The dominion of means over ends. Modern bank credit and Max Weber’s irrational rationalization

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Abstract. The institutions which grant credit today can be considered to be an example of what Max Weber describes as the typical rationalization of modern age. Such a rationalization would bring a lack of reflection on what should be the ultimate significance of certain technical means, which are confused with a value-in-itself of a social context. The paper highlight the fact that the function of credit consistent with individuals’ ‘ultimate ends’ seems to be that of a temporal coordination between the ‘bargaining wills’ of different individuals who aim at obtaining the highest benefit by means of the utility of their products and the products of their peers. But the current epoch has favored the elevation of historically determined features of credit-issuing to ultimate ends. Referring, among other sources, to a report by the Bank of England and to studies by Neo-Keynesian authors such as Stiglitz, this essay establishes that the consequence of the current private structure of credit-issuing is that the ultimate end of credit does not coincide with maximization and economic reciprocity but with the assessment of a risk which is distinctly private. Also, since in this structure Central Bank acts as the bank of all commercial banks, credit granting can be read as being in function of the availability – within a circumscribed economic web – of a specific credit ‘raw material’ which has a price: central bank’s liquidity. This situation puts a deep philosophical problem into
the limelight, since any ‘existential’ preferability of the current model of credit issuing can only be explained as an alienation.

Keywords: Max Weber, rationalization, financial system, credit, money creation

Introduction

The objective of this paper is to define an ultimate end of the tool of financial credit, by means of which it will be possible to compare the functioning of the present financial institutions in order to verify whether such an end is fulfilled or encounters alterations and obstacles.

The definition of such an ultimate end will be drawn from the only concept of credit consistent with the objective of maximization of every economic agent’s reciprocal usefulness in an exchange economy, once it is identified as the ultimate goal of exchange economy itself.

The methodology used for this comparison will consist in:
1 - the clear definition of the ultimate value-axioms from which the instrument of credit and, therefore, institutions of credit are derived;
2 - the determination of the consequences which the realization of these value-axioms bring about as they are bound to certain intrinsic features of these institutions.

This empirical observation can lead, in fact, to the uncovering of new practical axioms which the inventors of a certain instrument or institute did not take into consideration and which conflict with the former ultimate axioms. These conflicting axioms are the result of the historical form which the financial system has taken. These historical forms crystallized certain practices which make institutions of credit operate by means of norms which are ‘normative’ in the sense that they just ensure the good functioning of the technical means they use. These may have their own consistent logic, but their suitability for the end of human happiness is often not investigated.
This kind of procedure is inspired by the writings of Max Weber in which he portrays modernity as the triumph of the bureaucratic systems. The paper starts with an account of this very concept in order to show its fundament in Weber’s thought and, then, deals with the relevant scientific literature in order to assess the structure of modern credit issuing. In the second part, the essay will stress the fact that the measures dominating the most important current attempts to make the financial system more efficient – such as the Basel accords and European Banking Union - are mere attempts to only quantitatively modify the effects of the axioms which in the current financial system conflict with the ultimate end of credit.

**The notion of bureaucracy and the role of scientific discussion on value preferences according to Max Weber**

In this section two dichotomies drawn from writings by Max Weber are presented. They concern the contradiction between the instrumental rationality a person uses to achieve some ends in a certain situation and the danger that a blind reliance on these same instruments may make such a person unaware that they are no longer suitable to achieve the consequences which are really desired. Weber’s proposal of gaining consciousness of one’s ‘real’ ends - which he usually describes as practical ‘value-axioms’ – and of how the tools judged as necessary to reach them prevent their very achievement is the methodological route which will be used with respect to the phenomenon of credit.

**The dichotomy between polytheism of values and the unquestioned dominion of a determined instrumental rationality**

One of the dichotomies present in Weber’s works is the one between the value fragmentation typical of modern European rationalization and the unconscious crystallization of ultimate values which is possible in the same process. Polytheism results from the fact that scientific and technical calculus refrain from establishing supernatural and absolute meanings. One needs ‘no longer have recourse to magical means in order to master or implore the spirits, as did the savage, for whom such mysterious powers existed. Technical means and
calculations perform the service. This above all is what intellectualization means’ (Weber, 1919a, p. 144). This process is also called by Weber ‘rationalization’, a term which refers to a particular use of ‘rationality’ whereby this latter limits itself to instrumental ends and does not engage in ultimate reflections about existential or religious evaluations.

The ethical neutrality of technique ensures that no system of means can give us an a priori, natural existential meaning. The consequence is that ‘every single important activity and ultimately life as a whole, if it is not to be permitted to run on as an event in nature but is instead to be consciously guided, is a series of ultimate decisions through which the soul — as in Plato — chooses its own fate, i.e., the meaning of its activity and existence’ (Weber, 1949, p. 18). Polytheism of values inherent in modern rationalization, in other words, implies the necessity of an ‘authentic’ decision, a decision about the most important sense an institution or an instrument has for our will [1] ‘a decision which is all the more painful now that it needs to be enacted to choose between values whose disenchantment and relativity is recognized’ (Cacciari, 2006, p. xxxvii).

The bureaucratization of administrations, institutions and governments is the social equivalent of the process of rationalization which has occurred in natural sciences and engineering. The purely bureaucratic type of administrative organization is:

... capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means of exercising authority over human beings [...]. The primary source of the superiority of bureaucratic administration lies in the role of technical knowledge which, through the development of modern technology and business methods in the production of goods, has become completely indispensible (Weber, 1922, p. 223).

Within a bureaucratic arrangement of the social web one operates by means of practical values which are ‘normative’ first of all in the sense that they address the rightness and soundness of an instrumental rationality. The efficiency of a bureaucratic arrangement coincides with the achievement of the ends proper of a
technical process, independently of whether these are questioned or not in their consistency with the ultimate ends a subject would like to reach.

All this can bring to existence a rationality which has been set up to ensure the perfect functioning of a device, of an instrument which has its own independent and consistent logic. The suitability of this instrument for the end of human happiness, though, needs to be established each time through a different type of rationality. A lack of attention to this difference, to this double level of rationality, makes a system which structurally conveys a polytheism of values to paradoxically put in place an arbitrary monotheism: the mere consideration of the instrumental value of a historically determinate set of devices. The danger intrinsic in this dynamics is that there can be a loss of awareness of the possibility that a set of devices is no longer coincident with the best instrument to achieve the existential values expressed by our will, expressed by one’s needs and by the needs of the other. A contingent instrumental rationality inadvertently ends up taking the place of the ultimate existential value.

The awareness of this distortion of the role of means as ultimate ends brought by pervasive bureaucratization pushes Weber to his famous comments about the iron cage with which the modern organizations of production would coincide – a character from which not even socialism is immune (see De Feo, 1970). As he states in The Protestant Ethic and the Spirit of Capitalism:

> this order is now bound to the technical and economic conditions of machine production which today determine the lives of all the individuals who are born into this mechanism, not only those directly concerned with economic acquisition, with irresistible force. Perhaps it will so determine them until the last ton of fossilized coal is burnt (Weber, 1930, p. 123).

Weber even charges the ‘passion for bureaucratization’ with driving us to despair because of the fossilization and alienation of one’s identity which its confusing means with ultimate ends provokes: ‘rational calculation [...] reduces every worker to a cog in this bureaucratic machine and, seeing himself in this
light, he will merely ask how to transform himself from a little into a somewhat bigger cog’ (Roth, 1978, p. lix). His sharpest comment on how blind scientific calculation makes human beings lose sight of the proper and most suitable purpose of their life is made in Science as a Vocation. This process of disenchantment, which has continued to exist in Occidental culture for millennia, and, in general, this 'progress,' to which science belongs as a link and motive force, do they have any meanings that go beyond the purely practical and technical? […] The civilized man catches only the most minute part of what the life of the spirit brings forth ever anew, and what he seizes is always something provisional and not definitive, and therefore death for him is a meaningless occurrence (Weber, 1919b, pp. 21-22).

The sensation of obtaining only 'provisional' satisfaction is for Weber the signal of an existence in which mere instrumental rationality prevails.

**The dichotomy between false neutrality and concealed value-judgment. Weber's analytical proposal in order to go beyond it**

The second dichotomy which bureaucratization represents is the concealed – and, therefore, more deceitful and influential – value-judgment which is produced by the neutral, bureaucratic academic procedure of teaching scientific and sociological discipline by 'letting the facts speak for themselves'. It is very difficult, in fact, to tell apart empirical statements of fact and value-judgments about the social suitability of the techniques described in these facts. This ensures that the description of 'neutral' technical calculations related to instruments or empirical facts transmits the sense of an absolute existential preferability of the success of such calculations:

…all such procedures on the university lecture platform, particularly from the standpoint of the demand for the separation of judgments of fact from judgments of value, are, of all abuses, the most abhorrent (Weber, 1949, pp. 9-10).

If one thinks how the historical progress the practical side of rationalization (technological, engineering, institutional progress) is determined by the political, intellectual side and vice versa, the close interdependence of the two dichotomies becomes evident. This explains Weber’s renowned concern about the role of politicians – especially when teachers and theorists are the one who inadvertently play this role. Technical-instrumental rational actions and explanations should not hide the fact that the choice between alternative and conflicting ultimate ends and results ‘may well be determined in a value-rational manner [that is, by means of ‘value-axioms’]’ (Weber, 1922, p. 26). They should not hide that this kind of rationality appears “irrational” in front of the instrumental kind of rationality and that ‘the orientation of action wholly to the rational achievement of ends without relation to fundamental values is, to be sure, essentially only a limiting case’ (Weber, 1922, p. 26). For this reason a type of ethics which refers to ultimate existential values and an ethics which focuses on the cause-effect mechanism of our actions are not opposite to one another but complementary: ‘an ethic of ultimate ends and an ethic of responsibility are not absolute contrasts but rather supplements which only in unison constitute a genuine man--a man who can have the “calling for politics”’ (Weber, 1919b, p 133).

Weber is convinced that to put this interdependence between instrumental procedures and ‘irrational’ value-axioms which implicitly drive the purpose and the technical procedures themselves into this light is not only possible but necessary, and it is one of the methods and scopes of sociology. He states that a ‘scientific’ discussion of value-judgments needs to realize the following points.

a) ‘the elaboration and explication of the ultimate, internally “consistent” value-axioms, from which the divergent attitudes are derived’ (Weber, 1949, p. 20), because ‘people are often in error, not only about their opponent’s evaluations, but also about their own’ (Weber, 1949, p. 20). The validity of this procedure is not empirical but similar to logic.

b) ‘the deduction of “implications” (for those accepting certain value-judgments) which follow from certain irreducible value-axioms, when the practical evaluation of factual situations is based on these axioms alone’ (Weber, 1949, p. 20).

c) ‘the determination of the factual consequences which the realization of a certain practical evaluation must have: (1) in consequence of being bound to certain indispensable means, (2) in consequence of the inevitability of certain, not directly desired repercussions’ (Weber, 1949, p. 21). This purely empirical observation can lead, in fact, to ‘the uncovering of new axioms (and the postulates to be drawn from them) which the proponent of a practical postulate did not take into consideration. Since he was unaware of those axioms, he did not formulate an attitude towards them although the execution of his own postulate conflicts with the others either (1) in principle or (2) as a result of the practical consequences’ (Weber, 1949, p. 21).

This exact procedure will be now applied to the analysis of the phenomenon of financial credit, specifically as regards to the very creation and granting of credit within the structure of banking system.

First, the ‘value-rational’ justification for the existence of credit and, therefore, the existential value-axiom which it recalls within society will be elucidated. Secondly, there will be a list of what are today considered as the indispensable means to bring these values to fruition and the ‘not directly desired repercussions’ which the utilizations of these means brings about. This will lead to the observation of at least two other axioms which are inherent to the ‘necessary’ utilization of those means and which are incompatible with the first, main, value-axiom above all ‘as a result of their practical consequences’. These two axioms are emblematic of the byproducts of bureaucratization. In it, ‘what was originally a mere means (to an otherwise valuable end) becomes itself an end or an end in itself. In this way, means as ends make themselves independent and thus lose their original “meaning” or purpose, that is, they lose their original purposive rationality oriented to man and his needs’ (Lowith, 2002, p. 68).
The ultimate value-axioms of credit according to its ‘value-rational’ determination

This analysis can begin by noticing that the only consistent justification for the existence of credit needs to account for the fact that it is, in fact, a particular case of the functioning of the economy of exchange, in whatever historical form one may intend it – capitalist economy, division of labor in a planned economy with ‘planned’ exchanges or social bonds created by gift exchange in a barter economy. In an economy made by autarchic individuals, in fact, nobody owes anything to anybody else, by definition.

To establish a coherent ultimate end of the mechanism of credit, therefore, one has to set up an ultimate meaning of exchange economy which is consistent with the goal of the maximization of individuals’ will, in order to comply as much as possible with each person’s ‘value-rational’ decision. An exchange economy which, by means of its structures, aims at realizing everybody’s desires as much as possible can be conceived as a network of individuals who, by means of a maximized reciprocal bargaining power due to the usefulness they produce, aims at everybody’s highest possible well-being. It is interesting to note that this is also a conception of exchange economy which is consistent with Derrida’s and others’ ‘post-phenomenological’ definitions of ethics as ‘doing justice to the other’s naturalness’ (see for instance Derrida, 1990, Derrida, 1992 and Derrida, 1995) once this definition recognizes the impossibility of escaping a do ut des structure within an inter-subjective environment.

The kind of ‘ethics’ which emerges from this formal application of Weber’s categories needs a clarification with regards to its moral status: from a Weberian point of view, in fact, contrast between facts and values is resolved by differentiating one’s person ‘existential’ preferences (values) and the scientific analysis useful to understand the consistent way to reach them (which is value-neutral, so it can be considered as a study of ‘facts’). The two notions cooperate as science helps to provide a basis to perform one’s ‘arbitrary’ ultimate ends, without explicitly supporting one of them in particular. This text uses this dynamic distinction in order to generalize in a formal way ‘what we, as
community based on an exchange economy, prefer’, namely to maximize our reciprocal usefulness in the economic exchanges. The paper, therefore, aims at analyzing what instruments such a community should use in order to achieve ‘what it prefers in an exchange economy’, namely what is in general ‘preferable to be done’. The notion of credit and financial system emerge as necessary from the examination of such a ‘formal’ inter-subjective preference.

Given this instrumental definition of an exchange economy as an ‘instrumentally rational’ set of actions aimed at a decided ultimate value, credit emerges as an instrument necessary in this set because of the fact that it is typical within a market economy that not everybody immediately possesses all suitable instruments to set up a new activity or to update an old one in response to the contingent change in demand. In fact, credit makes sense only in presence of temporal or material asymmetries.

Credit can be defined as a form of anticipated agreement which a community achieves with a future producer, an anticipation of the reward the producer is going to obtain which is necessary because of the physiological temporal discrepancy which exists between the capacity to produce and the recognition of a possible future agreement on reciprocal exchange. A physiological temporal discrepancy which is between the recognition of a future agreement on reciprocal exchanges and the producer’s possession of the material resources useful to support herself and to realize the product to exchange. Once credit is considered as a particular case of exchange economy, a case which occurs when temporal asymmetries have to be taken into account, this is the definition which is most consistent with the final goal of exchange economy itself [3].

Conceived in this way, the rational function of credit granting should be the investment of a society which recognizes the highest productive potentiality of any individual, puts it in relation with the potential necessities and desires of the community and provides the adequate monetary tools so that every economic agent is able to implement the corresponding production and transactions. In other words, credit should place the material and relational conditions for a maximized reciprocal economic usefulness and ‘bargaining power’. It should be implemented as an investment which an entire community makes in order to
maximize and equalize all individuals’ instrumental potentiality and reciprocal utility.

It is necessary to list, now, what are today the institutionally established indispensable means to bring these goals to fulfillment. The following exposition, in fact, takes cognizance of the institutional structure in which credit creation is embedded and illustrates what follows from it as a ‘necessary’ structure for the issuance of credit and for the attempt to pursue the aim above. There is no need to ask for what—historical, material, ideological—reasons it is now the case that the underlying value of the optimization of reciprocal usefulness has to be fulfilled by means of certain established instruments. Following Weber’s sociological and philosophical approach, the purpose is firstly to discover contradictions between the value-axiom established for credit granting and other axioms inherent in the legal instrumental structure which performs it. Hence, it will be concluded that there is an inappropriate confusion between means and ultimate ends and that there is the necessity to rearrange these means in order to put them univocally in function of the established value-rational conclusions.

The structure of today’s banking system

One needs therefore to examine the functioning of the banking system in the parameters it uses in order to issue credit. This study will not touch the phenomenon of creation, buying and selling of financial instruments (such as bonds, shares, futures, etc.) which are purchased and exchanged with the exclusive aim of ‘betting’ on their future value or to modify their value or yield—causing a strongly inadequate credit allocation. The focus will be on the structure of the banking system and on the modalities of creation of credit by the system formed by a Central Bank and commercial banks, which is at the basis of the quoted phenomena. This will show that a transfiguration of what should be considered as contingent means of credit granting into ends in themselves is typical of the basic structure of credit creation from its very beginning.
The two main monetary tools in the mechanism of credit granting and in the consequent monetary exchange procedures are money from commercial banks and Central Bank money. In fact,

Central Bank and commercial bank money coexist in a modern economy. Confidence in commercial bank money lies in the ability of commercial banks to convert their sight liabilities into the money of another commercial bank [when transactions from a bank’s client and another bank’s client occur] and/or into Central Bank money [when these transactions have to be settled by means of this kind of money, for instance] upon demand of their clients. In turn, confidence in Central Bank money rests in the ability of the Central Bank to maintain the value of the stock of currency as a whole (i.e. not only of the small portion it issues directly), or its inverse, to maintain price stability (Committee on Payment and Settlement Systems, 2003, p. 1).

The majority of interbank payments take place using Central Bank money as the settlement institution is generally a Central Bank.\[4\]

In order to analyze this picture it is not wrong to describe it by saying that even if commercial banks can grant loans by electronically crediting the bank account of their customers with a certain deposit of commercial bank money expressly created without practical limits, they do need Central Bank money in order to settle every transfer a customer requires them to carry out (see McLeay, Radia and Thomas, 2014).\[5\] In particular,

banks first decide how much to lend depending on the profitable lending opportunities available to them — which will, crucially, depend on the interest rate set by the Central Bank [a commercial bank having to estimate the cost of Central Bank liquidity against the interest that it expects to earn on the loans, given competition among banks]. It is these lending decisions that determine how many bank deposits are created by the banking system. The amount of bank deposits in turn influences how much Central Bank money banks want to hold in reserve (to meet withdrawals by the public, make payments to other banks, or meet
regulatory liquidity requirements), which is then, in normal times, supplied on demand by the central bank (McLeay, Radia and Thomas 2014, p. 2).

Central Bank money therefore has a price and this gives rise to several issues. Firstly, at a certain juncture, a bank may transfer to other banks a quantity of Central Bank money larger than the quantity it obtains from the rest of the banking circuit or by issuing shares (McLeay, Radia and Thomas, 2014, p. 2). Such a bank is therefore forced to borrow a further amount to make new loans, altering either the economic return on new lending or the interest rates it charges – which would reduce people’s desire to borrow. In fact whether through deposits or other liabilities, the bank would need to make sure it was attracting and retaining some kind of funds in order to keep expanding lending. And the cost of that needs to be measured against the interest the bank expects to earn on the loans it is making, which in turn depends on the level of Bank Rate [set by the Central Bank] (McLeay, Radia and Thomas, 2014, p. 5).

Moreover, because of non-performing loans or financial investment losses, a commercial bank may lose Central Bank money, causing the same problems in the return on new lending as just described, also because it needs to retain liquidity to make up for losses and fulfill due payments soon to avoid additional interest charges. This institutional structure, typical of the great majority of today’s countries, is also empirically described by Wolynecwicz (2013) and Sheard (2013).

Because of such a private risk commercial banks may become structurally risk-averse, meaning that in order to safeguard their private business they may tend to avoid financing small entrepreneurs and innovations which are quite difficult to assess, despite the fact that they may give a great contribution to the technological and social advancement of a community (See, for instance, Stiglitz and Greenwald, 2003; see also James and Brophy, 1977). In addition, a similar attitude is emphasized in geographical areas in which there is little ‘pro-social
behavior’. Since anti-social behavior in economic relationships is often the result of interpersonal skepticism brought by long economic stagnation, this is likely to cause a vicious circle (see Andriani, 2014). This situation is also favored by the fact that banks often prefer to avoid lending rather than increase interest rates. In fact, as Stiglitz and Greenwald have shown, ‘raising the rate of interest may not increase the expected return to a loan; at higher interest rates one obtains a lower quality set of applicants (the adverse selection effect) and each applicant undertakes greater risks (the moral hazard, or adverse incentive, effect)’ (Stiglitz and Greenwald, 2003, p. 27). Stiglitz and Weiss also explain that such a risk aversion can take place even within a context of general financial equilibrium:

in equilibrium a loan market may be characterized by credit rationing. Banks making loans are concerned about the interest rate they receive on the loan, and the riskiness of the loan. However, the interest rate a bank charges may itself affect the riskiness of the pool of loans by either: 1) sorting potential borrowers (the adverse selection effect); or 2) affecting the actions of borrowers (the incentive effect) |…| It is difficult to identify ‘good borrowers’, and to do so requires the bank to use a variety of screening devices. The interest rate which an individual is willing to pay may act as one such screening device; those who are willing to pay high interest rates may, on average, be worse risks; they are willing to borrow at high interest rates because they perceive their probability of re-paying the loan to be low |…| (Stiglitz and Weiss, 1981, pp. 393-394).

As a consequence of the described structure, it is necessary to observe how today’s credit granting has to be the result of the assessments of distinctly private, individual risk or return. It represent a different pragmatic scenario in respect to the collective risk-benefit ratio which should be taken as parameter for an ‘investment which the entire society makes in order to maximize each individual’s instrumental potentiality and utility’. An individual lender who assesses her personal risk, in fact, can be indifferent about the possible technical and occupational advance which an investment on a start-up may bring to the entire society and very concerned about a possible personal loss of, say, sixty-
thousand euros. A publicly run institution can instead decide that a possible ‘waste’ of that sum – whose risk is spread on millions of taxpayers or defused by using newly created ‘fiat money’ - is indifferent or negligible in comparison with the possible advantage of a successful investment. It may also consider that, rather than a waste, such an outflow would consist in an allocation of purchasing power toward non-productive individuals who, by spending that money, would not spoil society’s mood of confidence and good expectations so much.

Such a structure also explains why credit institutions – and also companies – today show strong preference for short-term financial gains in comparison with long-term and more uncertain investments. This phenomenon is often called ‘financialization’ and is likely to involve the formation of speculative schemes. Bagnai remarks how ‘in chapter XII of his General Theory, Keynes makes a very simple claim: markets are not interested in ‘making the best long term forecast for an investment’s probable return’ so to direct capitals to investments which are on average the most productive and which most generate growth and employment [...]. To behave in such a way would not be rational for them (Bagnai, 2012, p. 7). Using the words of Keynes:

It would be foolish, in forming our expectations, to attach great weight to matters which are very uncertain. It is reasonable, therefore, to be guided to a considerable degree by the facts about which we feel somewhat confident [such as financial assets price change], even though they may be less decisively relevant to the issue than other facts about which our knowledge is vague and scanty (Keynes, 1936, p. 75).

Throughout recent years this theme has been faced by many authors, for instance Lazonick (see Lazonick, 2010) who underlines the spread of the phenomenon of stock buybacks; Lapavitsas (see Lapavitsas, 2011), who identifies it with the change of the sources of capitalist profit, Keen (Keen, 2012), who demonstrates the consequences of this dynamics on the macroeconomic instability and Scott-Quinn (2012). Another interesting author who in the past decades anticipated the debate about the inability of financial institutions to
allocate capitals in a suitable way for a harmonic growth is Caffè (see for instance Amari, 2014).

The consequences on the axioms determining today’s credit granting

In the structure of credit granting outlined above, therefore, availability of credit is in function of a private assessment of the risk-benefit ratio. It can be illustrated as the consequence of the following two value-axioms. The first is the privilege, as credit issuers, of private actors with private commercial goals and necessities. The second is the necessity of Central Bank liquidity institutionalized as a kind of ‘credit raw material’ which has a price for those private actors. In fact, credit availability – and the assessment of private risk stated above - can be also read as dependent on each bank’s specific flow and supply of a socially invented credit raw material. It can vary according to previous bad or good decisions made by the bank – as well as according to specific central monetary policies whose correspondence to the ultimate value which has to determine credit availability should be examined. The logic inherent to these material conditions exacerbates the distance of the instrumental rationality currently driving the assignment of credit from the value-rational logic whose scope should be only to maximize and equalize reciprocal bargaining power.

The contextual availability of Central Bank money - namely, the liquidity a bank can realistically draw by means of its inflows - coincides, mostly, with the availability of liquidity in depositors, shareholders or financial investors. Therefore, the value-axiom of the necessity of Central Bank liquidity, which has a price, can be considered as correspondent to that of the contextual availability of money as ‘reserve of value’ indicating the success of previous transactions or loans. After a contextual liquidity tightening,

the credit spreads for the loans already granted might then be not high enough to cover expected losses and the default probability of a bank increases. If the bank intends to maintain the previous level of the
probability of default, either additional capital or a change in the asset structure is needed. As raising new capital is usually costly, the latter solution might be the only available one for the bank in the short run. In this respect the bank reaction stems only from the present balance sheet structure (being a result of previous decisions) (Chmielewski, 2006, p. 2). According to the pragmatic outcome of this set of instruments, the previous decisions of an institution of credit influence its willingness to change its ‘asset structure’ and, therefore, to take further risks, that is to say that they influence the result of the assessments of new borrowers.

To be more precise, level of credit granting and assessment of private advantage by credit institutions end up being in function of the capacity to pay back exhibited by preceding borrowers. It is also in function of the assessment of the income situation of the community where a potential new borrower lives, made in order to calculate the level of effective capacity to demand held by her potential customers. It is clear that a similar established framework reduces a credit institution from being an instrument aimed at creating reciprocal attraction and bargaining power – which is implicit in the task of ‘maximizing’ it – to being a mere function of the currently expected or potential level of reciprocity. But a preferable mechanism for the conferment of credit should ‘put the material and relational conditions for building a maximized and equal reciprocal economic usefulness first’. Assuming, for instance, an extreme case of recession where all actors have little or zero income. The ‘value-rational’ and ‘instrumentally-rational’ behavior of such a mechanism should be to encourage those who have immediately ready productive potentialities to put more products into the market by providing adequate credit to their potential customers. These latter, obviously, need to be initially selected among the economic agents whose products also have immediate or short-medium time of production and immediate demand. This is in order to create reciprocal trust, to allow them to pay back their loans relatively soon without acting as ‘parasites’ in their bargaining and purchasing power and so as not to cause exaggerated inflation. As soon as the productive network and the reciprocal confidence become large...
and strong enough, credit can be extended to entrepreneurs or professionals who have a longer time of research and investment or whose product demand is less basic and immediate.

In order to implement similar measures a system of credit has to utilize a holistic logic according to which the contemporary concession of different loans and the parallel confidence in increase of economic demand can be calculated as likely to form a social result which will be greater than the sum of its single ‘components’. This is different from the abstract and individualistic logic necessarily used by a private bank, in which diffidence about the possibility that other lending institutions put into action loaning decisions which increase aggregate demand needs to prevail – creating a self-fulfilling uncertainty. Also, a similar holistic rationality needs a credit system which does not excessively care about the risk that a certain loan may be paid back very late – or, in the extreme case, never. Credit institutions currently managing credit supply, as has been showed, need to safeguard their economic advantage and tend to be risk-averse.

The idea of a system of banks which has an essentially different role in comparison with ordinary firms is therefore crucial. It is related to all the macroeconomic theories akin to the so called Theory of Monetary Circuit (see for instance Graziani, 1990). These theorists usually reject the General Equilibrium Theory, which they see as a theory interpreting market economy as a simply barter economy with money added ex post with banks just acting as mediators – and not as creator of endogenous money (Graziani, 1990, p. 8; see also Howells, 1995).

All these elements appear to lead to a preference for a public banking system and for a system of public investments and incentives. In order to maintain an harmonic growth and balanced focus, these systems should also be divided into different sectors according to the different industrial and economic sectors of a country. This would be justified by the fact that the anti-cyclical policies which a public instrument has been historically able to implement – opposite to the ‘pro-cyclical’ ones illustrated in this paper as proper of the private credit system - are more consistent with the end of maximizing everybody’s reciprocal
potentialities, above all in the case of recessions. Such a preference is also founded on the capacities – in which a public credit system is specialized – to invest in projects which have the potentialities to produce good social externalities but which would not be convenient for an individual investor. This system is very similar to the banking system typical of Italy and France in the forty years following the Second World War, the period in which these two countries experienced an economic growth which outdid all the other major European countries.[6] Also, it would be useful to integrate these measures with a change in the system of assessment of the major banks, in order to prefer a more relationship-based and qualitative evaluation to a mere ‘quantitative’ one, based only on the past results of an entrepreneur (Bolton et al., 2013).

Private risk assessment and concern due to the scarcity and the price of raw material as dependence on contextual availability of income are logics which are very different from the one credit granting should respect. They represent operational value-axioms, that is to say self-evident or universally recognized practical values which are, according to Weber’s methodological schema, inconsistent with ultimate credit value-axiom in their practical consequences. It is not the task of this paper to inspect the historical reasons why elements such as the private economic interest of the material mediator of the process of credit granting and the establishment of a potentially contextual scarce type of raw material of credit – scarce because costly – have arisen as absolute values of the mechanism of banking credit. What is remarkable for the present text is that in the light of what has been evaluated as the suitable ultimate end of credit in order to optimize everybody’s will, such elements appear at most as relative means, namely means which need to be assessed in their capacity to be consistent with the main objective. If they persist despite the fact that their pragmatic consequences are at odds with this objective it may mean that their utilization is existentially unquestioned. It may mean that they are the result of a ‘bureaucratic’ alienation of human self-awareness whereby historically contingent tools are elevated to final ends. In this context, economic agents with particular interests – or ‘alienated’ ones – can find the practical effects of the bureaucratic machine perfectly suitable to such an extent that they are able to exploit the economic and cultural dominance acquired from it in order to
ideologically maintain a device even should it becomes socially unsustainable. As Weber also notices:

the existing bureaucratic apparatus is driven to continue functioning by the most powerful interests which are material and objective, but also ideal in character. Without it, a society like our own — with its separation of officials, employees, and workers from ownership of the means of administration, and its dependence on discipline and on technical trainings — could no longer function (Weber, 1922, p. 224).

The ‘ideality’ of these interests can be located in elements such as, for instance, the abstractness and blindness of the particular interest of the private ‘entrepreneurs’ who are credit issuers, an interest which is legitimate and ‘rational’ within the present instrumental dynamics. The instrumental position which these actors occupy in this dynamics makes them usually able to have their affairs automatically safeguarded by ‘technical’ and bureaucratic political decisions.

Recent measures of emergence and reforms of the financial system

The next step of this examination is indeed to stress the fact that the measures dominating the most important current attempts to make the financial system more efficient are mere attempts to merely quantitatively modify the effects of the value-axioms quoted above, even if there is no reason to think that their general structure may change the basic characteristics of their effects. In particular, these measures correspond simply to attempts to diminish individual risk and losses by commercial banks and creditors in their assessments of a borrower, together with attempts to increase the quantity of credit raw material in circulation. They also may consist in channeling off the scarcity of credit raw material, which can structurally arise, towards agents and environments which would be ‘less contagious’ in the spread of risk-aversion and bad expectations which is possible within the described scenario.
According to the methodological analysis performed in the previous sections, all this means that the two axioms inherent to the tools used in credit institutions today are not put into question. They are definitely maintained and, consequently, their effects of diverting the nature of credit granting from fostering a maximization of reciprocal usefulness toward being a function of some private individuals’ risk assessment and inflow of Central Bank liquidity are not removed. These effects are only softened. As a consequence, it is consistent with Weber’s analysis to assert that, despite the reformative attempts, which are going to be explained later, the conflict between the value-axiom which manifests economic agents’ maximization of well-being and the axioms resulting from the current system of credit granting persists. The most important ones of the recent reforms of the system are listed hereafter and the reason why the conflicting axioms are only slightly altered in their effects is illustrated.

The Basel accords and the steps envisaged by the European Banking Union

Let us start with considering the so-called Basel accords. The second institution of these accords was initially published in 2004, repeatedly amended in the following years and implemented, by most major economies, by 2008 (see Yetis, 2008). The third institution of these agreements was established by the members of the Basel Committee on Banking Supervision (the so called ‘group of ten’ countries) in 2010–2011. (see Basel Committee on Banking Supervision, 2010a). Both of them impose the maintenance of a certain regulatory capital within the institutions of credit. This is estimated through the calculation of credit risk, operational risk and market risk which a bank takes on and it is implemented together with adequate supervision and transparency mechanisms in relation to the regulation.

According to the International Convergence of Capital Measurement and Capital Standards, in the Basel II accord ‘capital ratio is calculated using the definition of regulatory capital and risk-weighted assets. The Tier 1 total capital ratio must be no lower than 8%. Tier 2 capital is limited to 100% of Tier 1 capital’. (Basel Committee on Banking Supervision, 2006, p. 12). In this formula, the term ‘Tier 1’ refers to the safest part of capital, that is to say primarily to common stock and disclosed reserves (or retained earnings). The term ‘Tier 2’ refers to less safe
capital, which is composed of items such as revaluation reserves, undisclosed reserves, hybrid instruments and subordinated term debt. The Basel committee on banking supervision, committed to the Basel III improvements of the preceding regulations, also claims that it is critical that banks’ risk exposures are backed by a high quality capital base. The crisis demonstrated that credit losses and write-downs come out of retained earnings, which is part of banks’ tangible common equity base. It also revealed the inconsistency in the definition of capital across jurisdictions and the lack of disclosure that would have enabled the market to fully assess and compare the quality of capital between institutions. To this end, the predominant form of Tier 1 capital must be common shares and retained earnings. This standard is reinforced through a set of principles that also can be tailored to the context of non-joint stock companies to ensure they hold comparable levels of high quality Tier 1 capital (Basel Committee on Banking Supervision, 2010b, p. 2).

The scope of these regulations, therefore, is to ensure that the higher a bank’s exposure to credit and market risks is, the larger should be the quantity of safe capital retained in order to safeguard its financial solvency and stability. The distress caused by a possible lack of availability of Central Bank money – or of assets easily convertible into it – should be reduced, according to this logic, thanks to the relative financial protection of the economic agents who bring liquidity to the commercial bank. The fact that a bank is forced to have a more sensitive capital allocation and to maintain a buffer tier of capital in case of losses should make private investors – the kind of actors a private institution of credit mainly involves in its operations – more willing to invest and less likely to produce a contagion of lower financial expectations. In fact, the fundamental objective of the Committee’s work to revise the 1988 Accord [the so called ‘Basel I’] has been to develop a framework that would further strengthen the soundness and stability of the international banking system while maintaining sufficient consistency that capital adequacy regulation will not be a significant source of

competitive inequality among internationally active banks. The Committee believes that the revised Framework will promote the adoption of stronger risk management practices by the banking industry, and views this as one of its major benefits (Basel Committee on Banking Supervision, 2006, p. 14).

The mere quantitative modification of the consequences of the operational value-axioms of private risk assessment and concern due to the scarcity and the cost of raw material is clear in the fact that Basel accords just attempt to diminish possible losses and individual risk perceived by commercial banks and creditors in their assessments of borrowers. These institutions confirm, within the mechanism of credit granting, the logic of a private enterprise which may contribute to cause disequilibria due to losses and spread of lower expectations. Moreover, these measures – since they do not put into question the overall structure – cannot help but use the same, preceding logic in order to make risk lower. That is to say, they can only entail a sacrifice of funds which would otherwise be available for lending usage and are, instead, kept in banks’ vaults or used for very low risk activities. Lending capacity is above all limited by the bank’s very possibility of retaining adequate capital. To summarize, with the model of the Basel accords the scarcity of credit granting due to risk protection is only brought forward in time. The basis of this is the supposition whereby a greater protection of the economic agents who invest liquidity in the bank is preferable in order to minimize the risk of a general contagion of negative expectations, even at the cost of denying more credit to other economic agents. In effect, capital requirements is a limiting factor with regard to lenders’ transactions. Without raising further equity or securitisation, growth potential in lending is limited. In particular, because of the current limitations on their ability to pass on default risks by means of securitisations or other instruments on the capital market banks do not have further scope for lending [the Committee has established an amount of regulatory capital banks must hold for exposures to securitisations]71. On top of this comes the newly introduced leverage ratio, mentioned above, which generally limits new business (Angelkort and Stuwel, 2011, p. 15).
The negative impact of Basel III regulations on small business financing had been easily predicted ever since the year of their introduction:

the new regulations [... will disproportionately impact SMEs and startup companies. Small businesses and individuals will be ascribed a retail risk rating of 75%, provided the bank’s retail portfolio is diverse and no loan exceeds one million Euros’ (Padgett, 2013, p. 184).

The increase of the cost of borrowing is another issue connected with these regulations, as has been raised by several critics (see Hall, 2002). This is due to the logistical cost of the banks’ adaptations to the new rules. As the general arrangement of the quoted agreements, this problem reflects the preference for the ‘absolute’ operative value of the protection of individual creditors from risk. The financial cost of the adaptation to the rules can be considered as an effect of the use of ‘secondary’ instruments which are necessary in order to fulfill the above practical value-axioms. In this scenario, the necessity of the gain of a private ‘mediator’ is absolutized, independently of whether this orientation is preferable in order to maximize everybody’s economic good expectation.

It is important, now, to quote the content of the so called European Banking Union, the set of rules recently developed by the European Commission in order to ‘better regulate, supervise, and govern the financial sector so that in future taxpayers will not foot the bill when banks make mistakes’. (European Commission, 2015). It is necessary to notice, in the first place, how the prudential requirements proposed by the Commission explicitly correspond to the application of Basel III:

the package on capital requirements for banks, the so called ‘CRD IV package (consisting of the Capital Requirements Directive IV) and the Capital Requirements Regulation)’ implements the new global standards on bank capital (commonly known as the Basel III framework) into the EU legal framework. The new rules in force since 1 January 2014, ensure banks now hold sufficient level of capital, both in quantity and in quality. With these rules, the EU has met its commitment to the G20

to implement the Basel III framework in a timely manner (European Commission, 2015).

The initiative includes, therefore, a single set of rules for the European single market, as well as a single supervision mechanism for the implementation of these rules:

the Single Supervisory Mechanism gives the European Central Bank (ECB) responsibility for supervision over banks in the euro area (and other SSM participating Member States). The ECB will ensure a truly European supervision mechanism that is not prone to the protection of national interests, will weaken the link between banks and national finances and will take into account risks to financial stability (European Commission, 2015).

The two major steps envisaged by the European Commission to deal with failing institutions of credit – the so called bail-in and bail-out - are equally problematic since they represent another version of the application of the recalled value-axioms, only they are adapted to different empirical circumstances and evaluations. The Commission, in a statement dated 2014, claims that

if, despite [...], preventive measures, the financial situation of a bank would deteriorate beyond repair, the new law would ensure through a 'bail-in' mechanism that shareholders and creditors of the banks would have to pay their share of the costs. If additional resources were needed, these would be taken from the national, prefunded resolution fund that each Member State would have to establish and build up so it reached a level of 1% of covered deposits within 10 years. All banks would have to pay in to these funds but contributions would be higher for banks which took more risks (European Commission, 2014, see also European Commission, 2016).

Like the previous measures, to prevent a bank failing by putting the burden on investors and shareholders coincides with diverting the shortcomings originated
from a contextual lack of Central Bank’s money availability towards what are evaluated as ‘less contagious’ economic agents. As opposed to the general arrangement of Basel accords, in this case these agents are considered to be figures such as small depositors and potential borrowers.

With regard to the bail-out, the public financial support of a failing institution of credit, after being vastly used around the world at the beginning of the current economic recession, it appears now to be considered the instrument of last resort by the proponents of the European Banking Union:

indeed, the paradigm change from bail-out to bail-in has to become a reality for the Banking Union to become a success. We have to remember that a key issue to enter into the Banking Union was the vicious circle between banks and the debt of their sovereigns. As the financial crisis evolved and turned into the sovereign debt crisis in 2010/2011, it became clear that, for those countries which shared a currency and were even more interdependent, more had to be done, in particular to break this vicious circle between bank debt and their national public finances (European Commission, 2016, pp. 5-6).

From these lines it can be ascertained that the reason for setting aside the bail-out as a primary instrument to deal with banks crises is that it simply failed to be the best empirical way to fulfill the same goal as described above. It proved itself not to be a good calculus to divert the shortcomings originated from a contextual lack of Central Bank’s money availability towards what are evaluated as ‘less contagious’ economic agents; these agents had been considered, in this case, mostly bank depositors, bank debtors and potential bank borrowers coincident with a country’s tax payers. The danger of the so called ‘moral hazard’ by the banks which benefit from the bail-out [8] can be read as a direct effect of maintaining the pragmatic axiom-value of using private actors who have recourse to private commercial risk-benefit calculations as credit issuers, while the risk of losing Central bank money has been palmed off on the public sector. Even in this case the perspective of a possible private gain combined with the total absence of risk makes the private assessment of the convenience of granting credit definitely different from a public assessment in which the only parameter

to take into account is the collective, political reaction of voters and tax payers to the social usefulness of the issuer’s decision.

**Negative interest rates on Central Bank’s deposits, cut in Central Bank interest rates and the Quantitative Easing**

A last measure whose rationale can be understood as ‘channeling off the scarcity of credit raw material, which can structurally arise, towards agents and environments which would be “less contagious” in the spread of risk-aversion and bad expectations’ can be considered to be the application of negative interest rates on Central Bank deposits. The ECB, for instance, ‘moved its deposit rate into negative territory in mid-2014 to “underpin the firm anchoring of medium to long-term inflation expectations”’. (Bech and Malkhozov, 2016, p. 32) This means that commercial banks effectively pay for depositing money with the Central Bank overnight, which makes it more convenient for them to try to invest their liquidity in ‘more risky’ activities.

A cut in Central Bank interest rates (see European Central Bank, 2017) instead, can be interpreted as an ambiguous trade-off between diminishing the cost and the risk of some private creditors-investors (commercial banks, whose borrowers therefore find it cheaper to take out a loan) and diminishing the convenience of other creditors-investors (savers). The extent to which the effects of this trade-off correspond to a neat improvement of the system’s efficiency cannot be defined here, even if it is considered as a way to increase the presence of ‘credit raw material’ in the hands of agents and within environments which would be more contagious ‘in the spread of risk-aversion and bad expectations’:

the ECB’s accommodative monetary policy stance has substantially lowered borrowing costs for firms and households, while also lowering the returns on savings. As households do not only borrow, but also save, this raises the question about the extent to which lower interest rates have affected households’ net interest income. This is particularly relevant when assessing the impact of lower interest rates on aggregate consumption (European Central Bank, 2016).

It is clear, in any case, that even these measures are a way to quantitatively modify the effects of the value-axioms quoted above without having any reason to think that their general structure may change the basic characteristics of their effects – it is evident, above all, in a context of recession when a credit crunch can definitely persist despite a lowering of interest rates.

A mere quantitative modification of the limits indicated in this text also characterizes the institution of the monetary measure named ‘quantitative easing’. By means of the same, a Central Bank buys a certain quantity of assets – generally government bonds – from a commercial bank, using newly created liquidity:

QE involves a shift in the focus of monetary policy to the quantity of money: the central bank purchases a quantity of assets, financed by the creation of broad money and a corresponding increase in the amount of central bank reserves. The sellers of the assets will be left holding the newly created deposits in place of government bonds. They will be likely to be holding more money than they would like, relative to other assets that they wish to hold. They will therefore want to rebalance their portfolios, for example by using the new deposits to buy higher-yielding assets such as bonds and shares issued by companies (McLeay, Radia and Thomas, 2014, p. 11).

In this way, therefore, the commercial bank owns new ‘credit raw material’ in its deposits at the Central Bank which does not produce further value until it is utilized. The change brought by quantitative easing, in effect, is limited to an increase in the quantity of liquidity in circulation within a certain economic circuit. Neither the logic of risk-aversion in regards to projects which would be useful to the collective economy, nor a logic which prefers short-term large individual gains (as in financing real estate bubbles) rather than long-term possible earnings from investments in socially useful innovations are prevented from being favored by quantitative easing. What its mechanism can allow according to the structure analyzed before is, at best, to relatively reduce risk-aversion. This occurrence, furthermore, does not seem to be sufficient to contrast a credit crunch in a context of global recession or stagnation, as has been

empirically confirmed since QE implementation. As a report about the financial impact of this measure in the Us says, for instance,

with contracted demand, uncertain future and increased regulation (especially with requirements to raise capital adequacy ratios), community banks didn’t play the countercyclical role Bernanke would have hoped for. In the three years following the Lehman collapse, credit conditions tightened and loan supply fell— in fact, some studies find that the loan supply shock contributed to 50% of the GDP growth contraction in 2008-9 in the U.S. Could the Fed have done more in that respect? That is what Professor Joseph Stiglitz argued during our interview, stressing that there was ‘no way QE could work without fixing the bank credit channel’ (Cashman et al., 2016, p. 27) 91.

**Conclusion**

To sum up what appears from the outline of the main corrective actions applied to the credit system in recent years, they limit themselves to propelling the validity of the two value-axioms pinpointed above, which are inconsistent with credit ultimate value-axioms in their practical consequences. These actions quantitatively modifying (but do not put into question) the effects of the instruments through which these axioms are put into practice and with whose characters they coincide. The first of these practical value-axioms is the necessity whereby the figure who evaluates the suitability of credit issuing must be recruited from among private actors with private commercial goals and necessities. The second is the necessity of Central Bank liquidity institutionalized as a kind of ‘credit raw material’ which has a price and, as a consequence, the conception of credit as a goods whose scarcity or abundance should depend on the current availability of liquidity in the hand of the economic agents of a certain context. These two principles are inherent in the material structure of the banking system and reflect a myopic and partial logic in comparison with what would be its ‘rational’ aim. This would be the investment of a society which recognizes the highest productive potentiality of
any individual, puts it in relation with the potential necessities and desires of the community and provides the adequate monetary tools so that every economic agent is able to implement the corresponding production and transactions. This situation puts a deep philosophical and existential problem into the limelight, since any existential preferability of the current model of credit issuing can only be explained as an alienation which, to use Weber’s terminology, represents ‘the dominion of means over ends – being the end the fulfillment of necessities’. (Cohen, 1991, p. 95). The social legitimacy of current value-axioms of credit granting can only reside in them being longstanding manifestations of historical and accidental characteristics of the tool of credit: they can find their raison d’être only in tradition or ideology.

Endnotes

[1] In this paper, for ‘will’ is intended what is usually meant by desire in economics, or even intentions, goals. One of the differences between the traditional meaning used in the discipline and the concept as developed in this essay is that one individual’s ‘economic’ willingness is a subset of the overall identity of a subject and cannot be split from such an existential account.

[2] Alienation can be interpreted as the fact whereby pragmatic values which would be useful to enhance one's identity and satisfaction are obscured by a mechanical application of conventional or instrumental ends.

[3] Such a definition of credit and debt as structural in social relationships and expectations and not necessarily ‘violent’ phenomenon is quite different, for instance, from Graeber’s anthropological account of debt (Graeber, 2011), in which he manifests the preference for an epoch of human history where, supposedly, the instrument of I-owe-you was less deleterious in its exploitation and domination effects for the fact that it was less a ‘debt’ and more a relational expectation, due to how little human beings saw themselves as mere ‘market instruments’.
This kind of money can be considered as the ‘final’ means of settlement even if one takes into account that its use is limited to so called ‘top-tier’ banks, those banks holding accounts with the settlement institution which ‘are generally banks which in turn provide accounts and payment services [which can be performed in commercial banks money] to their own customers, which may be other banks, non-bank financial institutions, non-financial firms or individuals’ (Committee on Payment and Settlement Systems, 2003, p. 10).


See J. Sapir (http://russeurope.hypotheses.org/1500). The necessity of State directed funds and credit in the picture of a powerful industrial policy is emblematically illustrated by the French economist Sapir (2013) and by Mazzucato (2014). The requirements just described have been re-proposed by Stiglitz and Greenwald (2012). The difference between a banking system which focuses on and long-term policies which favor public well-being and a system focused on individuals’ separated necessities which act in a pro-cyclical manner is well described by Costi (2012).

See Basel Committee on Banking Supervision (2014). ‘Securitisation’ can be defined as the practice of combining various types of contractual debt such as residential mortgages, commercial mortgages, auto loans or credit card debt obligations and selling their related cash flows to third party investors as a financial asset.

The excessive risk taking resulting from widespread support to the financial system, see Allen et al. (2015).

Cashman et al. (2016). Notice that in my work I did not mention other recent important measures which can be considered redundant for the philosophical goal of the study, since they can be easily re-conducted to some of the logic reflected in the ones recalled (above all expansionary policies such as LTRO), see for instance Duprat (2013).

References


Andriani, Luca (2014), 'Is acting prosocially beneficial for the credit market?', Review of Social Economy, 72:3.


Basel Committee on Banking Supervision (2014), 'Revisions to the securitisation framework', Available at http://www.bis.org/bcbs/publ/d303.htm (accessed 16/01/2016).

Bech, Morten and Malkhozov, Aytek (2016), 'How have central banks implemented negative policy rates?', BIS Quarterly Review, March 2016, 31-44.


Costi, Renzo (2012), L’ordinamento bancario, Il Mulino, Bologna.


Tobin, James, (1963), 'Commercial banks as creators of “money”', Cowles Foundation Discussion Papers 159.


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