Esteban Pérez Medina

Universidad San Francisco de Quito, Ecuador

Philipp Bagus

Universidad Rey Juan Carlos, Spain

A Critique of the Pure Natural Law Approach to Loan Maturity Mismatching and Fractional Reserve Banking

24/2018
Political Dialogues
DOI: http://dx.doi.org/10.12775/DP.2018.001

Abstract:
This article addresses the debate on fractional reserve banking and maturity mismatching. Block and Barnett (2011) as well as Evans (2014) have regarded the distinction between loans and deposits as unclear, especially regarding the contracts' maturities. Davidson (2015) applying the a priori *Title Transfer Theory* cannot solve the continuum conundrum satisfactorily. We show how a free legal system by rule finding judges can settle the continuum problem and other problems relating to banking contracts in practice. The very same rule finding offers a new solution in the case of on-demand deposits with a withdrawal notice. The ethics of loan and deposit contracts can only by fully understood and sorted out by adhering to legal logic, proceedings, and general legal principles.

Keywords: fractional reserve banking; title transfer theory; deposits; loans; irregular deposits

Introduction: The Heart of the Matter

The discussion on the legitimacy of loan maturity mismatching and its relationship to fractional reserve banking is of vital importance as it goes to the heart of the ethicality of our financial system. Bagus and Howden (2009) have argued that, while fractional reserve banking is illegitimate, maturity mismatching *per se* is not a fraudulent activity. Their argument is based on the fact that both contracts (deposit and loan contracts) have had a very different nature ever since they were conceived in Roman Law. These contracts exist for various purposes among parties with different motivations. While in a loan contract, the debtor gains the availability of the money in return for an interest payment to the creditor at maturity, in the deposit contract, the depositor maintains the availability of the money that he gives to the depository for safekeeping. The transfer versus the maintenance of availability of the good is *the* fundamental difference in loan and deposit contracts. It explains why borrowing short and lending long is legitimate (for the debtor is given the full availability of the money); why holding only fractional reserves in a deposit is illegitimate (for the depositary is not given the full availability). In a rejoinder, Barnett and Block (2011) have argued that loan maturity mismatching is actually as much a fraudulent activity and indistinguishable from fractional reserve banking. They argue that there is no fundamental difference between loan and deposit contracts. In fact, they interpret deposits to be loans of zero maturity. As investing the deposited money (with a maturity higher than zero) would be fraudulent, it would be equally dishonest to spend borrowed money with a maturity greater than the original loan (borrowing short lending long).[1]

Block and Barnett argue that it is impossible to differentiate clearly between deposits (which they see as a loan of zero maturity) and loans. They base their argument on the continuum of possible maturities which would render it impossible to differentiate clearly between a deposit (with zero maturity) and a loan (a loan with a maturity of one second for instance). Moreover, they attack another distinction made by Bagus and Howden, who had argued that there is an exchange of present against future goods in the case of a loan contract while there is no such intertemporal exchange in the event of a deposit contract. Block and Barnett claim that this distinction is invalid because future goods just do not exist. Their arguments on the indistinguishability of deposit and loan contracts are also supported by Cachanosky (2011) and Evans (2014, 2015) who, ironically, maintain that both maturity mismatching and fractional reserve banking are legitimate.

While the "future goods" problem has been satisfactorily addressed by Bagus and Howden (2012) and Davidson (2015), it is the "continuum" problem that poses the real challenge. As Barnett and Block have framed it, the question that needs a solution is:

> [W]hat is the relevant time period that separates a loan from a deposit? For example, A wishes to establish an account with B in which A turns money over to B with the expectation that B will later on return it to A. If the term of the contract requires that A, upon making a demand for the return of his funds, may be required to wait before they are returned, does this render the contract a time deposit? Suppose the waiting period to be 1 second [sic.]? 5 seconds? 10 seconds? What is the maximum period of contractually allowed delay between demand and return that still qualifies the relation as a deposit and not a loan?... Therefore, we conclude that distinguishing between demand deposits and time deposits, insofar as maintaining that it is fraudulent to borrow short and lend long if a particular type of financial transaction is referred to as a demand deposit but not fraudulent if it is referred to as a time deposit, is inapposite. (p. 230)

Bagus and Howden (2012) answered that, even though a continuum of possible maturities does exist, it is the role of judges to determine on which exact point the maturity is considered "too short" to be a loan. Judges are to be aided in this task by the principles governing the different contractual figures: those of loans and deposits, which exist since Roman Law. Barnett and Block's continuum conundrum, they argue, is a vagueness-type argument which can be found in almost all concepts, and which does not turn invalid the practical distinction between loans and deposits.

[1] In a new twist on the debate, Block and Barnett (2015) have argued that maturity mismatching necessarily triggers an Austrian business cycle, sustaining that Bagus and Howden must subscribe to the doctrine of market failure. Bagus, Howden and Huerta de Soto (forthcoming) maintain that maturity mismatching does not necessarily cause a business cycle.

A further contribution to the debate is provided by Laura Davidson (2015). Davidson agrees with Bagus and Howden's conclusions, namely that fractional reserve banking is illegitimate, and maturity mismatching is legitimate. However, she criticizes Bagus and Howden's reasoning, sustaining that their legal based distinction between deposit and loan contracts does not prove fractional reserve banking to be illegitimate. Davidson attacks Bagus and Howden (2012) for making assumptions regarding the motivations of the parties involved in the different contracts based mainly on distinctions within Roman Law. Assumptions on motivations dating back to legal differences in Roman times, in her view, do not rule out that currently, on-demand loans can and are, in fact, mutually agreed upon. According to Davidson the historical doctrine on the contracts is irrelevant for the real present day motivation of the parties, and cannot prove an agreement as illegitimate. Because of this, Davidson concludes, Bagus and Howden are incapable of satisfactorily solving the continuum conundrum posed by their adversaries.

Davidson then provides an alternative argument for the fraudulence of fractional reserve banking based on the *Title Transfer Theory of contracts* as developed by Stephan Kinsella (2003).[2] In a nutshell, her argument is that all contractual relations are valid as long as they voluntarily transfer property titles (or rights within that property title) from one party to the other.

While in a loan, the loaner transfers the full property title of the money to the loanee, in a deposit he just transfers the physical possession, while retaining the right to claim it at any time. By doing so, the depositor does not transfer the full availability to the depositary. Since the depositor maintains the full availability of the money, deposits are incompatible with fractional reserves, i.e. the depository lending part of the deposit. Fractional reserve demand deposits create duplicate property titles, which violate natural law.

But we find Davidson's argument to get problematic when applying the *Title Transfer Theory* to callable loans, that is, loans in which the parties agree to transfer the full ownership of the money while giving a right to the loaner to be paid back on demand (just like in a deposit). The problems become evident when the callable loan has a withdrawal notice term, for long enough terms seem to be giving the loanee the full availability of the money for the given period. In such cases, the *Title Transfer Theory* is incapable of solving the continuum conundrum (where do we draw the line between short and long enough periods to consider the full availability transferred?) posed by Block and Barnett (2011). The crux of the problem is that no a priori approach, such as the *Title Transfer Theory*, can successfully solve the continuum conundrum which is at the heart of the matter in the present debate.

Davidson (2015) seems to suggest that, as long as it is an on-demand contract (a deposit or callable loan), the full ownership of the money has not been transferred, and the loanee is prohibited to loan the money to a third party, regardless of the withdrawal notice. The point of this paper is to show Davidson's flaws and to reinforce Bagus and

[2] The *Title Transfer Theory* of contracts developed out of a critique of contract theory based on promises. See Spooner (1971) also Barnett (1986, 1992) for problems associated with a contract theory relying on promises. On the *Title Transfer Theory* of contract see also Evers (1977), and Rothbard (1982).

Howden's (2012) original position: The nature of the different contracts, established by legal doctrines and precedents[3] of historical importance, such as Roman Law, are the best guidelines judges have to solve this and many other practical problems when an *a priori* solution attainable by mere deduction is lacking. In fact, we hope to demonstrate callable loans with long enough withdrawal notice terms can be considered loans proper and allow the loanee to engage in fractional reserve. We will also stress why applying Roman Law and legal precedent to interpret the intention of the parties in the contracts is in no way arbitrary, but may just be the proper free market solution.

For this purpose, we will discuss two cases of voluntary callable loans. We will first study what we call the "classic" case: A simple case in which both parties voluntarily agree to a callable loan without any withdrawal notice. We will discuss its evolution and logical conclusion. We will prove that this particular contract, even though mutually agreed, is unstable and legally impossible, and how judges will in fact solve this impossibility. We will do so without recurring to the *Title Transfer Theory* and, incidentally, showing how proper legal precedent evolves. Once we have established a solution to this easy case, we will approach the grey areas of a "continuum" case: We will study a situation in which parties agree to an on-demand loan with a withdrawal notice.[4] We will pose different scenarios with different notice term lengths and discuss their evolution. We will prove why analyzing the problem through the lenses of the *Title Transfer Theory* produces no satisfactory solution to the problem, and how judges and legal precedent would decide these cases, providing the only successful solution for the purpose. We will show how, contrary to what Davidson suggests, the solution reached by judges and legal precedent is far from arbitrary. Finally, we will emphasize on the importance of Roman Law as a legal precedent.

The "Classic" Case: Why Voluntary On Demand Loans Are Legally Unsound

Let us assume that Ulpian asks Paul to lend him ten denarii to buy a mule. Paul regards this as a great opportunity to have someone safe-keep his money and ends up agreeing as long as there is one condition: that he can collect the ten denarii on-demand. They agree upon this callable loan, and Paul gives Ulpian the ten denarii while gaining a "right" to be paid back whenever he asks Ulpian to do so. This is certainly an agreed upon contract which does not violate the non-aggression principle.[5]

Callable loans seem to create duplicate property titles, for both the loaner and loanee perceive they have the full availability of the money. For the *Title Transfer Theory* the problem seems easy to solve. The fact that the use of money requires its disposal means that a loan with no maturity is contradictory in its own terms, because it does not point a period for the unconflicting use of money

[3] We do not use the term "precedent" in the formal sense used in current state-dependent legal orders like the American Common Law. We use it merely to refer to past adjudicatory decisions successful in solving human conflict.

[4] Withdrawal notices are actually Evans' (2014) solution to the continuum problem posed by Barnett and Block (2009) and, in his eyes, provides for a legitimate form of on-demand loans. On "notice-of-withdrawal clauses" see also White (1992) or Selgin (1988, 138).

[5] On the non-aggression principle see Rothbard (2006) or Block (2015).

by each party. That the loaner retains its availability suggests that there is no real title transfer in this case, and therefore the contract may be treated as a deposit proper.

We offer an alternative explanation. As long as there is no conflict, so long as whenever Paul decides to withdraw his money he is effectively paid by Ulpian, this case raises no practical problem. But this is not the same as saying that the contract is legally sound. This contract, like any other contract, can potentially produce many conflicts between the parties, and it is when conflict arises that a need to generate legal rulings appears. Let us now assume that Paul decides to withdraw his money from Ulpian, but when he asks Ulpian the latter responds that he is not able to get hold of the necessary money to pay back. He frustrates Paul's expectations to be paid back on demand. The conflict escalates and, just when they were about to wage war against each other, they realize the immense expenses that would generate and decide to reach for a third party to adjudicate the conflict – a judge–.[6]

Once the judge is informed of the case, he realizes that to solve it he needs to establish who is to bear the costs incurred by Paul when he was not paid back on demand. Due to scarcity, the judge cannot magically generate additional 10 denarii and make everyone happy. Either Paul remains unpaid until Ulpian gets the money or Ulpian is forced to sell the mule and pay him back as fast as possible. And to do so the judge needs to establish who had a better claim: Paul on getting paid when he wanted or Ulpian to use the money to buy a mule. At this point this particular situation gets interesting. According to the terms of the contract both seem to have pretty legitimate claims, Paul has a claim to collect on-demand, and Ulpian a claim to use the money and dispose of it as he pleases. It is clear that if the contract was an ordinary contract, let us say a genuine deposit, Paul would have the full availability of the money. It is also clear that if it was a 5-year loan, Ulpian would gain the full availability. In both types of contracts parties make clear who has the disposition at a particular time, but this is not the case in our example of the callable loan. The judge needs a solution, because he does not have a ready-made ruling deductible from first principles.

While there is no *a priori* answer, the judge lives at a particular time and place, which gives him a possibility to inquire into the real legitimacy of the parties' claims by posing the following question: Which of the parties is more likely to be able to get away with his claim in this particular social context? Or, put another way, which of both claims is more likely to be approved by individuals in this particular society and upheld by other judges? Or, put yet another way, who, Paul or Ulpian, are basing their claims on more accurate expectations on what third parties would behave like? It is evident once again that if the contract was an ordinary deposit contract third parties would usually uphold Paul's claims. It is also clear that if it was a 5-year loan, third parties would confirm Ulpian's claims. So, instead of inquiring in the parties' intentions, the judge focuses on social practices. He finds that it is common that in similar cases, debtors who do not pay their debts when called upon are socially sanctioned. He may well then decide that Ulpian is to sell the mule and

[6] We use the term judge to refer to any third party hired to rule a solution on the case, which can be abided or challenged by the parties. We do not refer to any individual with political authority, as in the case of today's judiciary.

pay Paul back. Furthermore, and crucial for our debate, he establishes that for the contract to be a proper loan, and for Ulpian to have a better claim, a maturity period needs to be agreed upon. Only a maturity period can establish the temporal dimension on which the loaner holds the availability of the money borrowed. Based on social customs it is, therefore, the judge who determines the maturity period that distinguishes between a genuine demand deposit and a loan.

If the judge did a good job, Ulpian would find that even if he challenges the decision going to another judge, the new judge will decide in a similar way. Judges, as individuals in a society, tend to hold views similar to those of the rest. Even if Ulpian finds a "rebel" judge willing to rule differently, he knows that Paul would not abide by and would, in turn, challenge the second ruling. In the end, the solution will have to be determined by the generalized social norms and customs in their particular context.[7] Once Ulpian acknowledges that challenging the ruling is useless, he will abide by it, for he will perceive it as a cheaper solution than escalating the conflict.

But let us move on with our story. Two different persons, Gaius and Cassius, decide to agree upon a similar contract one month after the ruling. Gaius lends 20 denarii to Cassius, on the condition that he be paid back on-demand. Gaius asks to be paid and is told by Cassius that he does not have the money to do so. They decide to take their conflict for adjudication. The judge in this case is faced with the exact same problem as before, and in the absence of a contractual definition he finds a prior ruling in the case of Paul v. Ulpian, in which the judge had established that in absence of a maturity period, the contract is to be considered a deposit, regardless of party motivations and information. This new judge needs not to inquire into what the social norms are, for he knows that if the prior ruling remained unchallenged it is likely due to the fact that both parties ended up agreeing with it. What matters for his decision is not actually what moved the parties, but the expectations that they legitimately can hold in this particular social context.

In a third case of the same contract, let us say between Marius and Sulla, we assume that both know that even if they agree to an on-demand loan in a case of conflict a judge will determine it to be a mere deposit based on the prior rulings. The nature of the contract will then determine the parties' motivations, and not the other way around: If what Sulla wants is a real loan he will find that a callable loan is useless to him.

Through successive legal decisions, a legal doctrine is created that differentiates clearly a loan from a deposit. Such a legal theory is able to convert an unstable contract into a stable one that adequately defines who is to have the availability of the money. Most importantly, this doctrine is not arbitrary, but rests on successive decisions in which judges have made use of their entrepreneurship.[8] By doing so in an evolutionary

[7] On the evolution of law dependent of specific coordinates of time and place see Hayek (1978), Ianulardo (2009), Leoni (2012), Rallo (2007) and Huerta de Soto (2009, Ch. 1).

[8] Rothbard defines entrepreneurship as "[t]his process of forecasting the future conditions that will occur during the course of his action is one that must be engaged in by every actor. This necessity of guessing the course of the relevant conditions and their possible change during the forthcoming action is called the act of entrepreneurship." (2004, 64)

Every judge, when trying to identify which party had more accurate expectations is forecasting which behaviors are more likely to be socially accepted.

process, judges tend to reach decisions that are the best alternative to both parties in that particular social context.[9] Our analysis is, thereby, an illustration of Ludwig van den Hauwe's (1998, p. 1) explanation of the role of judges in cultural evolution:

> The theory suggests that the role of the judge in making law is analogous with the role of an entrepreneur launching a new product: the entrepreneur is consciously trying to make a profit, thus unintentionally contributing to the overall allocation of resources. The judges, by upholding those rules which make it more likely that expectations will match and not conflict, are consciously trying to give greater internal coherence to the law.

Legal doctrine is the proper and efficient tool to establish contracts as illegitimate and to offer an appropriate solution to any conflict. It does analyze the "true" content of the contract in the abstract, but works with a more tangible element: what expectations exists that judges and society in general will uphold the contract and on what terms. And by doing so it is accurate in really assessing the motivations of the parties involved, because it is the expectations that inform them on whether particular contract figures will be successful in reaching their ends, allowing them to achieve their goals. The legal system in an evolutionary process tends to find the desirable degree of detail in the law.[10]

[9] Elsewhere (2016) Pérez Medina has called the theory explaining this process the *Praxeological Rule Theory*. It explains at the individual or micro-level the process of the evolutionary genesis of law that von Hayek (1978) and Leoni (2012) described.

[10] Tullock (1995) posed the question of the "desirable degree of detail in the law". As our discussion illustrates, the desirable details can be provided by an evolutionary legal process of rule finding judges.

Title Transfer Theory, while attempting to produce a priori solutions to legal problems, over-rationalizes and over-complicates the matter, ultimately failing. It is not the problem that the contract between Paul and Ulpian duplicates ideal property titles, violating a rationalistic natural law based on first principles. The real issue is that, due to the metaphysical and self-evident fact of scarcity, someone needs to bear the costs caused by the conflict and a judge needs to make that decision. Any ruling which successfully ends the conflict and reflects the values and preferences of individuals in a given society will be imitated, and therefore become law.[11]

The "Continuum" Case: The Problem with Withdrawal Notices

Now let us imagine a different case: Smith asks Jones to lend him 10 dollars. Jones sees this as a great way to safe-keep his money and thus agrees on the condition that he be paid back on-demand. But Smith offers a different bargain; he asks Jones to give him 30 days after his notice to pay. This is now a callable loan with a 30-day withdrawal notice. Jones agrees.

[11] This is in no way to disregard the ethical principles of private property to inform these rulings. In fact, as Hoppe (2010, p. 235) has argued, the fact of scarcity demands a system of property as the only sustainable solution to social conflict. On the ethical principles of private property see also Rothbard (1982), and Hoppe (2010). On the role of individualism for absolute private property rights see Facchini (2002).

What we argue is that ethical principles do not provide ready-made solutions to most conflicts and that most legal rulings demand a level of entrepreneurship and social interaction to solve practical issues which surpass the abstract and diffuse principles of property rights. *A priori* theories are incapable of comprehending the entrepreneurial element that takes place in these rulings, and therefore to produce a valid theoretical account of them.

Davidson (2015) offers the following solution to this case:

> However, as discussed previously, a withdrawal notice does not transfer the money's title, or any aspect of it, no matter how the contract is construed. The owner of the funds, whomever that is assumed to be—whether it be the bank or the depositor—does not change in any way. Thus, from the perspective of the [*Title Transfer Theory*], a withdrawal notice does nothing to negate the illegitimacy of [Fractional Reserve Banking]. It simply changes the practical aspect of the contract, but leaves unaltered its title structure and the ethical dilemma.

Davidson has argued that callable loans are inconsistent because they duplicate property titles, and that all loans proper need a maturity time. This is due to the fact that, by definition, absent of maturity the loaner never gives up the title to its property. To that inconsistency we have agreed from a different theoretical framework. But, when considering "limits" to this kinds of contract, in particular withdrawal notices, she argues that by definition this does not change the fact that the loaner does not give up the full property of the money. Therefore, this contract may be considered a deposit as well. But why does she assume this? Why can one not argue that as long as there is a period to deliver, there is a maturity and a proper transfer of the full availability? Why must we concede more importance to the "on-demand" element over the "delay" element when the contract has both?

What if the notice period was one year? What if it was ten? Quite an extensive period may give the borrower enough time to take care of his business and still be able to get hold of the money in time to pay. In fact, one could assume that with a long enough period, the "loaner" is giving the borrower temporal availability to make use of the money as he sees fit, avoiding the problems of the "classic" case. Such a contract might be a useful and beneficial credit instrument, attractive for loaners who want to have control and flexibility on the date from which they get their money back.

But, on the other hand, what if the withdrawal notice Smith proposed to Jones was of one minute? Could Smith argue that because of this extra minute he had, he was given the full availability of the money?[12] Could he say that in this extra minute he had enough time to get hold of the money to repay Jones? It certainly seems to be unlikely.

It would be weird to suggest that, when the withdrawal notice period is long enough, none of the parties have real ownership of the money in the period between the moment the loan is made and the moment the loanee is required to pay back. The loaner would not get it back and the loanee would be unable to use it. It is a weirder suggestion coming from a *Title Transfer Theory* perspective, for this would be a period in which the title on the money would be void. But this is what Davidson seems to suggest. To us, it seems obvious that in some cases with long enough withdrawal notice terms, the loanee is in fact full owner of the money for a given period, avoiding the duplicate titles.

---

[12] One might ask, what is full availability? When is the obligation of maintaining full availability for the depositor fulfilled? The answer to this question we may delegate to the legal system in the same way we did with the question of continuum and the withdrawal notice. On the significance of full availability see Bagus and Howden (2016). The issue of availability is critical for the incompatibility of loan and deposit contracts. See Huerta de Soto (2009) and Ravier (2012).

The real problem we face is where do we draw the line: at which moment is the withdrawal notice term long enough for it to grant full ownership to the loanee? This was the conundrum posed by Block, and is the question the *Title Transfer Theory* does not even pose. It assumes an abstract lack of transfer of title in the parties without even attaining to the particulars of the case. The solution seems arbitrary.

We offer an alternative explanation. Let us return to the case with a ten-day withdrawal notice to see how it could be solved by judges and legal doctrine. What if Jones asks for his money back and when doing so finds out that Smith has used it for his own personal use. Even though Smith still has 30 days to return it, the fact that he was so lavish with his money infuriates Jones, who sees this as an overreach over the original contract, which he intended to be for safekeeping.[13] Smith and Jones bring the conflict for adjudication, and the judge finds himself in the awkward position to determine if the contract is either a deposit, in which case Smith would have abused his position or a loan, in which case Smith would be perfectly entitled to use the money. He looks for a precedent and finds Paul v. Ulpian, a similar case in which, faced with an inconsistent contract, the judge decided it to be a genuine deposit.

But the problem in his hands has the "withdrawal notice" element, which renders it harder to identify what the contract should be. He addresses the issue from the same perspective the former judge did, by establishing which claim is based on better expectations on what third parties would approve. He finds that it is common for people lending money to be able to get it back within a month (which is the typical interval for wage payments), and that due to this most people in society consider 30 days enough time to take care of their business before returning their money. He decides that the contract is, in fact, a loan and that Smith had no obligation to safe keep the money. If he is successful in doing his job, both Smith and Jones will abide by the ruling.

A month later Parker and Osborn agree to a similar contract. Parker gives money to Osborn and maintains the right to claim it "on-demand" with a 12-hour withdrawal notice. A conflict arises when Parker asks to get paid and finds out Osborn does not have the money. The judge in the case consults a precedent, Smith v. Jones, and concludes that it only establishes that withdrawal notices 30 days or longer are to be considered loans proper but says nothing about shorter periods. He resorts to study the social norms and customs and finds it hard for Osborn to get hold of the invested money and pay it back within 12 hours. He rules that the contract is, in fact, a deposit and that Osborn abused his position by making use of the money. If he is successful, the decision will remain unchallenged and inform future transactions.

So far, the legal doctrine established in these examples holds that any withdrawal period equal or longer to 30 days are to be considered loans, while those 12 hours or less, deposits, while leaving an undefined area in between.[14] As con-

[13] It must be noted that we are not alleging that every party in Jones position will have this intention. We are just ascribing this intention to Jones for illustrative purposes. If Jones did not consider the contract to be for safekeeping then there would be no conflict, and in lack of conflict, no legal precedent would be generated. The contract would work as a regular loan and effectively be one independent of its name, provided no conflict arises.

[14] For a similar view on the withdrawal notice

flicts arise, producing further legal precedent, the undefined area will tend to get shorter, finally establishing a particular length over which the contract would be considered a loan and below which it will be regarded as a deposit. Once again, this solution is far from arbitrary; it condenses individual values and preferences in society through successful legal decisions. This account does solve Block's continuum conundrum that *Title Transfer Theory* evades.

What Bagus and Howden (2012) argued as the solution to the continuum conundrum is, thus, reinforced and justified:

> Who does it fall on to answer the relevant question: Is the intention of the person to have full availability or does he want to transfer the availability of the good for a particular time (i.e., make a loan)? It falls on judges to decide in each case in a free society. For ''terms'' so short that they are seen as equivalent to deposits, the purpose of the contract is safekeeping and all legal obligations for deposits will apply. Consequently, the legal system has to determine if a certain contract was designed to conceal a deposit or whether it is a genuine loan. Conventions and legal norms that develop in an evolutionary process described by Leoni (1961) or von Hayek (1973) would deal with the important continuum question. (297)

On Roman Law

Once we have established the importance of legal precedent as the only viable solution to the continuum conundrum we need to answer why Bagus and Howden (2009) give such an importance to one particular kind of precedent. Why is Roman Law so relevant? We will find that, due to the exceptional circumstances in which it was generated, Roman Law can be considered the gold standard of legal precedent. It evolved from the voluntary interaction of individuals mostly independent from political influence. It was intended not as a tool to organize society from above but as a means to solve particular conflicts. Finally, for centuries since its inception, the principles of Roman Law have proven, and still prove successful in addressing many instances of conflict, regardless of their adoption by state legislation.[15]

This is not to say Roman Law is free from inconsistencies and mistakes. The fact that we have seldom had a time in which law could once again evolve under the same circumstances has inhibited progress that could have been obtained. Parts of the Roman Law are in fact obsolete and have to be read with caution. But it is because no legal system is preordained that we can solve the inconsistencies in Roman Law and accommodate it to our time and age. As long as legal systems are a product of freely acting individuals, there is enough room for change and progress based on individual values and preferences, just as there is in any other market.

Conclusion

We have shown how a free legal system of rule finding judges solves the continuum conundrum posed by Block and Barnett (2011) in practice. The very

see Bagus, Howden and Gabriel (2015, and forthcoming, fn. 18), which, however, do not spell out how the legal system would solve such cases using precedents.

[15] For more on Roman Law's influence in today's legal systems, both Civil Law and Common Law, see Drake (1904) and on the importance of the study of Roman Law see Ramage (1900) and Foster (1898).

same law finding offers a new solution in the case of on-demand deposits with a withdrawal notice. At the same time, the natural rights theory or *Title Transfer Theory* cannot solve the problems posed by callable loans satisfactorily. The ethics of loan and deposit contracts can only be fully understood and sorted out by adhering to legal logic, proceedings, and general legal principles.

References

Bagus, Philipp, and David Howden. 2009. "The Legitimacy of Loan Maturity Mismatching: A Risky, But Not Fraudulent, Undertaking." *Journal of Business Ethics* 90 (3): 399–406.

Bagus, Philipp, and David Howden. 2012. "The Continuing Continuum Problem of Deposits and Loans." *Journal of Business Ethics* 106 (3): 295–300.

Bagus, Philipp and David Howden. 2016. The Economic and Legal Significance of 'Full' Deposit Availability. *European Journal of Law and Economics.*41 (1), pp. 243–254.

Bagus, Philipp, David Howden, and Amadeus Gabriel. 2015. Oil and water do not mix, or: aliud est credere, aliud deponere. *Journal of Business Ethics* Vol. 128, No. 1, pp. 197–206.

Bagus, Philipp, David Howden, and Amadeus Gabriel. Forthcoming. The Hubris of Hybrids. *Journal of Business Ethics.*

Bagus, Philipp, David Howden and Jesús Huerta de Soto Ballester. Forthcoming. "Entrepreneurial Error Does Not Equal Market Failure." *Journal of Business Ethics*,

Barnett, Randy. 1986. "A Consent Theory of Contract."*Cornell Law Review*. 1986: pp. 1022–1033

Barnett, Randy. 1992. "Some Problems With Contract as Promise."*Cornell Law Review*. 1992: pp. 1022–1033.

Block, Walter E. 2015. "Natural Rights, Human Rights, and Libertarianism", *American Journal of Economics and Sociology*, 74 (1), pp. 29–62.

Block, Walter E., and William Barnett II. 2011. "Rejoinder to Bagus and Howden on Borrowing Short and Lending Long." *Journal of Business Ethics* 100 (2): 229––38.

Block, Walter E. and William Barnett II. 2015. "Maturity Mismatching and 'Market Failure'" *Journal of Business Ethics.*

Cachanosky, Nicolás. 2011. "A Comment on Barnett and Block on Time Deposit and Bagus and Howden on Loan Maturity Mismatching." *Journal of Business Ethics* 104 (2): 219–21.

Davidson, Laura. 2015. "Ethical Differences Between Loan Maturity Mismatching and Fractional Reserve Banking: A Natural Law Approach." *Journal of Business Ethics* 131 (1): 9–18.

Drake, Joseph H. 1904. "The Old Roman Law and a Modern American Code." *Michigan Law Review* 3 (2): 108–19.

Evans, Anthony J. 2014. "In Defence of demand' Deposits: Contractual Solutions to the Barnett and Block, and Bagus and Howden Debate." *Journal of Business Ethics* 124 (2): 351–64.

Evans, Anthony J. 2015. What is the Latin for ´Mayonnaise´? A Response to Bagus, Howden and Gabriel. *Journal of Business Ethics* 131 (3): 619–23.Evers, Williamson. 1977. "Toward a Reformulation of the Law of Contracts."*Journal of Libertarian Studies* Vol. 1, No. 1: pp. 3–13.

Facchini, Francois. (2002). Complex Individualism and Legitimacy of Absolute Property Rights, European Journal of Law and Economics, 13 (1): pp. 35–46.

Hayek, Friedrich A. 1978. *Law, Legislation and Liberty Vol. 1: Rules of Order*. Chicago: University of Chicago Press.

Ramage, B. J. 1900. “The Value of Roman Law.” *The American Law Register (1898–1907)* 48

Hoppe, Hans-Hermann. 2010. *A Theory of Socialism and Capitalism*. Auburn: Ludwig von Mises Institute.

Huerta de Soto, Jesús. 2009. *Money, Bank Credit, and Economic Cycles*. Auburn, Ala.: Ludwig von Mises Institute.

Ianulardo, Giancarlo. 2009. “El derecho como pretensión del individuo en Bruno Leoni: su importancia para la economía y sus límites.”*Procesos de Mercado: Revista Europea de Economía Política*, 6 (2): 73–116.

Kinsella, N Stephan. 2003. “A Libertarian Theory of Contract.” *Journal of Libertarian Studies* 17 (2): 11–37.

Leoni, Bruno. 2012. *Freedom and the Law*. Indianapolis: Liberty Fund.

Pérez Medina, Esteban. 2016. “Rules and Information: An Integral Criticism of Legislation.” *Procesos de Mercado: Revista Europea de Economía Política*, 13 (2): 197–252.

Rallo, Juan Ramón. 2007. “El derecho como institución espontánea.”*Procesos de Mercado: Revista Europea de Economía Política*, 4 (1): 117–152.

Ramage, B. J. 1900. “The Value of Roman Law.” *The American Law Register (1898–1907)* 48.

Ravier, Leonardo. 2012. “Carta contra-argumentativa al Freebanking con reserva fraccionaria.”*Procesos de Mercado: Revista Europea de Economía Política*, 9 (2): 282–296.

Rothbard, Murray. N. 1982. *The Ethics of Liberty*. New York University Press. New York, NY

Rothbard, Murray N. 2004. *Man, Economy and State With Power and Market*. Auburn: Ludwig von Mises Institute.

Rothbard, Murray N. 2006. *For a New Liberty*. 2nd Edition. Auburn, Ala.: Ludwig von Mises Institute.

Selgin, G. (1988). *The theory of free banking: Money supply under competitive note issue*. Totowa, NJ: Rowman & Littlefield.

Tullock, Gordon. 1995. “On the desirable degree of detail in the law”, *European Journal of Law and Economics*, 2(3): 199–209.

Van den Hauwe, Ludwig. 1998. “Evolution and the Production of Rules—Some Preliminary Remarks”, *European Journal of Law and Economics,* 5 (1): 81–117.

White, Lawrence. 1992. “Free Banking in Scotland before 1844.” in Kevin Dowd, *Experience in Free Banking*, London: Routledge: 157–186.