Journal of Prices & Markets (2013) 1.1: 49-56

A French Predecessor of the "Austrian" Theory of the Business Cycle – Marcel Labordère on the American Crisis of 1907

Eduard Braun[1]

Abstract: The history of economic thought has not been generous with Marcel Labordère. Either he has been neglected or he has been treated as a rather insignificant representative of the overinvestment theory of the business cycle. Yet, it can be argued that he anticipated the main components of the Austrian Theory of the Business Cycle. Four years before Ludwig von Mises he applied Knut Wicksell's distinction between the money rate of interest and the natural rate of interest to an explanation of the *mal*investments (not *over*investments) that emerge in the production structure during the boom phase. The main problem of his theory is that Labordère chose a rather confusing manner of representation. The present paper therefore arranges his arguments and works out his valuable contribution.

Key words: Austrian business cycle theory; malinvestment; Ludwig von Mises

1 Clausthal University of Technology. Email: eduard.braun@tu-clausthal.de. The author wants to thank an anonymous referee for careful reading and very valuable comments and suggestions.

1. Introduction

The Austrian business cycle theory (ABCT) essentially rests upon two cornerstones: the capital theory first indicated by Carl Menger ([1871] 2007) and later developed by Böhm-Bawerk (1930); and Wicksell's ([1898] 1936) idea of a cumulative process of inflation (or deflation) kicked off by a divergence between the natural rate of interest and the money rate of interest. In 1912, Ludwig von Mises ([1912] 1953) combined these two theories in his Habilitation treatise (see Wagner 1999, p. 67), thusly creating what would later become known as the ABCT. Although the ABCT has later been restated and reformulated several times by Mises himself and others, the following exposition relates to the original version of 1912 because it much more resembles Labordère's theory than do later versions. Besides, recent research has shown that the original formulation of the ABCT is more consistent than later versions anyhow (Braun 2012).

In the present paper, it is argued that the independent French gentleman Marcel Labordère had published fundamentally the same theory in 1908 in the paper "Autour de la Crise Americaine" [About the American Crisis] in the *Revue de Paris*. The paper was later reprinted under the title "Autour de la Crise Americaine de 1907 ou Capitaux-réels et Capitaux-apparents" [About the American Crisis of 1907 or Real Capital and Apparent Capital] (Labordère 1948). It contained all important elements of the Austrian theory of the business cycle and combined them in an explanation of the American economic crisis of 1907. While section 2 contains some background information on Marcel Labordère and his paper, sections 3 and 4 present Labordère's line of reasoning. They work out the existing parallels between the business cycle theories of the Austrians and Labordère and, in this, concentrate on the two cornerstones of the ABCT mentioned above. Section 3 focuses on the "real" side of the question and deals with the processes that are expected to arise within the capital structure of an economy during the business cycle. The present paper demonstrates that there is strong agreement between the two theories on account of both assuming that, during the boom, too many long-term investments are undertaken compared to short-term investments, resulting in a lack of real funding at some point. Section 4 relates to the monetary side of the question and clarifies how both the Austrians and Labordère blame the cause for the malinvestments that occur during the business cycle, described in section 3, on misinformation provided by the interest rate set by the banking system.

2. Marcel Labordère and the classification of his business cycle theory

Little is known about the man who seems to have anticipated a theory that earned Friedrich von Hayek the Nobel Prize in 1974. Presley (1979) analyzes the sparse correspondence Labordère conducted with John Maynard Keynes and Dennis Robertson, the only two economists with whom he had close contact. Apparently, Labordère was a self-taught economist who ventured into writing for French periodicals on monetary matters as a consequence of losses he incurred in reckless business and speculation during the American boom of 1906 and 1907 (Presley 1979, pp. 803 f.). Presley (1979, p. 804) does not provide us with Labordère's date of birth, but he must have been born in either 1868 or 1869, as he died in Paris in 1946, 77 years of age. Robertson (1948) describes him as "a very strange but very likeable old man, rather deaf and with a long white beard, much absorbed in a religion strangely compounded of Buddhism and Islam, and with peculiar political views which debarred him from accepting food or drink at my hands." With Keynes Labordère seems to have been on rather intimate terms. According to Felix (1999, p. 232), Keynes found "a sympathetic pen pal" in Labordère, and "[t]he two corresponded for the pure pleasure of it for a third of a century." It is not sure whether Keynes had some influence on the development of Labordère's economic thought after the latter had published his 1908 article. Presley (1979, p. 809) writes that by 1935 Labordère had abandoned his original position for what appears to be a more Keynesian point of view. Yet, according to the same author (Presley 1979, p. 804), by 1938 Labordère regarded Röpke's (1936) *Crises and Cycles* "as a book that he could unreservedly endorse," which seems to indicate that he didn't change his point of view too much.

Concerning Labordère's business cycle theory of 1908 Robertson (1948) states that Labordère "always disclaimed any particular originality for this article." But, on the other hand, as Robertson continues, "he did not appear to have any acquaintance with the works of those economists whose approach has most affinity with his own." These short and somewhat contradictory utterances contain all that we know about potential influences on Labordère's theory. In contrast, it seems quite certain that Labordère had great influence on others. According to Presley (1979, p. 807), there is little doubt that Labordère's article on the American crisis of 1907 had a "fundamental influence" on the theory of the crisis put forward by Robertson (1915).

Presley (1979, pp. 805 f.) classifies Labordère's business cycle theory as an over-investment theory, much like the theory developed by Spiethoff (1902). He (1979, p. 810) concludes in saying that "the name of Marcel Labordère therefore is yet another name to add to that group of economists who believed that the crisis was caused by over-investment." The following discussion will reveal that this is a misclassification as Labordère was not concerned about *over*-investment, but rather about *mal*-investment. In this, he anticipated Austrian Business Cycle Theory (ABCT). According to Mises (1949, p. 556) "[t]he essence of the credit-expansion boom is not overinvestment, but investment in wrong lines, i.e., malinvestment."

It goes without saying that the following discussion does not read anything into Labordère's article that it does not actually contain. On the relevant points, his arguments are illustrated by means of direct quotes. However, his thoughts are arranged in a more coherent manner. His own exposition is at times a bit clumsy. To give an example, his elucidation of credit expansion is not followed up by a discussion of the money rate of interest and its relationship to the natural rate of interest, as one would expect. Instead, he inserts an imaginary dialogue between an American and a European banker about their respective banking systems. When he later comes to introduce the two interest rates, he does not directly refer to the process of credit expansion any further. Any reader not conversant with the problems dealt with would be at a loss with his arguments if they weren't streamlined considerably.

3. The role of capital theory

One of Carl Menger's contributions to economic science was his de-homogenization of the production process. Whereas earlier generations of economists only distinguished between consumption and production *per se*, Menger ([1871] 2007) introduced the idea that the production process is separated into several successive, time consuming stages (see Skousen 2007). He did so, of course, not to build a basis for the explanation of the business cycle, but in order to explain the value-formation of producer goods. Eugen von Böhm-Bawerk, his most well-known student, took over Menger's vision of the production process and erected his opus magnum, *The Positive Theory of Capital*, on this foundation; his treatment of capital, in particular, builds upon Menger's contribution. According to Böhm-Bawerk (1930, p. 22), capital is nothing more than the "complex of intermediate products which appear on the several stages of the roundabout journey" of the production process. He also argued – as part of his explanation of the existence of interest – that production processes that are more "roundabout", that is, that take a longer time until they produce consumable output or, in still other words, that encompass a higher amount of intermediate stages, are more productive than shorter or less "roundabout processes" – at least when they are "wisely chosen" (Böhm-Bawerk 1930, pp. 78 ff.). More roundabout production processes would be very profitable for entrepreneurs as these processes are supposed to be more productive. Yet, according to Böhm-Bawerk, it is not at the discretion of entrepreneurs to effortlessly start more roundabout production processes. The precondition of any extension of the production process is that, while the process is still ongoing, the subsistence of the participating factors of production – especially workers – is ensured. A *subsistence fund* is necessary, the function of which is "to maintain the community from the time that their original productive powers are put in motion till these powers obtain their final and mature fruits" (Böhm-Bawerk 1930, p. 319). In short, longer production processes are more productive, but they can only be undertaken if they can be financed by an ample amount of the means of subsistence.

Mises ([1912] 1953) employs this capital theory in order to illustrate the changes that, in the course of the trade cycle, appear within the production structure and that, in his point of view, cause the boom and later the bust. He argues that the whole boom–bust–cycle is characterized by a collective error of judgment concerning the available amount of means of subsistence, that is, the subsistence fund. The boom in investments during the upswing of the trade cycle rests upon the illusion of an increase of the subsistence fund (Mises [1912] 1953, pp. 361 f.). Based on this illusion – and given that longer production processes are more productive than shorter ones – long-term investments, in particular, will be undertaken, and thus the "average period of production" will be lengthened (ibid., p. 361). Now, if the subsistence fund had indeed increased, the economy would become more productive and reach a higher level of real income. It would be possible to provide the people participating in the lengthened production processes with the consumer goods they want and need; however, if, as we have assumed, the increase of the subsistence fund was only an illusion,

> [a] time must necessarily come when the means of subsistence available for consumption are all used up although the capital goods employed in production have not yet been transformed into consumption goods. […] The means of subsistence will prove insufficient to maintain the labourers during the whole period of the process of production that has been entered upon (Mises ([1912] 1953, p. 362).

As a consequence, the production process has to be modified again. Some of the new projects turn out to be malinvestments that have to be abandoned, which is the same as to say that an economic crisis breaks out. The next section deals with the question as to how the illusion of an increase of the available subsistence fund can come about. What we are concerned with in this section is how Mises and Labordère conceived the nature of systematic malinvestments in the production structure. Mises's exposition, as we have seen, heavily draws on Böhm-Bawerk's capital theory.

It remains to be presented how Marcel Labordère envisioned the problems that occur in the economy during the boom and bust cycle. In order to be able to focus on the "real" economy, that is, on the production structure, without money complicating the issue, he begins with a moneyless economy. A rich countryman, who owns a large acreage and directs many bondmen, manages the production process in his small economy. Labordère (1908, pp. 650 f.) focuses on the problem that is also essential to Böhm-Bawerk's capital theory. On the one hand, long-term investments in fixed capital – like an irrigation plant, an artificial fishpond, or a new vineyard – promise to be the more productive the more roundabout they are. Although Labordère is not completely explicit on this point, it clearly shines through in the following passage:

> Of these kinds of fixed real capital, each will commence to procure a net real income to the granary or the cellars [of the countryman] *at a different date*. In consequence, these fixations of capital exhibit, *according to their category* [i.e., according to the length of the respective investment period] a more or less differing profitability (Labordère 1908, p. 651, emphasis added).

On the other hand, Labordère's countryman must be careful not to commence an excess of roundabout processes. It is necessary in this world as well to provide the bondmen (and himself) with sustenance until the final product is obtained. In order to express this thought, Labordère (1908, pp. 650 f.) introduces the term "disposable capital" (*capitaux disponibles*). This term has exactly the same function as Böhm-Bawerk's "subsistence fund" and constitutes the share of the product of nature – that is, in our countryman's world, of consumer goods – that can be handed over to bondmen while they work on the longer processes (ibid.).

In the following, Labordère explains the boom-bust-cycle in a way very similar to Mises. He bases his theory on the relationship between fixed capital – which represents higher productivity – and disposable capital – which stands for the subsistence fund. As long as the countryman is reasonable and stays within the limits drawn by the disposable capital, new and productive investments can be undertaken and finished as the years go by (ibid.). Labordère thus describes what Roger Garrison (2001, pp. 57 ff.) would later call "sustainable growth."

His discussion of the business cycle, that is, unsustainable growth, begins with the assumption that the countryman, in spring, after some favourable seasons of sustainable growth, becomes very confident in his abilities and starts several investment projects at the same time. He desiccates a moor, plants a forest, lays out a vineyard, clears a heather of stones, and finally even starts to build a new village in order to house additional families (ibid, p. 652). In Labordère's (1908, p. 652) own words, the countryman "has made fixed real capital out of disposable real capital"

(… *d'un pareil capital disponible en nature, il eut fait un capital fixe en nature*). However, if the countryman should happen to be too optimistic concerning the supply of disposable capital, start too many long-term investment projects, and/or overconfidently increase his own consumption, he will end up with too little disposable capital.

> At the end of the summer, he realized that his provisions, his reserves of wheat, wine, and all the products the abundance of which made him proud, in other words, that his disposable real capital dwindled (Labordère 1908, p. 652 f.).

What the countryman has to do now, according to Labordère (1908, pp. 652 f.), is to abort several of his projects halfway through, leaving the half-finished buildings to the winter and the snow. He (ibid., p. 653) puts it drastically in saying that the "thing that is half-finished dies and thus washes away every trace of human efforts which it represents." Furthermore, the countryman not only has to possibly sacrifice his new projects, but even part of his wealth. In order to provide his bondmen, who are now employed to exert the most important current tasks necessary for the next season, with their daily subsistence, he has to sacrifice many sheep and cattle, thus reducing the provisions for the next season (Labordère 1908, p. 653).

In a second step, Labordère (1908, p. 655) leaves the small economy of the countryman and analyzes a whole city state which "offers a complexity of industries which does not fall behind the one the United States of America could offer in 1907." However, he again abstracts from money, assuming something similar to a socialist administration (ibid.). Thus, he is able to once again concentrate on the real side of the issue. According to him, the reason for a crisis in the city state is the same as in the case of the rich countryman; crises appear when "one wants to accomplish too many things too quickly at the same time" (Labordère 1908, p. 658). In order to avoid a crisis, therefore, one has to make sure that not an excess of disposable real capital is transformed into fixed real capital. He illustrates this point by means of the following example: the construction of a new railway line necessitates not only steel, copper, lead, and the rails. At the same time, "proportioned amounts of cotton cloth, sugar, alcohol, bread flour, necessary for the real wages of the construction workers," must be in place (Labordère 1908, p. 657). Both the consumer goods and the producer goods mentioned above "must form a harmonious ensemble" (ibid.). A crisis breaks out when the harmony between fixed and disposable capital is disturbed. When the disposable capital necessary for the continuation of the production of the railway line does not come forward in the right proportions because too many long-term projects have been started, there is a "rupture of the equilibrium, a crisis, a partial halt in the economic machine" (Labordère 1908, p. 657). At this point it becomes clear that Labordère does not promote an *over*-investment theory of the business cycle, as Presley (1979, p. 805 f.) and Dupont and Reus (1992, p. 77, n. 20) maintain. He does not argue that *too much* has been invested during the boom, but that the investments have been *in the wrong lines*.

> What is called overproduction is not an overproduction in the absolute sense (humanity cannot produce too many goods): it is a disproportion in the production of different goods, it is a rupture in the harmony of production. It is, if you will, a rupture in the harmony of the work of humanity; one organ of production becoming too large at the costs of the others; it is the disturbed harmony of the organs. If one wants to see things poetically, it is an episode of war between the Future and the Present: between the Future that wants to move on too quickly and to equip the world for a grown humanity too quickly, and the Present that is in need of something to eat before and that wants to enjoy life. During the convulsions of the crisis, the Future […] wrests all it can from the Present – everything that the Present has carelessly committed itself to deliver. But the Present will not concur any more. The devastating Chimaera is vanquished and collapses… (Labordère 1908, pp. 657 f.).

According to Labordère (1908, p. 661) – and in conformance with the ABCT (Skousen 2007, pp. 255 ff.)

– the crisis, once it has broken out, cannot be overcome by any means other than saving. He (1908, p. 661) explicitly states that "[t]hings being what they are [i.e. the crisis], only saving will give back to our City without money the supplies of goods, in harmony and proportion."

He argues that the disproportion between fixed and disposable real capital cannot be healed any other way; most notably, an increase in the *production* of circulating capital, i.e., of consumer goods, is out of the question. That is because the possibility of producing additional consumer goods rests upon the pre-existence of consumer goods in the same way the production of fixed capital does. Therefore, the production of additional circulating capital cannot begin before additional savings have increased the reserves of commodities of our city state by means of which the workers can be paid (Labordère 1908, pp. 660 f.).

4. Credit expansion and the natural rate of interest

So far we have been focusing on the real side of the issue. We presented the way Labordère explained the occurrence of an economic crisis in real terms, that is, in terms of the production and distribution of real goods. His point is that, to avoid a crisis, it is necessary that the different commodities are produced in harmonious proportions. If too many long-term projects are started – i.e., excessive investment in fixed capital – a time will come when the means of subsistence for the participating workers – circulating capital – do not suffice. In this case, the crisis cannot be avoided and some of the long-term projects end up as malinvestments.

In this section, we deal with the question as to how Labordère thought the disproportion in production comes about. In this regard, he anticipates Mises's ([1912] 1953) application of Wicksell's ([1898] 1936) distinction between the natural rate of interest and the money rate of interest in the problem of the business cycle.

Like Labordère, Wicksell dealt with a moneyless economy in order to express some of his ideas. In such an economy, goods would be lent and borrowed "in kind," not in money. The interest rate that competition would bring about in this imaginary economy could be called the "natural rate of interest on capital" (Wicksell [1898] 1936, pp. 102 f.). It would depend "on all the thousand and one things which determine the current economic position of a community" (ibid., p. 106) or, in other words, real factors. That is because, in his (ibid., p. xxvi) opinion, the supply of real capital is limited by "purely physical conditions." For the case of a *monetary* economy Wicksell ([1898] 1936, p. 104) argued that, as long as the banking system loans money at the natural rate of interest, the conditions of equilibrium are fulfilled in precisely the same manner as in the moneyless economy. However, as soon as the money rate of interest differs from the natural rate, "the economic equilibrium of the system is *ipso facto* disturbed" (ibid., p. 105, emphasis by Wicksell). The trouble is that the natural rate of interest is unobservable and indeterminate; it is, as Wicksell ([1898] 1936, p. 168) admits, an unknown. Therefore, the deviation of the money rate from the natural rate of interest can happen easily, all the more as the supply of money credit by the banks, as opposed to the supply of real capital, "is in theory unlimited and even in practice is held within fairly elastic boundaries (ibid., p. xxvi)."

Now, in Wicksell's ([1898] 1936, p. xxvi) theory, a persistent deviation between the two rates of interest leads to a continuous and progressive change in commodity prices. If the money rate of interest should be lower than the natural rate, commodity prices must rise and vice versa (ibid., p. 106). Yet, Wicksell did not extend his theory to an explanation of the business cycle. This was accomplished, in 1912, by Ludwig von Mises. Whereas Wicksell only paid attention to the development of the price level, Mises established a connection between the divergence in the two interest rates and the real economy. According to him ([1912] 1953, p. 366 ff.), when banks reduce the rate of interest below the natural rate by means of an artificial expansion of credit, a force is automatically set in motion which ultimately eliminates the divergence between the two rates – via an economic crisis.

His argument is the following: the natural rate of interest depends, on the supply side, on the size of the available subsistence fund. "The greater the fund of means of subsistence in a community, the lower the rate of interest" (ibid., p. 347). As it is the size of the subsistence fund that, according to Mises, limits the length of the production processes, the natural rate of interest thus indicates to entrepreneurs how long the production processes can reasonably become. If people save a lot, the natural rate of interest will be low and entrepreneurs can start more roundabout production processes.

However, as the natural rate of interest cannot be observed, the only way open to entrepreneurs is to orient themselves by the money rate of interest. Consequently, when the banking system reduces the money rate of interest below the natural rate by means of an artificial credit expansion, "entrepreneurs are enabled and obliged to enter upon longer processes of production" (ibid., pp. 360 f.). The additional and artificial kind of credit Mises (ibid., p. 264) calls "*circulation credit*." He contrasts it to "*commodity credit*" which is based on real savings. The expansion of circulation credit, by artificially reducing the money rate of interest, traps entrepreneurs into thinking that the subsistence fund has increased, and, therefore, they base their plans upon the illusion that more means of subsistence are available allowing for more long-term investments. They subsequently adapt the production structure in a way that was shown in section 3 to lead to malinvestments and, in the end, a bust. In the monetary economy, the lack of means of subsistence at the turn of the crisis expresses itself in a rise in the prices of consumer goods as compared to producer goods. This induces banks to increase the money rate of interest again, thus making it apparent to entrepreneurs that many of the started projects have been based upon an illusion and, therefore, end up being malinvestments (Mises [1912] 1953, pp. 361 ff.).

Now, Marcel Labordère essentially explains the influence of the banking system on the production structure in the same way Mises does. Like the latter, he looks for an explanation of how the illusion of the available subsistence fund or, in his words, disposable real capital, comes about. As will be remembered, he (1908, p. 661) also thought that crises "are born […] out of the wrong perception which a human society has, at a given moment, of its actual resources, of its real resources actually disposable." According to him, an illusion about the available disposable real capital can emerge once money is allowed for in his model of the economy presented above. He adds that, in our monetary economy, money seems to be part of disposable real capital, but that we have good reasons for calling it "*apparent* disposable capital". In his opinion, the amount of money in existence does not bear a necessary and constant relation to disposable real capital (ibid., p. 661). The key reason for this is the working of the modern banking system. In order to illustrate his point, Labordère (1908, pp. 661 f.) describes the well-known money multiplier, i.e., the way how banks create deposits on the basis of reserves. This additional money "is born in a deposit" and, regarding its origin, should be should be called "apparent disposable capital" (capitaux-apparents disponibles) (ibid., p. 662). It will be noted that this concept is very similar to and serves the same purpose as Mises's "circulation credit."

Like Wicksell and Mises, Labordère argues that the difference between the actually available disposable real capital and the apparent disposable capital manifests itself in a divergence of the money interest rate from the natural interest rate. Theoretically, he states, there exists a rate of interest that indicates the available amount of disposable real capital. He (1908, p. 669) calls it the "(theoretical) rate of real interest" (taux de l'intérêt réel (théorique)), but it should be clear that this rate conforms to Wicksell's natural rate. However, he continues, as the amount of real capital cannot be determined for the whole society, there is no collective demand and no collective supply for it and, consequently, no rate of real interest can ever be observed. It is an imaginary rate – but it still does exist (ibid.). On the other hand, the supply and the demand for apparent disposable capital – that is, money – are visible, and the relation between the two manifests itself in the "apparent interest rate" (taux de l'intérêt apparent) (ibid., pp. 669 f.). This rate can be understood as the counterpart of Wicksell's money rate set by the banking system.

In Labordère's theory of the business cycle, the boom is characterized by a low apparent interest rate – which indicates an (apparently) huge amount of disposable capital – whereas the (theoretical) rate of real interest is marked by extreme tensions – which indicate the (true) scarcity of disposable capital. The apparent interest rate

> does not show any sign of extraordinary tension and therefore ceases to give any serious information about the real situation. In other words, before the crisis, the gap between the (theoretical) rate of real interest and the apparent interest rate is very large; the curve of the (theoretical) rate of real interest runs considerably above the curve of the apparent rate: it is the moment when the public believes in an extreme prosperity and, misled by the abundance of apparent disposable capital, in an extreme abundance of money (ibid., p. 669, tenses matched to the context).

According to Labordère, the United States was living through a boom of the described kind before the crisis broke out in 1907. The banks had created a massive amount of deposits by lending money against everything they could get hold of. By means of easy credit, they fueled positive expectations about the future, induced entrepreneurs to produce, and encouraged speculation (ibid., pp. 662 f.). However, what the United States did, in his (ibid., p. 664) words, is "they accumulated, in the form of deposits in the banks, a mass of apparent disposable capital out of any proportion with their disposable real capital." The Americans were living in a fool's paradise made out of apparent disposable capital (ibid., p. 668). Yet, at the advent of the crisis, nature insisted on its rights. It became necessary that the apparent disposable capital would incarnate in actual commodities so that the massive projects could be executed. At this moment, "the truth must re-appear underneath the fraudulent manifestation; the truth, that is to say, the disposable real capital" (ibid., p. 668).

Labordère (1908, pp. 671 f.) concludes with some short remarks on the issue of whether economic crises can be prevented. In his opinion, the causes of crises lie in the precedent period of prosperity where the subsistence fund – the "disposable real capital" – has been malinvested. According to him, the only method to avoid a crisis would be to follow the fluctuations of disposable real capital and the theoretical rate of real interest. However, as these magnitudes cannot be observed in practice, he recommends anchoring the amount of apparent disposable capital – meaning especially bank deposits – in gold reserves. "The stock of gold represents reason. […] [W]hen the bank deposits form a mass which is out of proportion with the stock of gold reserves, one has reason to worry" (ibid., p. 672). Even in this point he anticipated the Austrians who, in contrast to the Keynesians and the monetarists, argue that economic crises must be explained endogenously as a result of malinvestments undertaken during the preceding boom and, as a correlate of their ABCT, also demand that the monetary system keeps close contact to gold (Mises ([1912] 1953, pp. 413 ff.).

5. Conclusion

It was the purpose of this paper to demonstrate that Marcel Labordère anticipated the ABCT, and did so in a more than cursory manner. His theory of the business cycle combines the same two elements that are also central to the ABCT as developed by Mises in 1912. Labordère analyzes the effects an artificial lowering of the money rate of interest by means of credit expansion has on the production structure of the economy. He argues that the main problem of a boom caused by an excessively low rate of money interest will be noticed in the malinvestments that follow. Cheap credit induces entrepreneurs to start more long-term investments in fixed real capital without making sure that enough short-term investments guarantee the frequent replenishment of disposable real capital. At the turning point of the crisis, the lack of disposable real capital makes itself known as it becomes impossible to continue the long-term projects.

The weakness of Labordère's article is certainly the confusing exposition which is likely due to the fact that he was not a professional economist. He did not build upon the work of others and, therefore, it might well be that he was not as aware of the connection between the different elements of his arguments as he could have been. Labordère does not systematically assemble the components of his theory and, therefore, partly leaves it to the reader to put them together into a coherent whole. This seems to indicate why his contribution has remained nearly unnoticed up to the present day and why those who dealt with it classified his business cycle theory as stressing over-investment when it actually maintains malinvestments as the cause of the crisis.

From a present-day perspective, the most interesting contribution of Labordère's article is his discussion of the business cycle in an economy managed by one single person. In a clear and precise manner it demonstrates what exactly Austrian economists intend to convey when elaborating on "malinvestments" that occur during the boom. Even a single person can undertake multiple plans that do not harmonize with each other and, therefore, can – in theory – instigate a business cycle.

References

Böhm-Bawerk, Eugen von 1930: *The Positive Theory of Capital*, translated with a preface and analysis by W. Smart. New York: G. E. Stechert & Co.

Braun, Eduard 2012: The subsistence fund in Ludwig von Mises's Explanation of the Business Cycle, in: J. G. Hülsmann (ed.): *Theory of Money and Fiduciary Media. Essays in Celebration of the Centennial*, Auburn (AL): Mises Institute, pp. 193-208

Dupont, Frédéric and Reus, Estiva 1992: La théorie réelle des cycles de Dennis Holme Robertson, in: *Revue française d'économie* 7 (4), pp. 33-80

Felix, David 1999: *Keynes – A Critical Life*, Westport (CT) et al.: Greenwood Press

Garrison, R. W. (2001). *Time and Money: The Macroeconomics of Capital Structure*. London and New York: Routledge

Labordère, Marcel 1908: Autour de la Crise Américaine, in: *Revue de Paris* 15 (1), pp. 647-672. Available online at http://gallica.bnf.fr/ark:/12148/bpt6k17499v.image.swf

Labordère, Marcel 1948: Autour de la Crise Américaine de 1907 ou Capitaux-réels et Capitaux-apparents, in: D. H. Robertson: *A Study of Industrial Fluctuation*, reprint, London: LSE, Appendix

Menger, Carl [1871] 2007: *Principles of Economics*, transl. by J. Dingwall and B. F. Hoselitz. Auburn (AL): Mises Institute

Mises, Ludwig von 1949: *Human Action – A Treatise on Economics*, New Haven: Yale University Press

Mises, Ludwig von [1912] 1953: *The Theory of Money and Credit*, New Haven: Yale University Press

Presley, John R. 1979: Marcel Labordère: A Neglected French Contribution to Trade Cycle Theory, in: *Kyklos* 32 (4), pp. 802-812

Robertson, Dennis H. 1915: *A Study of Industrial Fluctuation*, London: P. S. King & Son

Robertson, Dennis H. 1948: *Autour de la Crise Américaine de 1907 by Marcel Labordère*, in: Labordère (1948), preface

Röpke, Wilhelm 1936: *Crises and Cycles*, London: Hodge

Skousen, Mark 2007: *The Structure of Production*, with a new introduction. New York and London: New York University Press

Spiethoff, Arthur 1902: Vorbemerkungen zu einer Theorie der Überproduktion, in: *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reich* 26, pp. 721-759

Wagner, Richard E. 1999: Austrian Cycle Theory: Saving the Wheat while Discarding the Chaff, in: *Review of Austrian Economics* 12, pp. 65-80

Wicksell, Knut [1898] 1936: *Interest and Prices*, translated by R. F. Kahn, London: MacMillan