also a highly active political figure,[31] it is in this sense natural to see whether his influence reached in any way the Romanian territory. His *Treatise on Money* (1930), which was a highly technical book, was unfortunately not translated in Romanian. On the other hand, the *General Theory* was, but only as late as 1970.

The preface to this first edition of this Romanian translation, written by L. Stroja, proves to be an invaluable tool in order to gauge the way

in which Keynesianism was received in the country. According to this source, Keynes's technical economics started to be read and analyzed in Romania only in the late 1950s and early 1960s (Stroja, 1970, p. 5). It is actually invigorating to see the huge amount of work that the translator put in order to familiarize himself with the work of the British economist.[32] However, given that the country was in full socialist swing, naturally the readings of the *General Theory* took place from Marxist-Leninist positions. This puts the translator in the strange position of viewing Keynes's theory as "western economic policy", with applicability only for the "bourgeoise economies" of western Europe and the US (Stroja, 1970, p. 20). He seems to believe that the necessity of state interventionism in the west in the interwar period organically developed in parallel with the development of the socialist economy in the Soviet Union.

At least declaratively, Stroja (1970, p. 22) views Keynes's measures as futile in their effort to change the nature of the capitalist production system, which according to Marxist ideology is of course unsustainable.[33] There is a clear trace of sympathy for Keynes in Stroja's preface, but with a constant tendency to patronize the British economist for his alleged failure in supporting socialism. Stroja (1970, pp. 23-24) acknowledges that the *General Theory* is revolutionary, but he labels it as only "bourgeois revolutionary" and claims that Keynes only represented the interest of his class, i.e., the highly educated bourgeoise. He even asks at the end of his preface why even after implementing all the interventionist measures prescribed by Keynes, the "ugly traits of capitalism" such as inequality or unemployment were not banished forever from the west.[34]

While it is true that the impact of western economists was small in Romania before 1989, even in the case of Keynes who was extremely fashionable, it was not inexistent. Take for instance the case of the applied mathematician E. Balas, who attempted a Keynesian – Marxist-Leninist synthesis in 1957 (and who unfortunately lost his job after publishing his book and was accused of being a bourgeoise revisionist (Benvenuti, 2013)). There are also claims that M. Manoilescu, probably Romania's most renown economist, was a proto-Keynesian, but these are, if not exaggerated, at least insufficiently documented in my opinion.[35]

Even at present, the impact of the works of Keynes in Romania is somewhat ambiguous. To quote one researcher:

> translations are generally used by the large public […] or by the students who study Economics […] yet the researchers, who, most of them, are

> actually familiar with several foreign languages, make use – more often than not – of materials written abroad [...]. It is for this very reason that we cannot really talk about an impact of the translation of certain works, such as the work of Keynes, on the Romanian economy (Adam & Iacob, 2013, p. 1) .[36]

This is indeed true. While many, probably most, economists in key positions in Romania and eastern Europe do draw on Keynesian principles, it is highly questionable how many of them are actually hardcore Keynesians on a theoretical level.

Given his stark liberal views, Hayek only managed to permeate Romanian economic thought after 1989. Given the level of censorship in the country, especially within the economics profession, which was characterized by complete Marxist-Leninist dogmatism (Aligica, 2002), this is of course nothing to wonder at. The first Romanian translations of *The Road to Serfdom* and *The Constitution of Liberty* came only in 1993 and respectively 1998. The first translation of *Prices and Production*, one of Hayek's renown technical books, was done as late as 2017, thanks to the efforts of prof. G. Mursa and the Hayek Institute Romania.

Hayek and the Austrian school had many followers in post-communist Romania. The ideas had a great impact in academic circles and even some impact on public policy (Aligica, 2002; Cerna, 2012). However, a direct and well-structured clash between Hayekian and Keynesian ideas in Romania, as far as this research goes, never actually took place.

NOTES

1. Keynes's' s political orientation is a subject of eternal debate. While Skidelsky (1994) pictures him as a liberal who intended to "save" capitalism, a recent article by Fuller (2019) convincingly argues that Keynes was in fact a full-blown non-Marxist socialist.
2. This is particularly ironic given the fact that Keynes insisted that his magnum opus be named in this way.
3. The present work also includes an annex which explores the way in which the Keynes-Hayek debate was perceived in Romania. Given that this is not a theoretical contribution to the debate *per se*, I chose to present it as a self-standing annex.
4. Excluding here of course the controversy regarding which scenario is more relevant for real life situations. This is however an empirical question and is therefore outside the scope of our present research.
5. Among others, see for example Mises (1949), Rothbard (2009), De Soto (2020) and Thornton (2018).
6. Progressive artificial credit expansion will be efficient only if it is unexpected. If individuals will anticipate a future decrease in the purchasing power of the monetary unit, they will increase their current purchases and further devalue the currency. Such a panic would quickly cause the breakdown of the monetary system. Austrian writings vividly describe such scenarios, see for instance Mises (1949) and Rothbard (2009; 2010).
7. And I do not argue that additional (more complex) premises do not exist for each author, but I do believe that the present approach can prove to be fruitful in emphasizing the common core principles.
8. Empirical analysis could further guide us to see which scenario would pe more relevant to a particular situation.
9. There are many reasons for which, at this stage, Hayek's theory is superior in the sense that the Hayekian scenario is much more probable to occur than the Keynesian one. In our current economic settings, banks have a huge capacity to artificially expand the money supply with very few checks imposed (basically, hyperinflation would be the only serious deterrent). Moreover, the central bank, if its management desires, can potentially back up the inflationary tendency of banks for a considerable period of time. Keynesian speculators are, on the other hand, highly limited in their capacity to go against the market. Sooner or later (and it is perhaps decent for us to assume sooner rather than later) they will run out of old securities that they can sell on the market. Their capacity to drive the interest rate away from its natural level is not institutionalized as compared to the banking system.
10. Including here, of course, his renown paragraph where he stated that he had rid himself of Wicksell's influence (Keynes, 1936, p. 121): "*I am now no longer of the opinion that the concept of a 'natural' rate of interest, which*

previously seemed to me a most promising idea, has anything very useful or significant to contribute to our analysis".

11 See Hicks (1936), Robertson (1936) and Hawtrey (1937).

12 For Keynes the four key theoretical ingredients of the *General Theory* were *effective demand*, the *marginal efficiency of capital*, the *propensity to consume* and *liquidity preference* (Moggridge, 1973). It is obvious that he held the last of them in high regard. But if we would take, as Keynes does, savings and investment to be identical, liquidity preference would bear the full burden of determining the interest rate (even in the long run). In that case we would be left with an infinite amount of interest rates, each corresponding to a level of employment and none of them being the "natural" one. Moreover, there would be no tendency in the market process to push towards full employment and equilibrium in the classic sense (not Keynesian unemployment equilibrium!). In this case, the interest rate is practically what speculators decide it to be.

13 See chapter 16 *Sundry observations on the nature of capital* and chapter 17 *The essential properties of interest and money* in Keynes (1936)

14 Even more interesting, Keynes himself appears to hold the same belief (Moggridge, 1973).

15 There is here one notable exception, namely T. Goodspeed (2012). He claims in his book that the *General Theory* is still a Wicksellian variant *even with* liquidity preference. Even more unexpected is the fact that he attempts to use chapters 16 and 17 as the foundations for his claim, since he considers them relevant and attributes Keynes's bad response to the critics of the *General Theory* to the ill health of the British economist's last years of life (Goodspeed, 2012, p. 105). However, I am unable to see how exactly does his theoretical development add in any way to the analysis made by Leijohnhufvud in *The Wicksell Connection*, from which he clearly draws on. As far as I could understand there are only a few places in his 4.3 Chapter entitled *The cumulative process* where he diverges from Leijohnhufvud. One of them is: "*The multiplier, however, can only come into play if, and only if, relative money prices fail to adjust with sufficient speed. This is, in fact, precisely why it is valid to say that The General Theory still functions within the Wicksellian natural rate framework*" (Goodspeed, 2012, p. 121). But this is necessarily true given that the cycle theory is an analysis of a disequilibrium process. If relative prices would automatically adjust, society would be in equilibrium and no cycle theory of the kind described in the *General Theory* (or *Prices and Production* for that matter) would ever take place.

The second one is "*Certainly, once the multiplier gets a foot in the door, it is possible to conceive of multiple natural rates corresponding to different levels of employment. But there is still a natural rate associated with full employment [..]The key question—and this is where Keynes makes*

a decisive break from Wicksell—is whether that rate has any attractive durability once the market rate departs from it" (Goodspeed, 2012, p. 124). But if this means what I understand, i.e., that there is an infinite number of "natural interest rates" (one for each employment position), and that there are no market forces which push towards the "natural interest rate with full employment", isn't this exactly the theoretical nihilism which Leijonhufvud associates with Keynes's liquidity preference theory of interest and the very reason that he rejects it?

I believe the readers of the above-mentioned chapter 4 of Goodspeed's book may find the ending rather unclimactic when the author claims that (p. 125-126) *"Leijonhufvud suggests that any theory incorporating liquidity preference "will attach a probability of zero" to a successful traverse from one full-employment growth path to another, "for the simple reason that the only price mechanism that might do it never gets into play to coordinate saving and investment decisions".* Based upon our analysis of chapter 17, this conclusion is not entirely accurate; the probability *may be slight, but it is non-trivial*". In a certain sense, the paragraph can be interpreted as *it is not impossible* for the market rate of interest to land on its full employment value. I do not believe Leijohnhufvud would have a problem with such a statement.

16 There is probably no need to go further with the descriptive part of the process since it is presented at length in Leijohnhufvud (1979) under the name *"the Z-theory".*

17 In Leijohnhufvud's model an increase in savings manifests itself as an excess demand for securities. Households save by purchasing the securities floated by the business sector. (Any hoarding on behalf of the population is swept away. As I understand, only "speculators" may hoard and implicitly decrease the velocity of money.

18 To the question regarding why exactly doesn't the system smoothly accommodate an excess supply of labor like in the classical model Leijonhufvud (1976, pp. 89-90) writes: "*Clearly, because in that system all exchanges involve money on one side of the transaction. The workers looking for jobs ask for money, not for commodities. Their notional demand for commodities is not communicated to producers; not being able to perceive this potential demand for their products, producers will not be willing to absorb the excess supply of labor at a wage corresponding to the real wage that would "solve" the Walrasian problem above. The fact that there exists a potential barter bargain of goods for labor services that would be mutually agreeable to producers as a group and labor as a group is irrelevant to the motion of the system*".

19 For a more detailed exposition regarding the concept of deviation amplifying tendencies and the so called "corridor hypothesis" see Leijohnhufvud (1976; 2009). The basic idea put forward by the author is that the market is generally

on a full-employment path to equilibrium. If the system is exposed to some external shock and it is displaced form its trajectory, but whiting some reasonable range from it, the market forces will push it relative smoothly back on track. If the deviation is outside of the said range, the market forces are weak, sluggish and multiplier repercussions kick in. Shocks which push the market outside range will even be endogenously amplified, hence the term *deviation-amplifying tendencies*. Leijohnhufvud's (1976) claim is that both the idea that the market tends smoothly and instantaneously towards equilibrium and, on the other hand, that the market does not tend towards equilibrium *at all* are essentially opposing *ideologies* and that the corridor hypothesis would be a possible alternative to them.

[20] The easiest way to interpret Keynes's model from the *General Theory* is to follow Hawtrey (1937) and state that the money mass would be split in two categories, the money necessary for active circulation and the money necessary for speculative reasons. Interest rate would be formed in the latter money sphere based on liquidity preference.

[21] *The General Theory* is also the reason for which I previously claimed in another article that the Keynes-Hayek debate, in the way it is usually presented, does not have an *a priori* solution, see Patruti (2018). If one takes liquidity preference theory seriously, as in the case of the *General Theory*, no tendency towards equilibrium can develop. This is of course incompatible with the Hayekian framework of analysis which focuses precisely on the coordinating role which prices play in an economy. Moreover, this conclusion is reinforced by the fact that for a considerable period of his life, Hayek was an adept of strong *a priori* tendencies towards equilibrium, as I explained in the aforementioned article. Further empirical research on the issue would be required to in order to argue which of the two ideologies is more relevant for the present state of affairs.

[22] Leijonhufvud (1979, p. 4) goes as far as claiming (and his position is actually sensible) that *"Keynes "obfuscated" the workings of the interest rate to such a degree with his theoretical endeavor that later Keynesians completely lost track of the saving-investment framework of analysis".*

[23] Hawtrey makes one of the best attempts in my opinion to elucidate the tangled web of Keynes's work. He points out that for Keynes the money supply can be divided into two parts, M1 and M2. M1 is required for the actual working of the economy and M2 for what Keynes called the *speculative motive*. Hawtrey goes on to argue that *active* and *passive balances* would have been better terms for these two categories. It is on the latter market, the one for idle balances (M2), where the interest rate is formed based on liquidity preference. Thus, the interest rate further determines the level of investment (and consequently savings) and investment goes on to determine income through the multiplier effect (and consequently employment if the wage level is more or less fixed).

However, Keynes mentions at the end of the article that this is *not* what he claims. "There is a deep-seated obsession associating idle balances, not with the action of the banks in fixing the supply of cash nor with the attitude of the public towards the comparative attractions of cash and of other assets, but with some aspect of current savings. Even so careful and candid a reader of my recent book as Mr. Hawtrey begins his discussion of it *(in spite of my repeated explanations that this is not what I say)* [emphasis added]" (Keynes, 1937, p. 251).

24 This is in my personal opinion an example of a bad violation of the *ceteris paribus* clause. I understand the need of a dynamic theory, but the above-mentioned claim is just dazzling. Of course that in a fractional reserve banking system where (commercial) banks cand create money the system can offset increased demand for hoarding from the population. But if we formulate the problem like this, we have two factors simultaneously influencing the same magnitude in different directions.

25 Goodspeed (2012) argues in his book that the bad defense put up by Keynes was a consequence of the ill health of the British economist.

26 Let us not forget that for example Ralph Hawtrey was a personal friend of Keynes and also a member of the same intellectual society at Cambridge, "the apostles".

27 Keynes appears to the present researcher to go back and forth on the issue of whether the demand for active balances is relevant or not for the formation of the interest rate. After reading the *General Theory*, the reader gets the impression that only inactive balances, i.e., hoards, are relevant for the determination of the interest rate. This is also the opinion of Hawtrey (1937, p. 166). However, in the article cited above Keynes explicitly mentions that active balances *are* relevant in the formation of the interest rate, although unclear in exactly what way. If more details would have here been given, a relatively structured comparison between Keynesian liquidity preference and Austrian time preference could have been made.

The role played by the general public with regard to hoarding is also unclear to the present author. If only "specialists" determine the relationship between investment and hoarding, do consumers actually play any role if they decide to postpone consumption?

28 It is interesting to note that in some cases Keynes (p. 668) belabors the obvious. For instance, he repeatedly emphasized that "*completed activity, whether the proceeds of it are invested or consumed, is selfliquidating and makes no further net demands on the supply of liquid resources*". This is of course true. Hayek would not disagree with this. But in myriad cases Hayek and the Austrians have stressed the fact that it is precisely *unfinished* production that causes trouble and transforms into "malinvestment", because consumers pull the resources away from these industries towards the ones closer to consumption.

[29] The only authors who got translated were A. Smith, D. Ricardo, F. List and, fortunately, Keynes. However, the impact of western economics in Romania was unsurprisingly small (Aligica, 2002).

[30] In order to see references regarding the Austrian School in economic thought in Transylvania before 1918 see Valeanu et al (1981). However these annotations refer to rather well-known Austrian figures at that time, such as Eugen von Böhm-Bawerk (who also served as the Minister of Finance for the Empire) or Carl Menger and his marginalist revolution in economics.

[31] Let us not forget that his book *The Economic Consequences of the Peace (1919)* was a resounding success throughout Europe. Keynes argued there that the measures imposed on the losing countries after the first world war, especially Germany, were exaggerated and that they would drive these countries to desperate actions. This book was translated in Romanian under the heading "*Urmarile economice ale păcii*" as early as 1921.

[32] There is even a reference to Keynes's *Treatise* and to the disequilibrium between savings and investment. Stroja (p. 18) writes: "*In December 1930 A Treatise on Money appeared, a work in two volumes which is considered the most academic and scientific of Keynes's writings, a work of professorial attire, with no polemical attacks, but also without relevant innovations as compared to the authors previous statements. […] However, the problem of the relationship between investments and savings appears, treated in line with the overall body of the work […] Historians tend to believe that the impact of this book was undeservedly low […]*" [own translation]. Although explicitly pointing this out, when talking about the *General Theory* Stroja unfortunately does not mention anything regarding saving and investment, which reinforces our above statement that the theoretical makeover made by Keynes in the *General Theory* completely obscured the Wicksellian theme.

[33] In the same note, Stroja (1970, pp. 22-23) criticizes Keynes's attack on Marxist theory, claiming that Keynes was not even familiar with the writings of Marx. This is most probably true, since numerous renown economists have often criticized Keynes for the fact that he had read pretty much nothing else except Cambridge and Marshallian economics, see for instance Samuelson (1970) or Hayek (Rosten, 1975).

[34] The rest of the preface is unfortunately for us rather unusable. Stroja (1970, 24-33) oddly chooses to talk about the dispute between neo-Keynesians and monetarists, instead of actually discussing the *General Theory*. I believe this is somewhat explicable by the fact that most of the world's non-Marxist economists were in the 1970s Keynesians, but monetarism was rising fast as the new dominant economic doctrine. The Marxist-Leninist training of the Romanian economists at that time din not permit them to contribute productively to the discussion, transforming them at best into skeptical observers. This would justify Stroja's claim regarding the fact that Keynesian measures essentially only prolonged the agony of capitalism while the rise

of monetarism could be seen only as "*a re-emergence of nostalgia typical in general to economic liberalism in the conditions of monopoly capitalism* [own translation] (Stroja; 1970, p. 31)".

[35] See for example Enache (2019) who calls Manoilescu the "Keynes of the poor". He writes "Although the connection is rarely made, his theory shares more in common with that of John Maynard Keynes than with previous protectionist thought" (Enache, 2019). The author argues that both Keynes and Manoilescu dealt with the problem of *unused resources*, albeit in different circumstances. Moreover, he further claims that Manoilescu dealt with trade because agrarian exports from Romania to the industrialized west were necessary for monetary stability. In Enache's (2019) view, Manoilescu's import substitution scheme had a considerable monetary component, fact which would bring him considerably closer to Keynes.

[36] The same author, goes on stating that: "*What we can really analyze is the impact of Keynes' theories on the Romanian economy, and in this paper we will focus on the impact of Keynes's ideas on the Romanian economy, highlighted for The General Theory of Employment, Interest and Money*". However, if I have understood correctly, the work only points out towards the role of nominal (and real?) rigidities in current macroeconomics and mentions that these are inspired from the *General Theory*.

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