Money as a Legally Enforceable Debt

© 2017, Andreas Rahmatian, University of Glasgow*

Abstract:
Money is usually regarded as a subject in the domain of economists, but it is really a fundamentally legal notion. In fact, it is a creation of the law. Money is a special object of property, and at the same time a form of debt, enforceable by law which ultimately confers on it the quality of money. The concept of dematerialised property assists in describing the concept of money accurately. The article discusses the different types of money, and the creation of money through central banks and through commercial banks by giving credit. It explores the possible legal foundation of this money creation process. The discussion also looks at the legal regulation of money creation in Germany and presents findings from an interview with a practising commercial lawyer in Germany which confirm the author's thesis that money is a legally enforceable debt.

1 Introduction

Money is indisputably a fundamental concept in commercial law, but lawyers rarely examine the essence and legal qualities of money. They do discuss the function of money in commercial transactions, and current commercial law and banking law textbooks attest to that.[1] But they hardly consider the legal concept itself – what money *is* in law, not what it *does*, only how it is owned, transferred, traced and the like, but not how it comes into existence in law and what its own specific legal qualities and effects are. Payment through money is more worthy of investigation than money itself. Money is apparently a phenomenon which the law has to deal with, but not a conception which may even be the product of law, not just mere recognition by the law. Money is considered as a form of personal property[2] – that much is true, but it is obvious that this kind of personal property distinguishes itself from ordinary tangible or intangible property. It seems to be less obvious that debts, documentary intangibles and intellectual property rights are conceptually closely related to money

* For section 5 of this article, the author is grateful to his former student Alexander Linda, LLB (Glasgow), for research assistance in June 2016, and to Hans Scharpf, Attorney-at-Law in Frankfurt/Main, Germany, for agreeing to a research interview with him on 18 June 2015. The author would also like to thank the Institut d'études avancées (IEA) in Nantes, France, for a grant of €500 for travel and conduct of this interview during his time at the IEA as fellow (résident) during the academic year 2014-15.
[1] E.g. Peter Ellinger, Eva Lomnicka, Christopher Hare, *Ellinger's Modern Banking Law*, 5th ed (Oxford: Oxford University Press, 2011), 119-125; Ewan McKendrick, *Goode on Commercial Law,* 5th ed (London: Penguin 2016), 488.
[2] Michael Bridge, *Personal Property Law*, 4th ed (Oxford: Oxford University Press, 2015), 21.

and assist greatly in explaining the legal concept, not just the legal meaning, of money. In the eighteenth and nineteenth centuries legal scholars saw money as an essential part of private law and devoted much discussion to money as such. William Blackstone, [3] Friedrich Carl v. Savigny, [4] Bernhard Windscheid [5] or Levin Goldschmidt[6] had a lot to say about money, but they based their analyses on now antiquated monetary systems and are therefore unfortunately of limited importance today. Probably around the beginning of the twentieth century lawyers ceded quietly their competence in speaking scientifically about money to the economists,[7] and the establishment of the neo-classical school, especially the Cambridge School headed by Alfred Marshall [8] as well as the increasing mathematisation of economics as a discipline appear to have played a significant role in this development.

Today legal scholars approach the matter of money with a certain diffidence. The seminal legal text on money by F. A. Mann illustrates this:[9]

> 'The troublesome question, What is money? has so constantly engaged the minds of economists that a lawyer might hesitate to join in the attempt to solve it. Yet the true answer must, if possible, be determined. … a great deal of a lawyer's daily work centres around the term 'money' itself and the many transactions or institutions based on that term, such as debt, damages, value, payment, price, capital, interest, tax, pecuniary legacy.'

For Mann lawyers seem to encroach on economists' expertise. But the various legal functions and institutions make up the conception of money: what money does also means what money is. Proctor's later edition of Mann's book takes over almost the same passage.[10] A lack of sufficient theoretical examination of the legal concept of money may have contributed to Mann's assertion that '[b]ank accounts … are debts,

---

[3] William Blackstone, *Commentaries on the Laws of England. Book The First*, book 1, ch 7, 13th ed (Edinburgh: Strahan, Cadell, 1800), 276-278.

[4] Friedrich C v Savigny, *Das Obligationenrecht als Theil des heutigen Römischen Rechts*, Vol. 1 (Berlin: Veit, 1851), § 40, 403-423, § 42, 448-456, § 43, 463-468.

[5] Bernhard Windscheid, *Lehrbuch des Pandektenrechts*, 9th ed., Vol. 2, Theodor Kipp (ed) (Aalen: Scientia Verlag, 1963), 45, 52 and n. 32, 53 and nn. 34-35.

[6] Levin Goldschmidt, *Handbuch des Handelsrechts, 1. Band, 2. Abteilung, enthaltend die Lehre von der Ware* (Stuttgart: Ferdinand Enke, 1868), especially at §§ 91-99, 1060-1071: 'A combined legal theory for all so-called money [coins, notes, bank money] does not exist' (at 1071), § 105, 1142-1176, §§ 107-109, 1193-1231.

[7] Ludwig v. Mises (1912): 'It does not come within the scope of the legislator or jurist to define the economic concept of money.' See Ludwig v Mises, *The Theory of Money and Credit* (New Haven: Yale University Press, 1953), 69. Incidentally, Mises was a lawyer by training, as all founders of the School of Austrian economics.

[8] Alfred Marshall, *Principles of Economics*, 8th ed (Houndmills, Basingstoke, Hampshire: Palgrave Macmillan 2013) V, iii, 7, 291, on the equation of money costs with real costs.

[9] Francis A Mann, *The Legal Aspect of Money*, 4th ed (Oxford: Clarendon Press, 1982), 3.

[10] Charles Proctor, *Mann on the Legal Aspect of Money*, 7th ed (Oxford: Oxford University Press, 2012), 5-6.

not money', or that '[m]oney is not the same as credit',[11] which indicates incomplete appreciation of the legal quality of extant money itself and the money supply (or creation) process. Proctor no longer maintains this narrow classification.[12] The practical-transactional approach – what money does tells us (conclusively) what money is – can be found more openly in Goode. He recognises the broader 'economic' definition of money in that bank money and electronic money should be included in the meaning of 'money'.[13] But this is more a pragmatic than a conceptual assessment:[14]

> '[M]uch of the debate on what constitutes money in law is rather sterile and has few implications for the rights of parties to commercial transactions, where payment by bank transfer is the almost universal method of settlement. … The crucial question … is not what constitutes money but what constitutes payment.'

For the property theorist this is not enough. Not only is this attitude unsatisfactory for the scholar (it may well be adequate for the practitioner), it also overlooks the fact that the economy as a whole is profoundly influenced by the method with which money is conceptualised and created, and the choice of this method is a legal, normative decision, not an economic explanation of a social phenomenon. Thus one should try to know what money is in law.

2 Money in Law as a Form of Dematerialised Property

a) Real Rights and *res*

The starting point shall be existing money that circulates and is used for payment.[15] Money is a type of personal property. Property has historically been regarded as a relationship between a person and a thing, an allocation of a thing to a person.[16] For unsophisticated practical purposes, this view may be sufficient, but property theorists are quick to point out that property is really a legal relation between persons with regard to a thing.[17] The relational concept of property is not new; it can be found in

[11] Mann, 5-6.
[12] Proctor, 10-12.
[13] McKendrick, 488.
[14] McKendrick, 490.
[15] The question of money supply or money creation is discussed below under 3.
[16] E.g. Blackstone, book II chapter 1, 1. In Roman law, see Barry Nicholas, *An Introduction to Roman Law* (Oxford: Oxford University Press, 1975), 98, 153-154.
[17] Jeremy Waldron, *The Right to Private Property* (Clarendon Press 1988) 27; Antony M Honoré, *Ownership*, in Antony G Guest (ed), *Oxford Essays in Jurisprudence (First Series)* (Oxford: Oxford University Press, 1961), 134.

eighteenth century writers already, most particularly with Kant.[18] At this stage it becomes necessary to define the meaning of 'property': It can mean (a) 'assets' (*patrimonium*),[19] (b) 'property right' or 'real right', (c) object to which the real right refers, the 'thing' in law – in the following it will be named '*res*'. Imprecise and unfortunate, but even found in statutes,[20] is a fourth use of the term 'property' if it denotes 'ownership', a particular, in fact the most extensive, real right.[21] For present purposes we are only interested in the widest but most vaguely defined real right of ownership,[22] not in the restricted real rights ('special property'[23]) or *jura in re aliena*, such as the easement or the mortgage. Nor is the characteristic division of ownership by quality in English law[24] (unlike in Roman law-based systems[25]), that is, legal and equitable ownership,[26] relevant for the further discussion.

Real rights or rights *in rem* are commonly regarded as a bundle of rights, somewhat influenced by Hohfeld's attempt at dissolving property rights in a multitude of individual rights *in personam erga omnes* as corresponding duty holders.[27] That leads to highly artificial conceptions especially in the case of property transfer,[28] and can erroneously suggest that property rights are a matter of degree.[29] One can reinterpret this concept with a metaphor in Spinoza's spirit as the substance of a right *in rem* being split into a number of attributes that turn the right *in rem* into concrete individual rights *in rem*[30] and so avoid possible misunderstandings.

For the following discussion obligations or 'debts' are the most important type of property or *res*. Thus it is necessary to define the terms 'obligation' and 'debt' more clearly, for English legal terminology is not sufficiently consistent, in contrast to

---

[18] Immanuel Kant, *Die Metaphysik der Sitten*, Wilhelm Weischedel (ed) vol 8 (Frankfurt: Suhrkamp, 1977) *Rechtslehre*, § 11, 371-372. See also Andreas Rahmatian, *Intellectual Property and the Concept of Dematerialised Property*, in Susan Bright (ed), *Modern Studies in Property Law*, vol. 6 (Oxford and Portland, OR: Hart Publishing, 2011), 363-364.
[19] In German law '*Vermögen*', in French law '*biens*'.
[20] E.g. Sale of Goods Act 1979, ss. 16, 17, 61 (1).
[21] Honoré, 108.
[22] In Civil Law Systems, e.g. § 903 German BGB, art. 544 French Code Civil, art. 641 Swiss ZGB.
[23] This is the term of English personal property law, see Bridge, 46, and e.g. Sale of Goods Act 1979, s. 61 (1).
[24] Division of ownership by (legal) quality is to be distinguished from division of ownership by allocation, as in the case of co-ownership.
[25] Max Kaser, *Das Römische Privatrecht. Erster Abschnitt. Das altrömische, das vorklassische und klassische Recht*, 2nd ed (München: C H Beck, 1971), 124, 432.
[26] E.g. James E Penner, *The Idea of Property in Law* (OUP, 1997) 133; Simon Douglas, Ben McFarlane, *Defining Property Rights*, in James Penner and Henry Smith (eds), *Philosophical Foundations of Property Law* (Oxford: Oxford University Press, 2013), 240-243.
[27] Wesley N Hohfeld, *Fundamental Legal Concepts as Applied in Judicial Reasoning* (New Haven: Yale University Press, 1966), 72.
[28] Penner, *Idea of Property*, 23; Rahmatian, *Intellectual Property*, 364.
[29] James E Penner, *The "Bundle of Rights" Picture of Property*, 43 *University of California Los Angeles Law Review* (1996) 796.
[30] Andreas Rahmatian, *Lord Kames: Legal and Social Theorist* (Edinburgh: Edinburgh University Press, 2015), 226-227.

French law (*la créance – l'obligation/la dette*[31]) or German law (*Forderung – Verbindlichkeit/Schuld*[32]). On the active side of the obligation, that of the creditor, his right will be called *claim*, on the passive side, that of the debtor, his corresponding duty will be called *debt*. 'Obligation' – in the present context only contractual obligation – refers to the legal relation or bargain[33] between persons as a whole from which personal rights originate, and the personal rights determine these persons as corresponding creditors or debtors. This distinction between obligation, claim and debt is essential, because the obligation out of which debts arise as *jura in personam* is itself a *res*.

The relationship between (b) property right and (c) property object or *res* matters for the present problem. A pear separated from its tree (an example of a natural chattel) or a clock (an example of a manufactured chattel) are not property *per se*. They only become property objects by virtue of the real rights or property rights attached to them. Real rights are relations between persons with regard to things, thus behavioural patterns, typically possession denoting visibly the owner's entitlement, and non-interfering conduct of all others denoting non-entitlement. It is this behavioural pattern, prescribed by law,[34] which makes the real right. Only through the performance of the real right the thing in question becomes 'property' and the law turns the physical thing into a property object which property law recognises, or, more accurately, creates. Without the law there is no property, following the philosophical view that property is not a natural right, as Locke says (in principle),[35] but a conventional right, as especially Hume[36] and Bentham[37] maintain. Thus the real right creates the thing or *res* for the purpose of the law.[38] The thing is only property because somebody has (or could have: *res nullius*) property rights in it. The property object is a legal, normative concept, and the law typifies concrete physical objects as legal *res*. The pear only exists in property law because the real rights attached to it have transformed it normatively into the legal concept of a *res*. The pear or the clock

[31] This is the usual term for monetary debts in French law, see René Savatier, *La théorie des obligations en droit privé économique*, 4th ed (Paris: Dalloz, 1979), 13.
[32] Helmut Köhler, *BGB Allgemeiner Teil*, 27th ed (München: C H Beck, 2003), § 17 n. 33, 283.
[33] The equivalent in German law would probably be '*Rechtsgeschäft*', see e.g. Köhler, § 5, n. 5 (n 32), 43.
[34] On the Scandinavian Realist aspect of this argumentation, see Jes Bjarup, *Scepticism and Scandinavian Legal Realists*, in Timothy Endicott, Joshua Getzler, Edwin Peel (eds), *Properties of Law. Essays in Honour of Jim Harris* (Oxford: Oxford University Press, 2006), 61-62.
[35] John Locke, *Two Treatises of Government*, 2nd ed., 24th printing, Peter Laslett (ed) (Cambridge: Cambridge University Press, 2013), *Second Treatise*, ch 5, §§ 26-27, 286-288.
[36] David Hume, *A Treatise of Human Nature*, Lewis A Selby-Bigge (ed) (Oxford: Clarendon Press, 1960), Bk 3, pt 2, sec 2, 491: 'The origin of justice explains that of property. The same artifice gives rise to both.'
[37] Jeremy Bentham, '*Principles of the Civil Code* in *The Theory of Legislation*, 7th ed., (London: Kegan Paul, Trench, Trübner, 1896), 113.
[38] Rahmatian, *Intellectual Property*, 364; Rahmatian, *Lord Kames*, 228-229.

are physical instances of the abstract legal, normative concept of the *res*: ‘This pear shall be a *res*’ by virtue of the real rights attached to it and exercisable by the right holder, forcing *erga omnes* a corresponding behavioral pattern.

b) Dematerialisation and Reification

The legal notion of the *res* does not require physical instances or objects of the real world. This is the concept of *dematerialised property*. ‘Property’ is necessarily an abstract legal concept that is detached from any physicality, even in case of tangible property.[39] For the expert in English land law this is nothing new, because the idea of holding an estate in land is also an ancient abstract concept detached from the physicality of a given plot of land.[40] In case of personal property, a physical pear is a concrete social reifier of the underlying and conceptual *res*, thus it is not the *res*, it only represents it. There are different *versions of reification* of the *res*: through tangible objects, intangibles (such as electricity), and pure intangibles (such as an intellectual property right).[41] (*Versions* of reification are tangible or intangible objects, while *instances* of reification are, e.g., one or the other pear.) The best example for pure intangibles are intellectual property rights. The physical copy of a book is a social reifier of the personal property-*res* and, at the same time, indirectly[42] of the copyright-*res* of the text as being an original and recorded literary work.[43] A patented machine is the social reifier of the personal property-*res* and indirectly of the patent-*res*, the monopolised invention as delineated by the claims and supporting description of the patent as granted in the B-publication,[44] since the actual patent, the notional realm of property, is defined by the text, not the machine.[45]

There is a perceived kinship between intellectual property rights and claims arising from obligations. English law even defines intellectual property rights as choses in action.[46] Other jurisdictions do not specifically, but the similarity comes to the fore in the case of assignment of intellectual property rights, which are modelled

[39] Some traditional property lawyers still find that difficult to accept, see Ben McFarlane, *The Structure of Property Law* (Oxford and Portland, OR: Hart Publishing, 2008), 132-134.
[40] See Kevin Gray, Susan F Gray, *Elements of Land Law*, 5th ed (Oxford: Oxford University Press, 2009), 57.
[41] Bridge, 14-19.
[42] ‘Indirectly’ because the copyright-*res* requires the physicality of the social reifier (provided there is a social reifier), which also invariably acts as a social reifier of a normal personal property-*res* because there is a physical object. This does not apply conversely: personal property does not normally have an intellectual property right behind.
[43] CPDA 1988, s. 1(1)(a).
[44] Patent Act 1977, ss. 1(1), 14(5), 18(4), 24.
[45] *Buchanan v. Alba Diagnostics* [2001] RPC (43) 851, IH, paras. 58-59; Rahmatian, *Intellectual Property*, 372-374, 376.
[46] CDPA 1988, ss. 90, 222, Trade Marks Act 1994, s. 22. According to Patents Act 1977, s. 30(1), patents are not choses in action, but nobody knows why not, see William Cornish, David Llewelyn, Tanya Aplin, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights*, 8th ed (London: Sweet and Maxwell, 2013), 292, n. 66.

upon assignments of claims ('debts').[47] The assignment of a (contractual) claim emphasises its proprietary quality: especially in English law, where the *numerus clausus* of property rights *de facto* exists,[48] but is not as rigid as in codified civil law systems, a hallmark of what defines property is its transferability, despite the inherent circularity of this argument (it is property, therefore transferable – it is transferable, therefore property).[49] There is no doubt that a claim (such as a monetary claim or a claim directed at delivery) is part of a person's assets ('property' in the meaning of (a)). This wide understanding of property is only an application of the general idea of property in English law. *Ius commune*-based civil law systems of the European continent also have a wide meaning of 'property', for example France,[50] or Austria,[51] but not Germany.[52] Where does that leave the well-established distinction between rights *in rem* and rights *in personam*? The debt or the corresponding claim are only binding and enforceable by the contracting parties, but the obligation as such goes beyond the purely personal relationship of the parties to the obligation. The obligation is a (proprietary) asset, and it is protected by tort law, particularly the tort of knowingly procuring (inducing) a breach of contract[53] that is directed against third parties, similar to a property right which is – in England[54] – protected through torts as well.[55] The intangible claims and debts within the obligations share this tortious protection with other pure intangible property rights or legal concepts: intellectual property rights. Their infringement provisions are functionally special torts.[56] The obligation out of which claims and debts arise as *jura in personam* is itself a *res*. The term of English law, chose in action, is an expression of this concept. Intellectual property rights are also choses in action, and when it comes to the transfer of intellectual property rights, even civil law systems resort to an analogous application of the rules on assignments of claims ('debts').[57]

---

[47] E.g. Germany, § 413 BGB, but this rule is usually replaced by special provisions.

[48] Bernard Rudden, *Economic Theory v. Property Law: The* Numerus Clausus *Problem*, in John Eekelaar and John Bell (eds), *Oxford Essays in Jurisprudence. Third Series* (Oxford: Oxford University Press, 1987), 244, for English law.

[49] *National Provincial Bank v. Ainsworth* [1965] AC 1175, 1247G-1248A, per Lord Wilberforce.

[50] Art. 529 Code Civil.

[51] § 285 Austrian ABGB.

[52] § 90 German BGB.

[53] *Lumley v. Gye* (1853) 1 Bl. & Bl. 216, and *Bowen v. Hall* (1881) 6 QBD 333.

[54] The Roman law-based systems have the *rei vindicatio* instead for the protection of the ownership right, but for tangible property only, see Rahmatian, *Intellectual Property*, 374-375.

[55] Trespass and conversion in particular for personal property, see Bridge, 79. These property torts give stronger protection than the torts protecting against interference with a contract since these require knowledge and intent, see William V H Rogers, *Winfield & Jolowicz on Tort*, 16th ed (London: Sweet and Maxwell, 2002) 628, and *OBG Ltd. v. Allan* [2008] 1 AC 1, paras. 308-10.

[56] Andreas Rahmatian, *Contracts infringing Intellectual Property Rights*, 4 *Intellectual Property Quarterly* (2003), 426-427.

[57] For example in Austria, Fritz Schönherr, *Gewerblicher Rechtsschutz und Urheberrecht. Grundriß Allgemeiner Teil* (Wien: Manz, 1982), 22-23. Germany has an explicit rule: § 413 BGB, but only if

Thus the assignment emphasises that the obligation is a *res* (in English law: assignment of a chose in action[58]). Legal systems often require a notification or even consent of the debtor to make the assignment effective against third parties.[59] Since there is not necessarily a physical social reifier that represents the *res* and its change of allocation or entitlement,[60] the central party to perform the obligation, the debtor, must acknowledge the assignment to effect the transfer of entitlement from the old to the new creditor vis-à-vis third parties. To ensure transferability or fungibility of claims (monetary or otherwise), documentary intangibles[61] like the bill of exchange and the promissory note,[62] provide a corporeal social reifier of the abstract underlying *res*. That is particularly important, where, as is with some documentary intangibles, there is an exception to the *nemo dat quod non habet* rule.[63] Not only the physicality of the paper, but also the strict formality requirements[64] represent the *res*, the exact claim and its limits, to make it recognisable and enforceable against third parties, similar to the description and claims of a patent. The most important documentary intangibles, the bill of exchange, the cheque as a special bill of exchange,[65] and the promissory note, akin to the bill of exchange or even a form of it in particular cases,[66] are all physical reifiers of the *res*, here necessarily a monetary claim.[67] So is the banknote: it started life as a promissory note of a bank to pay a sum of gold payable to bearer on demand.[68]

c) Money Reified by Banknotes

The banknote is technically still a promissory note payable on demand[69] and one, not the only, social reifier of 'money', more precisely of cash. The bank note retains its quality as a promissory note whether or not this is spelt out on the note (as in England and Scotland) or whether or not a gold standard is still in place.[70] Historically the

---

there are no special provisions (e.g. § 15 German Patent Act 1980, § 27 German Trade Marks Act 1994).

[58] In equity, to which assignment was confined historically, see Guenter H Treitel, *The Law of Contract*, 11th ed (London: Sweet and Maxwell, 2003), 674-675.

[59] England: LPA 1925, s. 136(1); Scotland: intimation of assignation; Germany: § 409 BGB; Austria: § 1396 ABGB; France: Art. 1690 Code Civil, and Savatier, 323.

[60] But there can be one, ordered by statute, see LPA 1925, s. 136(1) for statutory assignment and the social reifier effected by formality rules: absolute assignment by writing under the hand of the assignor.

[61] Bridge, 19. For the equivalent in Germany, see Wolfgang Zöllner, *Wertpapierrecht*, 14th ed (München: C H Beck, 1987), 27-28, 32-34.

[62] BoEA 1882, ss. 3, 83.

[63] BoEA 1882, s. 29.

[64] BoEA 1882, s. 3(2). For Germany, see Zöllner, 65.

[65] BoEA 1882, s. 73.

[66] BoEA 1882, s. 5 (2).

[67] 'A sum certain in money', BoEA 1882, s. 3(1), s. 83(1).

[68] McKendrick, 489 note 7.

[69] See BoEA 1882, s. 89, Procter (2012: 45), *Banco de Portugal v. Waterloo & Sons* [1932] AC 452, HL, at 478, 487.

[70] *Banco de Portugal v. Waterloo & Sons* [1932] AC 452, HL, at 477, 487, 509.

promise was for payment of the equivalent of the face value in gold, since the abolition of the gold standard (in the UK finally in 1931[71]) the promise is directed at a more general debt.

Money is an obligation or, from a debtor's perspective, a form of debt. Why and against whom money is a debt, will become clear after an examination of the money supply process.[72] In the case of cash, the *res* or money-obligation is represented physically by banknotes and coins. In the case of bank money, the *res* is represented by the accounting entries in the ledgers or computers of the bank. The *res* is the obligation which money *is*, and it can be used to extinguish a different monetary debt arising, for example, from a contract of sale. Unlike the money obligation-*res*, the *res* of the obligation and monetary debt from the contract of sale may not have a social reifier at all. This must obviously be distinguished from the property-objects which are the subject-matter of the sale and to which real rights (specifically ownership) are attached that *constitute* the *res* which are themselves *represented* by the physical things, for instance, 'goods'.[73] Furthermore, one needs to separate the money obligation-*res* represented by the banknote from the personal property-*res* (chattel) as represented by the banknote as well since the banknote is itself a chattel and can just be commodity or curio in exceptional cases.[74] (One feels reminded of the physical copy of a book representing the personal property-*res* and the copyright-*res* at the same time.)

The rare scenario in *Banco de Portugal v. Waterloo & Sons*[75] shows how this principle works in practice. In that case the Bank of Portugal ordered and was delivered 600,000 banknotes (500 escudo notes) by a British printer, and the Bank of Portugal put them into circulation. Then 500,000 notes were ordered from the printer by a rogue posing successfully as having been authorised by the Bank of Portugal and were delivered by the printer in breach of contract. These unauthorised notes were also put into circulation, and the Bank of Portugal was forced to withdraw the whole issue of these banknotes. The question was whether damages claimed were only in relation to the printing costs of the banknotes, or whether damages were, in addition, the exchange value in sterling of the Portuguese currency given in exchange for the unauthorised notes. The HL (by a 3:2 majority) decided in favour of the latter. The banknotes, authorised or not (they came from the same printer and were not actual

[71] Through the Gold Standard Amendment Act 1931, s. 1, see Mann, 31, Geoffrey Crowther, *An Outline of Money* (London: Nelson, 1946), 62, 319.
[72] This is discussed below under 3.
[73] See definition of goods under the Sale of Goods Act 1979, s. 61(1).
[74] *Moss v. Hancock* [1988] 2 QB 117 (in this case a coin).
[75] *Banco de Portugal v. Waterloo & Sons* [1932] AC 452, HL.

forgeries) have no legal effect as promissory notes before they are issued,[76] and if destroyed before, the liability for damages would be for the cost of paper and printing of the notes. After issue, the bank undertakes an obligation in relation to the notes in circulation which is denoted by the face value of the notes, here within a paper currency. The latter amount is the proper measure of damages (together with the printing costs).[77] One could also say, in the terminology of dematerialised property, the mere printed paper represents the personal property-*res* (damages for its destruction), while the face value on the banknote represents the debt/money-*res* (damages for lost currency value of the note).

Similar cases highlight the difference within the social signifier that represents the personal property-*res* as well as the *res* of money-as-obligation. A situation is where a banknote has been stolen and the distinction has to be made whether ownership transfer is possible: in relation to the tangible personal property of the paper the *nemo dat* rule would normally apply, in relation to the banknote representing the money obligation-*res* the exception to the *nemo dat rule* applies instead and the bearer is entitled, so as to preserve full negotiability and fungibility of paper money. The exception to the *nemo dat* rule of the money obligation[78] prevails over the general principle of *nemo dat* in relation to the physical paper.[79] Another situation is where a banknote or a coin could be put into circulation and transferred as currency but is in fact transferred as curio or commodity, such as a rare coin or a historical banknote. In such a case there is no question of fungibility and no exception of the *nemo dat* rule for money because the object did not operate as money; rather, there is only the personal property-*res* element (represented by the physical paper or metal object). The general rules of personal property transfer apply, so that the person from whom the coin/note has been stolen can request their restitution as specific objects. These physical objects to be restored are the social reifiers of the *res* as medal or curio, not as money-obligation.[80] If a (bearer) bill of exchange or cheque is said to be currency or as good as cash, this means that for practical purposes one *res* (contractual debt directed at money) is equated with another *res* (the money-obligation itself): legally this equalisation is imprecise and normally incorrect.[81]

---

[76] This is the general rule for promissory notes and bills of exchange: bills of exchange have legal effect only if delivered (handed over) to the payee, see BoEA 1882, ss. 21, 84.
[77] *Banco de Portugal v. Waterloo & Sons* [1932] AC 452, HL, at 478, 483, 510.
[78] The reason that a bearer in good faith and for value obtains good title even if the transferor has a defective title is not that money has no ear-mark, but that the physical object operating as money is currency, not commodity, see *Moss v. Hancock* [1899] 2 QB 111, at 115-116.
[79] *Miller v. Race* (1758) 2 Kenyon 189 (see also 1 Burr 453), 96 ER 1151, at 1154. Lord Mansfield says (at p. 1154) that banknotes 'become the same as cash.' In a modern system of money, banknotes are cash because the promise to exchange to gold at face value is meaningless.
[80] *Moss v. Hancock* [1899] 2 QB 111, at 116.
[81] *Banque Belge pour l'Étranger v. Hambrouck* [1921] 1 KB 321, at 323, 326.

d) Bank Money and Definitions of Money

The discussion so far has focused on the property aspect of money if it is cash and its representation in form of banknotes and coins. For bank money the representation is only in relation to the money-obligation *res*, without any further personal property element: the money-*res* is represented by the accounting entries.[82] Since the lawyers' main concern is the transfer of, and entitlement to, money, legal definitions of money tend to be pragmatic and incorporate the usual economic definition of money. Money in law is generally defined with reference to *Moss v. Hancock*.[83] The characteristics of money is that it is fully negotiable and, unlike commodities, has no purpose beyond payment or discharging debts. Another decision stresses the social acceptance of money: 'Money, properly speaking, is whatever common consent has fixed upon as a sign denoting a certain value'.[84] This opinion moves towards an economist's understanding of money, for whom money is usually defined as any asset that can easily be used to purchase goods and services. It fulfils three roles: being a medium of exchange, a store of value, and a unit of account[85] (the *numéraire* according to Walras[86]). Lawyers accept this view,[87] sometimes with some minor additions,[88] and often with emphasis on the role as medium of exchange,[89] which mirrors the legal model of the sales contract as the principal concept of transactions. Apart from the fact that economists tend to take the functions of money for the meaning of money,[90] the definition is not quite complete for the lawyer, especially with regard to the store of value function.[91] Banking business distinguishes between narrow money (M1) and broad money (M2-4).[92] The US Federal Reserve and other central banks use the

---

[82] Savatier, 216-217.
[83] *Moss v. Hancock* [1899] 2 QB 111, at 116: Money is 'that which passes freely from hand to hand throughout the community in final discharge of debts and full payment for commodities, being accepted equally without reference to the character or the person who offers it and without the intention of the person who receives it to consume it or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities.'
[84] *Miller v. Race* (1758) 2 Kenyon 189 (also 1 Burr 453), 96 ER 1151, at 1154 per Lord Mansfield.
[85] Crowther, 15-16; Paul Krugman, Robin Wells, *Economics*, 4th ed (New York: Worth Publishers, 2015), 854-856, Gregory Mankiw, *Principles of Economics*, 6th ed (International Edition) (Mason, O./London: Cengage Learning, 2012), 621.
[86] Léon Walras, *Théorie de la monnaie* (*extrait de la revue scientifique, numéros des 10 et 17 avril 1886*), (*Bureau des revues*, 1886), 12, 15.
[87] McKendrick, 488, Mann, 22-23.
[88] Proctor, 10-12, who adds 'a measure of value or … a standard for contractual obligations' (at p. 10).
[89] Mann, 5, 22.
[90] Krugman and Wells, 854: 'Money is defined in terms of what it does.'
[91] See briefly in the conclusion below.
[92] Peter Howells, Keith Bain, *The Economics of Money, Banking and Finance*, 3rd ed (Harlow: Pearson, 2005), 231.

aggregates of M1 and M2 to measure the overall money supply;[93] the Bank of England categorises M1 money as currency, bank deposits and central bank reserves.[94] For present purposes, 'money' is certainly M1, but can also be M2: this is less relevant for the legal concept of dematerialised property and the *res* that money is, because this notional dematerialisation in law is also a conceptual monetisation of all assets, whether being money in the narrow sense or not.

Commodity money[95] (with an intrinsic value), and commodity-backed money[96] (by reference to an intrinsic value)[97] are historical forms of money today.[98] The current system is that of *fiat money*, that is, being established by order of law as money without any intrinsic value and without any commodity-backing,[99] not just accepted and used as money or means of payment in certain communities, based on a social convention.[100] The law orders that banknotes and coins without any intrinsic value *have to* be accepted as satisfaction of debts and thus declares them as *legal tender*[101] or compulsory tender. Thus an object with no intrinsic value must be accepted by law as full and complete payment, not in lieu of payment (such as payment by cheque[102]), but as payment proper, and is inconvertible or irredeemable (e.g. in form of gold). This concept is not specific to a particular jurisdiction.[103] Coins were always legal tender, banknotes of the Bank of England were finally declared legal tender in England since 1833.[104] Before, banknotes were money, but not legal tender.[105] Banknotes issued by Scottish banks are not legal tender, either in England in Scotland.[106] It appears that Scottish banknotes were classical promissory notes of

---

[93] The exact definitions of M1, M2, M3, M4 depend on the country. For the USA, see Krugman and Wells, 857-858; Mankiw, 624-625. For the European Central Bank see the Bank of England website: http://www.bankofengland.co.uk/statistics/Pages/iadb/notesiadb/m3.aspx (visited 19 November 2016). See also Deutsche Bundesbank, *Geld und Geldpolitik*, ch. 3: *Das Buchgeld* (2015), 69-74.
[94] Bank of England, *Money in the Modern Economy: An Introduction*, *Quarterly Bulletin Q1* (2014), 5-8. Central bank money can also be referred to as M0.
[95] E.g. gold and silver coins, see Crowther, 18-23, for a short discussion of the history.
[96] Gold standard of a paper currency, in the UK until 1931 with interruptions. For the history of its collapse, see Crowther, 354-362. More tenuous backing through Bretton Woods system until 1971, see Mann, 34.
[97] Krugman and Wells, 856-857; Mankiw, 621-622.
[98] See Mann, 30-34, for the history.
[99] Krugman and Wells, 857, Mankiw, 622; Bank of England, *Money in the Modern Economy*, 5.
[100] That is more the economist's interpretation of money, see e.g. Crowther, 36, Mankiw, 622.
[101] Mann, 41. The present legal basis for banknotes as legal tender in England is the Currency and Bank Notes Act 1954, c. 12, s. 1 (3), for coins as legal tender in the whole UK the Currency Act 1983, c. 9, s. 1 (3) amending Coinage Act 1971, c. 24, s. 2.
[102] Payment by cheque has been referred to as payment in cash, for example in the Scottish case *The Glasgow Pavilion v. William Motherwell* (1903) 6 F 116, IH, at 119.
[103] E.g. for Germany § 14 Bundesbankgesetz 1992.
[104] Bank of England Act 1833, s. 6.
[105] *Wright v. Reed* (1790) 3 TR 554 (100 ER 729). Mann (n 9) 40-41.
[106] *The Glasgow Pavilion v. William Motherwell* (1903) 6 F 116, IH, at 119. Only coins issued by the Royal Mint are legal tender, see Donald B Caskie, *Wallace and McNeil's Banking Law*, 10th ed (Edinburgh: Green/Sweet and Maxwell, 1991), 18. See also Currency and Bank Notes Act 1954, c. 12, s. 1 (1) and (2).

the issuing Scottish banks until the Banking Act 2009 in the wake of the financial crisis.[107] Bank money[108] and electronic money (digitised cash)[109] are money, but not (or not yet[110]) legal tender.

e) The Money Obligation as a Normative Text

It follows from the foregoing: When payment of a monetary debt arising from a contract of sale, for example, is made with money, the sales debts become discharged and thereby replaced by the money obligation (the money debt from a debtor's perspective, now a different debtor), being the *res*, represented by physical refiers, such as banknotes and coins. Where the creditor has to accept by law this payment as satisfaction of his claim and full discharge of the debt, the money obligation represented by the refiers is legal tender. Payment can also be made by a different means which can be converted at any time into legal tender under the conditions of a healthy economy, for example payment through cheques or bank money[111] transfers that can be converted into cash and are therefore usually 'as good as cash'. In the case of bank money the *res* is represented by accounting entries only, thus essentially a text (and figures) with normative quality. Ultimately all money is a normative text[112] creating a debt and a legally enforceable expectation to obtain real value (e.g. tangible property) at a future time.[113]

3 The Creation of Money

Money itself is an obligation (a 'debt'[114]) because of the money supply process which is really a money creation process. There is a dual system of money supply: money created by central banks and money created by commercial banks.

---

107 The Banking Act 2009 introduced in s. 217 the requirement that banknotes issued by the Scottish banks must now be backed by backing assets.

108 *In re Stonham. Lloyds Bank v Maynard* [1963] 1 WLR 238 at 245: Money is also money on deposit at a bank, provided no substantial period of notice for paying out is required. Hence National Savings Certificates are not money, see *In re Hodgson. Norwell v. Flannery* [1936] 1 Ch 203, at 207, for want of the fungible quality of money.

109 Proctor, 50. On the definition of electronic money, see EU-Directive 2000/46/EC on the taking up, pursuit of and prudential supervision of the business of electronic money institutions, Art. 1 (3)(b).

110 See e.g. overview of limits for cash payments in the EU at: http://www.europa-consommateurs.eu (accessed 6 Dec 2016).

111 The difference is that cheques are regarded as in lieu payments, while bank money is usually not.

112 Andreas Rahmatian, *Money as a Normative Text*, 13(2) *Journal of International Business and Law* (2014), 228.

113 This is an application of Jeremy Bentham's idea of property in general, Bentham (n 37) 112: 'The idea of property consists in an established expectation; in the persuasion of being able to draw such or such an advantage from the thing possessed … this persuasion can only be the work of law.'

114 See also Bank of England, *Money in the Modern Economy*, 3: 'Money in the modern economy is just a special form of IOU … a financial asset', or, put differently, a *res*.

a) Money created by Central Banks

Among a central bank's purposes as the bank of the commercial banks and the government, and as the regulator of monetary policy and the lender of last resort,[115] its role as the issuer of banknotes is the most obvious to the general public.[116] Relevant is here that a banknote represents a debt of the issuing central bank expressed by the face value. Since conversion into gold or any other commodity of value is no longer possible, the debt is self-referential, since the promise to pay is redeemed with further promises to pay.[117] In fact, the debt is never repaid but 'eternal'.[118] As already said, payment of a debt arising from a contract of sale with banknotes (cash) is the replacement of the sale's debt with a money obligation represented by the banknote, being legal tender, so the original debt is extinguished. Commercial banks keep accounts with the central bank: their cash holding consists of banknotes issued by the central bank and of their deposits with the central bank ('central bank money').[119] When commercial banks need additional banknotes, for example to pay customers withdrawing from their accounts, or to pay out a loan granted, they reduce their credit balance with the central bank and increase their liability.[120] The central bank can increase or reduce the quantity of money issued to the public.[121] The money supply can be regulated or, realistically, influenced somewhat through changing the quantity of reserves (purchase/sale of government bonds, lending of reserves to banks) or through changes of the reserve ratio of banks with the central bank. Historically, these forms of monetary control have been the central regulatory measures of the monetary system central banks have, and economics textbooks still stress this role of central banks.[122]

---

[115] Walter Bagehot, *Lombard Street: A Description of the Money Market* (London: Henry S King, 1873), chapter VII, sections 44-75.
[116] Crowther, 58; Ross Cranston, *Principles of Banking Law*, 2nd ed (Oxford: Oxford University Press, 2002), 111.
[117] Crowther, 62-63.
[118] Hans Christoph Binswanger, *The Growth Spiral* (Berlin-Heidelberg: Springer, 2013), 40.
[119] Crowther, 59-60.
[120] Crowther, 47; Binswanger, 40 and note 3. There are further ways in which a bank can increase its cash holding.
[121] Crowther, 62.
[122] E.g. Mankiw, 632-635.

b) Money created by Commercial Banks

(i) Credit creation theory of money

However, the degree of a central bank's influence must be weighed against the fact that most circulating money, well over 90%,[123] is bank money created by commercial banks. This is the second and much more important method of creating money – by way of credit granted by commercial banks.[124] Traditionally it has been assumed (and a large proportion of the general public may still hold that view) that commercial banks grant credits out of the deposits by their customers, the so-called financial intermediation theory of money.[125] The Bank of England itself has recently laid to rest this idea,[126] and the House of Commons has followed the Bank of England's position in a debate devoted to money creation.[127] Another view, the fractional reserve theory of money, is misleading because it claims that the central bank determines the quantity of loans and deposits in the economy by controlling the central bank money with the use of the 'money-multiplier'.[128] The Bank of England has rejected this theory as well as too inaccurate because this is not the proper way in which money is created.[129] However, economics textbooks still maintain the importance of the fractional reserve/money multiplier aspect in the money creation process,[130] and indeed, it plays a certain practical role in banking,[131] although it is not essential to money creation as such.

The proper description of money creation by commercial banks is the credit creation theory of money. It was described already in the nineteenth and early twentieth centuries by authors like H. D. Macleod and J. A. Schumpeter,[132] but it only obtained full recognition by the central banks in their publications after the time of the banking crisis of 2008.[133] The probably unsettling aspect of the credit creation theory

---

[123] Richard A Werner, *How do Banks create Money, and why can other Firms not do the Same? An Explanation for the Coexistence of Lending and Deposit-taking*, 36 *International Review of Financial Analysis* (2014) 72, says that 97% of the money supply in the UK is by credit creation by commercial banks. See also Bank of England, *Money Creation in the Modern Economy*, *Quarterly Bulletin Q1* (2014) 2.

[124] Binswanger, 38; Bank of England, *Money Creation in the Modern Economy*, 2.

[125] See Richard A Werner, *Can Banks individually create Money out of Nothing? – The Theories and the empirical Evidence,* 36 *International Review of Financial Analysis* (2014) 9, for a literature review.

[126] Bank of England, *Money Creation in the Modern Economy*, 2.

[127] Hansard, House of Commons, HC 20 November 2014, col 434.

[128] Discussed further below under section (iv).

[129] Bank of England, *Money Creation in the Modern Economy*, 2. For a literature review concerning the fractional reserve theory, starting with Alfred Marshall, see Werner, *Can Banks individually create Money out of Nothing?*, 6.

[130] E.g. Krugman and Wells, 866-869.

[131] See Crowther, 45.

[132] A Mitchell Innes, *The Credit Theory of Money*, 31 *Banking Law Journal* (1914), 159 (on MacLeod); Werner, *Can Banks individually create Money out of Nothing?*, 3-6.

[133] Bank of England, *Money Creation in the Modern Economy*, 2-4; Deutsche Bundesbank, *Geld und Geldpolitik*, ch. 4: *Die Banken als Geldproduzenten*, (2008) 60-63.

is that it confirms that banks create money out of nothing. The credit theory of money says that a sale/purchase is the exchange of a commodity for a credit,[134] or, as said before, the exchange of a personal property-*res* as represented by the commodity as social refier, for a money obligation-*res* as represented, for example, by a banknote, or by an accounting entry if payment is with bank money. The credit *creation* theory of money says that banks *create* money by granting credit, that is, making a loan. This theory is the only one that is consistent with existing case law, especially *Foley v. Hill*,[135] and can be explained briefly for present purposes as follows. When a bank makes a loan, it credits the customer's account with the loan amount, which also means that the bank indebts itself: the customer-borrower is creditor and the banker-lender is debtor when the bank deposits the loan amount in an account of the customer. Under the general rule, if a normal deposit is made in cash, the banker becomes owner of the banknotes and the customer's debtor while the customer becomes unsecured creditor of the bank for the amount deposited.[136] If the bank makes the loan this is its debt and a claim of the customer (borrower), credited to his account. Thus the bank granting the loan simultaneously creates a matching deposit in the borrower's (customer's) bank account. It is this moment in the accounting process which creates the money.[137] The customer will use the credit to pay a third party to extinguish their claim. But the customer-borrower is at the same time obviously debtor of the amount lent: the bank credits itself with the amount of the loan the customer owes (on the assets side of the bank's balance sheet) and at the same time debits itself with the loan amount as deposit of the customer owed to him by the bank (on the liabilities side of the bank's balance sheet), because the loan money has been paid into the customer's account. Thus banks grant credit by indebting themselves, and the borrower pays his debts with the debts of the bank.[138] The credit money does not come from existing customers' deposits.[139] Since the bank's liability to extend the credit is matched by a deposit in the borrower's bank account, this is only a lengthening of the bank's balance sheet,[140] that is, the increase of the assets and liabilities of a balance sheet by the same amount.

[134] Innes, 152.
[135] *Foley v. Hill* (1848) 2 HLC 28. See also *Joachimson v. Swiss Bank Corporation* [1921] 3 KB 110.
[136] *Foley v. Hill* (1848) 2 HLC 28, at 36-37.
[137] Bank of England, *Money Creation in the Modern Economy*, 1, 3.
[138] See Bank of England, *Money Creation in the Modern Economy*, 3; Deutsche Bundesbank, *Geld und Geldpolitik*, ch. 3: *Das Buchgeld* (2015), 76-80; Crowther, 43-45; Binswanger, 39-40; Howells and Bain, 235-239; Werner, *How do Banks create Money, and why can other Firms not do the Same?*, 71-72.
[139] A relatively early clear statement in: Federal Reserve Bank of Chicago, *Modern Money Mechanics* (1994), 6: '[Banks] do not really pay out loans from the money they receive as deposits. If they did this, no additional money would be created.'
[140] Werner, *How do Banks create Money, and why can other Firms not do the Same?*, 72.

This balance sheet extension distinguishes banks from other companies or non-financial institutions when they grant loans. If a normal company grants a loan and transfers money to the borrower, that reduces the lender's deposit (cash) assets and increases the claim assets resulting from the loan, because the funds granted must come from some other funds within the company. Overall, the total size of the company's balance sheet does not change, because the increase of the claim is matched by a decrease of the funds out of which the lent money is paid. If a bank grants a loan, the size of the balance sheet is lengthened because the assets side (claim being the borrower's liability to repay the loan) is matched by the liability side (customer deposit, borrower's claim/bank's liability being the amount of the loan granted), and there is no balance drawn down when the loan is paid (in bank money) to the borrower. The accounts also show that the bank never actually pays out the loan but still owes the money because no actual transfer of funds from anywhere within the bank to the customer has occurred. The bank rather re-classifies its liabilities when it 'pays out' the loan: the bank's 'accounts payable' obligation (the bank's liability to the borrower to pay out the loan because of the loan agreement) is reduced by the loan amount and at the same time re-classified as 'customer deposit' of the borrower with the bank, although neither the customer-borrower nor the bank deposited any funds.[141]

This new 'customer deposit' is the new money created through credit, and it is money according to the understanding of money in banking practice:[142] it is a new money-obligation or *res*. Since a *res* is an abstract legal notion according to the concept of dematerialised property, there is no need for an already existing *res*, perhaps represented by a physical reifier. A money obligation-*res* can be created out of nothing like any other obligation or like a work of copyright. The new deposit (a re-labelled bank liability) arises out of nothing because no funds coming from within the bank have actually been paid out. Since the bank has created a legally enforceable claim through the accounting entries for granting the loan, and since this claim can ultimately be transformed into physical assets in the enforcement process in case of non-repayment, the bank has itself created a real value (expectation value) as creditor by virtue of an act of writing. The accounting entries are therefore a normative text, similar to the text of a bill of exchange or cheque made out in accordance with the legal formality requirements.[143] The difference is that the drawer of the bill of exchange attaches his liability (the payee's/indorsee's/holder's claim) inescapably to his own funds and assets which stand behind it, and the legal basis for this liability is clearly extant,[144] while a bank's loan claim and corresponding debt come out of

[141] Werner, *How do Banks create Money, and why can other Firms not do the Same?*, 73-74.
[142] See Bank of England, *Money in the Modern Economy: An Introduction*, 7, 9.
[143] BoEA 1882, s. 3(2), s. 89(1).
[144] BoEA 1882, ss. 53-58.

nothing and are not attached to other funds of the bank, and the legal basis for the right of the bank to create such a claim is obscure.[145]

Since the creation of money by credit out of nothing may appear unsatisfactory, attempts have been made to argue that a creation truly out of nothing does not really take place. The money the banker creates is his liability and he must provide for payment in cash when asked, and although the system is based on the assumption that only few at any one time will demand payment, the banker must ensure that his cash does not fall below a certain proportion of his deposit liabilities. Furthermore, the earning capacity of the borrower, the bank's loan claim or a security are assets, and the acquisition of such assets brings about the deposit which just transforms other forms of less mobile wealth into liquid money.[146] What this argument overlooks is the fact that *first* the money-obligation *res* or asset is created, and only *then* corresponding assets, such as the borrower's earning capacity or property as security may be attached, or, if cash payment must be made, the debt is replaced by central bank money, being another debt which is never repayable but eternal as a result of the fiat money system. The credit as an asset is not counterbalanced by the corresponding liability (hence the characteristic balance sheet extension), and so the liability cannot be posited as some value already in existence that could contradict the idea of a creation out of nothing.

(ii) Exception from client money rules for banks

The invented customer deposit, being the created money, is in substance indistinguishable from the 'real' deposits by customers. Any existing 'real' deposits are however irrelevant for the grant of loans, contrary to the financial intermediation theory of money. Non-banks cannot create money by way of giving credit, because their funds for the loan must come from own funds. Furthermore, as a necessary device for money creation, they do not normally hold customer deposits. This is unlike banks, where real deposits can be complemented by invented ones, that is, liabilities re-classified as customer deposits which are also debts from the bank's perspective. If non-banks obtain customer/client money, they have to keep them in separate accounts as trustees, such as solicitor's accounts, segregated from their own business accounts.[147] For example, the client money rules of the UK Financial Conduct Authority require client deposits to be held in segregated accounts with banks.[148]

---

[145] See below under 4 and 5.
[146] Crowther, 44, 46-47.
[147] See the SRA Account Rules 2011 of the Solicitors Regulation Authority (SRA), Rules 13 *et seq*.: Client Accounts, e.g. Rules 13.2, 13.5, 14.1, 14.2, 18.2, 20.1.
[148] FCA Handbook CASS 7.13.3 'Client Money Rules: Segregation of Client Money' (version: release 11, Nov. 2016), see www.handbook.fca.org.uk (visited 14 November 2016).

Banks are expressly exempt from this requirement. The following is not client money: any deposit within the meaning of the CRD held by a CRD credit institution,[149] and: 'The money held for that client is held by the firm as banker and not as a trustee under the client money rules'.[150] This exception mirrors the general rule in *Foley v. Hill* that a banker taking deposits does not hold the money as a trustee of the customer but only assumes a liability as an ordinary party (debtor) to the contract with the customer.[151] It is, however, this exception from the normal client money rules which enables banks to create money through credit by mixing different liabilities.[152] This reflects the economic concept of a bank as a reservoir of money.[153] The courts recognise that deposited funds are not specifically segregated, but commingled with the bank's other funds.[154] That method of money creation also enables banks to shore up their finances by simply finding new borrowers to whom they grant loans and thereby increase their capital.[155] In the same way possible obligations to pay fines from regulators can be met, or compliance with capital adequacy rules can be achieved.

(iii) The interpretation of client money protection by the UK Supreme Court in the **Lehman Brothers** *liquidation case in contrast to banks*

The UK Supreme Court decision of *Lehman Brothers International (Europe) v. CRC Credit Fund Ltd*[156] illustrates well the difference between a normal institution taking client money with a duty to keep that money segregated and a bank which is exempt from this requirement, since the money paid to the bank is not defined as client money and not held in trust. Although the insolvent firm in question, Lehman Brothers International (Europe) ('LBIE'), was a trading subsidiary in the UK of the US holding company as part of the (then also insolvent) Lehman Brothers investment bank group, this firm did not operate as a bank. It was authorised by the Financial

[149] A full CRD credit institution is, for present purposes, a bank authorised under relevant EU regulations (abbreviated as CRD).
[150] FCA Handbook CASS 7.10.16 and 7.10.19 'Client Money Rules: Credit Institutions and Approved Banks' (version: release 11, Nov. 2016).
[151] *Foley v. Hill* (1848) 2 HLC 28, at 43-44; Ellinger, 120-122.
[152] Werner, *How do Banks create Money, and why can other Firms not do the Same?*, 74-75.
[153] Ellinger, 215.
[154] *Azam v. Iqbal* [2007] EWHC 2025 (Admin), [2008] BusLR 168, paras. 15-17, 27-29, and *Foley v. Hill* (1848) 2 HLC 28, at 36: 'The money paid into the banker's, is money known by the principal to be placed there for the purpose of being under the control of the banker; it is then the banker's money; he is known to deal with it as his own': hence a segregation of accounts makes no sense. Accordingly, the money paid into the account cannot be traced (tracing as the equitable remedy *in rem* for breach of trust) and the customer is unsecured creditor, see *Sinclair v. Brougham* [1914] AC 398, at 419. See also Ellinger, 120.
[155] Example by Werner, *How do Banks create Money, and why can other Firms not do the Same?*, 76.
[156] *In the matter of Lehman Brothers International (Europe) v. CRC Credit Fund Ltd*. [2012] UKSC 6, also reported as: *Lehman Brothers International (Europe) (in administration) v. CRC Credit Fund Ltd. and others* (Financial Services Authority intervening) [2012] Bus LR 667.

Services Authority (FSA), as it then was, to take and handle client money, but not to keep deposits.[157] The firm was therefore subject to client money rules under Chapter 7 of the Client Assets Sourcebook ('CASS 7'), issued by the FSA under s. 138 of the Financial Services and Markets Act 2000 and giving effect to the EU Markets in Financial Instruments Directives (MiFiD).[158] The CASS 7 rules required LBIE to segregate the client money and to keep it in separate accounts. Since under normal English trust law the segregation of clients' money alone is not sufficient to establish a proprietary (equitable) interest in the clients' funds[159] because the necessary declaration of trust is usually lacking (no certainty of intention), and a declaration of trust without segregation is not sufficient either (no certainty of subject-matter),[160] CASS 7 created a statutory trust which did not have to be interpreted according to the criteria of ordinary trust law.[161]

Lord Hope discussed briefly the Scottish equivalent of the English statutory trust solution, given that Scots law, as in Civil Law jurisdictions, does not have an English-style trust with its division into common law and equitable ownership. The 'trustee' in Scotland is an agent and fiduciary of the client and therefore the client's money is held by the agent ('trustee') on his client's behalf, so that in case of the agent's/trustee's insolvency, the client money still belongs to the client and does not form part of the agent's insolvent estate.[162] Similar solutions that seek to emulate the English statutory client money trust without taking over the division of ownership (as that would stand against the idea of the property concept of *dominium* in Roman law) can be found in European jurisdictions. In France, the corresponding device would be the *fiducie*, whereby the client enjoys proprietary protection of his client money as a *bénéficiare*, which resembles much the equitable ownership of an English beneficiary

---

[157] *Lehman Brothers v. CRC Credit Fund*, para. 24.

[158] Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on Markets in Financial Instruments (OJ 2004 L145, p. 1) and the Commission Directive 2006/73/EC of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards organisations requirements and operating conditions for investment firms and defined terms for the purposes of that Directive (OJ 2006 L241, p. 26). On the implementation of these Directives in Civil law jurisdictions who do not have the division into legal and equitable ownership under English trust law, see Dorothy Gruyaert and Sander van Loock, *UK Supreme Court Decision on Lehman Brothers Client Money: Equity or Lottery?*, 22(2) *European Review of Private Law* (2014), 225.

[159] This is the basis for the protection of clients' (investors') funds from the firm's creditors in case of the firm's insolvency, because equitable ownership ensures that the clients do not part with ownership and the clients' funds do not become part of the insolvent firm's assets, and that equitable ownership can only be effected with a trust.

[160] *Lehman Brothers v. CRC Credit Fund*, para. 186.

[161] *Lehman Brothers v. CRC Credit Fund*, para. 110. Especially the distribution rules of the trust (client) money under the trust do not follow general trust law, but the CASS 7 rules, *Lehman Brothers v. CRC Credit Fund*, para. 121.

[162] Lord Hope in *Lehman Brothers v. CRC Credit Fund*, paras. 2, 8, 10, 12. Lord Hope could have given a more 'proprietary' explanation for the Scottish trust as a *fiducia*, in that the agent-trustee holds a special patrimony for the client beside his personal general patrimony, but he did not go into too much detail.

in effect. German law considers the fiduciary relationship (*Treuhand*) as a contractual, though fiduciary, obligation of the owner to act in accordance with the fiduciary obligations to the client-beneficiary in relation to the client money. Although the client has only got a contractual, not proprietary, claim, in insolvency proceedings of the owner the client-beneficiary can require the separation of his client money from the insolvent estate of the owner under the fiduciary duty.[163] Despite these different legal solutions, the result – the protection of the segregated client money in case of the trustee's insolvency – is the same.

In *Lehman Brothers*, all five judges of the Supreme Court were of the opinion that the statutory trust arises when the client's money is received.[164] But it was a 3:2 decision on the following issue. Under the CASS 7 rules, LBIE had the option to pay incoming client money into a segregated client account on the day or the next business day (normal approach to money segregation requirements), or, as LBIE was a multi-product, multi-currency firm, it could instead pay incoming client money into the firm's own account with the duty to segregate client money in a client bank account on a daily basis after a reconciliation of records and accounts of the entitlement of each client for whom the firm holds client money with the firm's existing client accounts (alternative approach).[165] LBIE opted for the alternative approach, that is, LBIE paid client money into and out of its own accounts, but failed on a massive scale to identify and segregate client money according to the alternative approach rules.[166] When LBIE became insolvent and therefore when the primary pooling event in relation to client money under the CASS 7 rules occurred, the question arose whether the primary pooling arrangements also apply to client money held in non-segregated accounts. The Supreme Court had to decide further whether participation in the client money pool depends on whether actual segregation of client money has taken place (contributions theory) or not but ought to have taken place (claims theory).[167]

The majority in the Supreme Court[168] decided in favour of the claims theory, thus the primary pooling arrangements also apply to client money in LBIE's own accounts. The pooling at the primary pooling event includes any non-segregated client money in any account of the LBIE into which client money has been received.[169] An interpretation of the wording of the CASS 7 rules does not confine the client money

[163] Gruyaert and van Loock, 230-233.
[164] *Lehman Brothers v. CRC Credit Fund*, paras. 15, 62, 111, 128, 171.
[165] The rules are set out in detail in *Lehman Brothers v. CRC Credit Fund*, para. 39.
[166] *Lehman Brothers v. CRC Credit Fund*, para. 27.
[167] *Lehman Brothers v. CRC Credit Fund*, para. 139.
[168] Lord Clarke of Stone-Cum-Ebony, Lord Dyson, Lord Collins of Mapesbury.
[169] The non-segregation happened in breach of the client money rules in CASS 7, *Lehman Brothers v. CRC Credit Fund*, paras. 27, 80-81.

pooling and distribution arrangements to actually segregated client money in separate accounts. This wide interpretation is also in line with the rationale of the MiFiD to ensure investor protection.[170] According to the minority view,[171] however, only client money actually segregated in client accounts is entitled to participate in the client money pool (contributions theory), because a trust without segregation cannot really provide protection for the money supposedly held in trust. The effect of the majority opinion would be that those clients whose money was indeed segregated would have to share the risk with the unsegregated clients which reduces considerably the individual pro-rata share on distribution and 'makes investment banking more of a lottery than even its fiercest critics have supposed'.[172] To construe CASS 7 in the way of the majority view would have the effect of depriving the client of the protection which the rules were designed to achieve at the very moment when it is most needed.[173]

Regardless of the position one takes on *Lehman Brothers*, in relation to money creation the difference between a financial services firm and a bank is apparent. LBIE was a financial services institution which could handle money, but not take deposits and therefore had to hold client money separately on trust, either through actual segregation in client accounts or through required segregation at a later stage. That makes the creation of money impossible, because a firm like LBIE is neither allowed to take deposits nor to grant loans as part of their business activities,[174] but exactly that would be required to be able to re-classify one liability as a different type of liability (bank liabilities being paid-in loan money re-labelled as customer deposits). The obligation of a client money trust account would stand against that. The decision in *Lehman Brothers*, that the statutory trust arises on receipt of the client money, underlines that: 'Where money is received from a client … it would be unnatural, and contrary to the primary purpose of client protection, for the money to cease to be the client's property on receipt, and for it … to become his property again on segregation.' (per Lord Walker).[175] But that is the situation of a bank, because there is no trust for the benefit of the customer:[176] the money received becomes outright property of the banker, and when money is paid out again the customer becomes owner. By law and implemented by the client money rules for financial institutions, a

[170] *Lehman Brothers v. CRC Credit Fund*, paras. 109-110, 167-169, 171, 196.
[171] Lord Hope of Craigshead, Lord Walker of Gestingthorpe.
[172] *Lehman Brothers v. CRC Credit Fund*, para. 85, per Lord Walker.
[173] *Lehman Brothers v. CRC Credit Fund*, para. 18, per Lord Hope.
[174] If a private loan is granted by a firm like LBIE, that loan must derive from its assets. For example, the cash amount lent is replaced by a corresponding claim against the loan debtor.
[175] *Lehman Brothers v. CRC Credit Fund*, para. 63.
[176] *Foley v. Hill* (1848) 2 HLC 28, at 43-44.

bank does not hold the money on trust that is paid in by the customer, so for a bank a *Lehman Brothers* scenario would not have arisen.

From the perspective of the concept of dematerialised property the client money is the *res* (here a debt which is the money, but it could also be the *res* reified by a physical chattel). If the *res* (client money) has been segregated under the statutory trust according to the CASS 7 rules, it is trust property and the clients' claims to the trust property are proprietary. If the client money-*res* has not been segregated, the claims to the client money are contractual, and for the minority view in *Lehman Brothers*, they are indeed. The majority opinion somehow changed the contractual claims concerning the *non-segregated* client money to proprietary claims on which the client protection in case of non-compliance of the firm with the rules was based.[177] For present purposes that makes no difference: even if the majority view could be interpreted contrariwise as 'contractualising' the clients' proprietary claim to the actually *segregated* client money and so as effectively dissolving the trust relationship, this does not resemble a bank, because a commercial bank's privilege of reclassifying liabilities is still absent.

(iv) Banks' capital adequacy requirements and fractional reserve

There are, however, a few limitations to the banks' privileges. In connection with capital adequacy requirements, banks have certain restrictions as to the amount of money they can create. It is clear that banks create their deposits (through reclassification of the banks' debt to pay out the loan granted as a new customer deposit, again a debt to the customer), and are not dependent on the real deposits as a result of customers having money paid into their accounts with the banks.[178] Capital adequacy rules require that banks must hold a fraction of their total deposits with the central bank.[179] If the required fraction of the deposits in reserve has to be 10%, a loan of 100 (i.e. money created by credit paid into an account) does not make available an amount of 100 for further loans that can be deposited with this or another bank, but only 90: that is, the reserve ratio is 10% or 1/10. These 90 allow the bank to lend for 90-10%, another for 81-10% and so forth. Thus the total increase of bank deposits is 100+90+81+72.9 … or, put differently, the money multiplier is 10, being the reciprocal of the reserve ratio of 1/10 in the present example.[180] According to this fractional reserve theory of money, when banks hold a fraction of deposits in reserve, banks create money in that way, and central banks supposedly influence the amount

[177] Gruyaert and van Loock, 249.
[178] Crowther, 50.
[179] Or they are kept by the bank as cash which is central bank money.
[180] Instructive example by Deutsche Bundesbank, *Geld und Geldpolitik*, ch. 4: *Die Banken als Geldproduzenten* (2008), 61.

of money created by changing the reserve ratio: the higher it is, the less banks can lend and the smaller the money multiplier, so that the money supply is decreased.[181] Economics textbooks still describe the process of money creation in this way,[182] although the fractional reserve theory of money on which this explanation is based is a misleading presentation of the actual functioning of the money supply system.[183] The Bank of England itself states that the fractional reserve theory is incorrect: 'Another common misconception is that the central bank determines the quantity of loans and deposits in the economy by controlling the quantity of central bank money – the so-called "money multiplier" approach.' In reality, the reserves are not a binding constraint on lending, nor does the central bank fix the amount of reserves that are available. The banks' individual lending decisions determine the amount of bank deposits, and the real constraint on money creation is by the monetary policy that the central bank adopts.[184]

In fact the obligatory minimum reserve is often well below 10% and depends on the type of liability.[185] The capital adequacy requirements of the Basel Accord (now Basel III[186]) have been criticised as ineffective because they are based on the inaccurate theory that banks are financial intermediaries, that is, banks lend out of their customers' deposits.[187] These matters are, however, not relevant for this discussion of a legal theory of money.

Another aspect that cannot be discussed here is the role that interest plays. An interest-free loan from a bank is legally possible but unrealistic. As a simple calculation of interest and compound interest,[188] an investment of 100 over 10 years with 10% interest yields a sum of 259.37,[189] thus interest increases exponentially. The

---

[181] Mankiw, 629, 630, 634.

[182] Mankiw, 627-632; Krugman and Wells, 864-868.

[183] Werner, *Can Banks individually create Money out of Nothing?*, 6-9, with a critical literature review of representative texts. Also Howells and Bain, 235-244, criticise the money multiplier explanation for the creation and quantity of money as misleading.

[184] Bank of England, *Money Creation in the Modern Economy*, 2, 7.

[185] See, for the Eurozone within the European Union, Regulation (EC) 1745/2003 of the European Central Bank on the application of minimum reserves of 12 Sept. 2003 (ECB/2003/9) OJ L 250/10, Art. 4: reserve ratio 2%, but for deposits with agreed maturity over two years or redeemable at notice over two years it is 0%. The minimum reserves are to be held with the respective national central bank of each EU Member State according to Art. 6. See also European Central Bank: https://www.ecb.europa.eu/ecb/legal/1002/1015/html/index.en.html (visited 19 November 2016).

[186] Basel Committee on Banking Supervision, *Basel III: A global regulatory framework for more resilient banks and banking systems*, pp. 55-56, Pt. 129, 131.

[187] Werner, *How do Banks create Money, and why can other Firms not do the Same?*, 76.

[188] According to the formula $M = P \times (1+i)^n$, whereby M is the final amount, P the principal sum, i is the interest rate per year and n the number of years.

[189] A principal sum of 100 invested for 10 years with 10% interest will be the final repayment sum of $100 \times (1+0.1)^{10} = 259.37$, thus an increase of almost 160%. The assumption is: compound interest once a year.

asset the gain represents is obviously another's liability[190] and has to be met with wealth deriving from somewhere else. Furthermore, if all repay their debts, this destroys the assets of their creditors, and there would not be any money either, being a form of debt.[191]

4 Money in Law as a Form of Enforceable Debt: The Legal Basis for Money Creation and Enforcement

The money creation process shows that money is made in form of a debt. But it is the enforceability of the debt in law, and the fact that law forces the recipient to accept the money-debt as full payment and discharge of another (contractual) debt, that enables money to fulfil its role as a medium of exchange and as a store of value, or more precisely, as a reasonable expectation[192] to obtain genuine value (especially tangible property, such as food, clothes) in the future through exchange. This is particularly important where the expectation to obtain value is the result of a normative text, especially of figures in accounting entries, the representing refier of the *res* in case of bank money. Since everyone can draw up accounts which denote that the lender indebts himself by giving credit at the same time, but only commercial banks can create money in this way (that is, 'out of nothing' with no corresponding value), it must be the law which gives legal effect to such an endeavour and which privileges the banks to create money through credit.

For cash and central bank money in general (including central bank resources) we have legal sources. There are the respective provisions for coins,[193] bank notes[194] and the right of the Bank of England to issue banknotes,[195] and legal rules ordering that cash be legal tender,[196] with corresponding provisions in other jurisdictions.[197]

[190] In case of loans, the calculation of the full amount to be repaid – loan sums plus interest payments – is much more difficult because beside the duration and interest rate, that depends on the type of the loan (repayment mortgage etc.) the amount, number or frequency of repayments, and other costs, which the individual loan agreement would stipulate.
[191] Bank of England, *Money Creation in the Modern Economy*, 3: '[T]aking out a new loan creates money, the repayment of bank loans destroys money.'
[192] The term 'purchasing power' is too optimistic. It suggests a firm causal link between money and the acquisition of real value which can obviously not been taken for granted.
[193] Coinage Act 1971, ss. 3 and 4.
[194] Currency and Bank Notes Act 1954, s. 3: '"bank notes" means notes of the Bank of England payable to bearer on demand'.
[195] Bank Charter Act 1844, s. 1; Currency and Bank Notes Act 1954, s. 1 (1). On the power of the Bank of England to make rules in respect of banknotes issued by Scottish and Northern Irish banks, see Banking Act 2009, s. 216.
[196] Coinage Act 1971, s. 2; Currency and Bank Notes Act 1954, s. 1 (2) and (4). *Suffel v. Bank of England* (1882) 9 QBD 555, at 563.

The provisions make clear that banknotes are money because they embody a promise to pay that is never fulfilled. This means that a central bank discharges its own monetary obligations by delivering new obligations to pay.[198] There are also rules regarding the duty of banks to maintain accounts with the Bank of England as the central bank for netting their inter-banking liabilities and for keeping minimum reserves.[199]

For commercial bank money the legal basis becomes opaque. There are decided cases and regulations which presuppose the existence and recognition of bank money, otherwise the decisions and rules would not make sense. Particularly the central rule that depositing cash in a bank account is equivalent to money lent by the customer to a banker and that this does not make the banker a trustee and bailee of the cash,[200] presupposes the legally accepted transformation of cash into bank money. Bank money, nowadays almost always in the form of digitised transfer,[201] is not legal tender, but payment practices, for example with tax authorities or utility companies, where cash payment is discouraged or only giro transfer is allowed, elevates bank money practically to the status of legal tender, or, put differently, the notion of 'legal tender' becomes less and less important.[202] The English courts have taken a pragmatic approach early on.[203] Nevertheless, all these provisions regulate what one can do with bank money, but not how bank money has to come into existence. It seems that the creation of bank money through credit is an informally recognised banking practice whereby the legal recognition happens indirectly by ordering legal consequences which are based on the assumed and accepted creation of bank money as a debt. Or the informal legal recognition is simply based on lawyers' insufficient appreciation of the bank money creation process. It can hardly be doubted that there *is* legal recognition for the creation of bank money by granting loans, because the accounting entries on a sheet of paper or in a computer of the bank unquestionably result in a

---

197 In Germany, the equivalent provision on the issuing of banknotes and legal tender is § 14 Bundesbankgesetz 1992 (BGBl. I, p. 1782), at EU-level Art 128 TFEU (ex-Art 106 TEC). See Art 128 TFEU: 'The banknotes issued by the European Central Bank and the national central banks shall be the only such notes to have the status of legal tender within the Union.'

198 Proctor, 30 note 129; Binswanger, 40.

199 Bank of England Act 1998, ss. 6, 17(7) and sched. 2.

200 *Foley v. Hill* (1848) 2 HLC 28; *Joachimson v. Swiss Bank Corporation* [1921] 3 KB 110, at 117-118.

201 This digitised transfer of bank money must be distinguished from electronic money as digitised cash.

202 Proctor, 26.

203 *In re Harmony and Montague Tin and Copper Mining Company (Spargo's Case)* (1872-73) LR 8 Ch App 407, CA, at 411-412: it would be 'an absurd and unjustifiable result … that an exchange of cheques would not be payment in cash, or that an order upon a banker to transfer money from the account of a man to the account of a company would not be a payment in cash', followed by *The Glasgow Pavilion v. William Motherwell* (1903) 6 F 116, IH, at 119-120: cheques equal payment in cash, a distinction between cheque payment and cash payment is unjustifiable. The cheque is of course drawn on an account in bank money which presupposes bank money as a lawful concept.

legally enforceable debt of the borrower vis-à-vis his lending bank, whereby the lending bank has created the loan by indebting itself, as described before.[204] The legal enforcement of the debt arising from the loan finally leads to a forcible transfer of the borrower's physical property, thus real value, in enforcement or insolvency proceedings.[205] It is actually at this point when the conceptual money-debt *res* changes into a *res* represented by a physical object of genuine value.[206] Since a particular accounting method (one that is only available to banks) creates a legally enforceable claim, the law enables the transformation of the expectation value of money into the real value of assets seized in enforcement in case of non-payment of the debt.

5 German Law as an Example for Enforcement of Bank Money as Debt: Findings from an Interview

When trying to find the legal basis for the creation of bank money through credit by commercial banks it is worthwhile looking at the laws in Germany. The tradition of the *Rechtsstaat*[207] with its inherent principle of legal certainty[208] and the experiences of the complete corruption of the constitutional and legal system in the Third Reich that the idea of the *Rechtsstaat* was supposed to safeguard has prompted the German legal order to provide meticulously detailed regulations in all areas of the law to give effect to the principle of a constitutionally completely accountable executive power, together with a complex system of specialist courts. And indeed, there is a rule dealing with the creation of bank money through credit by commercial banks. The surprising point is that this rule could be interpreted as a prohibition.

The German Banking Act 1998 (*Kreditwesengesetz* 1998, KWG), provides in § 3(1)(3) that the conduct of lending business or deposit business is prohibited if, by agreement or in accordance with normal business practice, it is impossible or made seriously difficult to dispose of the credit amount or of the deposits by way of withdrawal in cash.[209] This prohibition goes back to a provision of the Banking Act

---

[204] See above under 3.

[205] In England: Civil Procedure Rules, Part 70, Part 83 *et seq*.; Insolvency Act 1986, Second Part, ss. 251A *et seq*. In Scotland: Bankruptcy and Diligence (Scotland) Act 2007, Parts 4-11, Bankruptcy (Scotland) Act 2016, ss. 78, 109.

[206] If the debtor repays the loan in cash, the bank money-*res* (from the bank's perspective) is replaced by a central bank money-*res*: one debt is replaced by another debt of different origin. In that case the expectation value of money is not transformed into real value. The same effectively applies if the debtor transfers bank money from another account to repay his loan, only that (from the bank's perspective) bank money (the loan deposit) is simply destroyed.

[207] Georg Jellinek, *Allgemeine Staatslehre*, 3rd ed (Berlin: O Häring, 1914), 248-249, 362, 613.

[208] Hans Kelsen, *Reine Rechtslehre* (Wien: Österreichische Staatsdruckerei, 1992), 257, 314.

[209] § 3(1)(3) Kreditwesengesetz 1998 – Verbotene Geschäfte.

1961[210] and had a predecessor in a similar prohibition in a law of 1934,[211] not surprisingly, since the financial crash of 1929-31 was fresh in people's memory.[212] A violation of this rule renders the whole agreement void;[213] in addition, it is a criminal offence.[214] The idea of this prohibition of misuse of bank money or cashless payment is that banks can otherwise provide credit without having liquidity (cash) available as backing assets and can therefore disproportionately strongly influence, particularly increase, the quantity of money and consequently disturb the financial stability of a national economy. This was exactly the reason given for the introduction of the prohibition in § 3(3) of the Banking Act 1961;[215] the corresponding provision in § 3(1)(3) of the current Banking Act 1998 is identical. This rule shall also prevent the establishment of isolated exchange circles in the economy where the delivery of goods is only paid for with crediting an amount on an account as consideration which cannot be withdrawn and converted to cash.[216] A company or bank could then theoretically obtain infinite capacity to grant loans. Since deposits could not be readily withdrawn, a deposit guarantee would be doubtful. It is this latter concern which commentators regard as the principal point the prohibition is directed at, more than the danger to the general economy because of a potentially uncontrolled expansion of money through the unrestrained grant of bank credits.[217]

This cautiously restrictive interpretation of the prohibition in § 3(1)(3) is revealing, because at first sight it appears that this provision has exactly the creation of bank money through credit in mind. As described before, when a bank makes a loan, it credits the customer's account with the credit amount and thereby indebts itself because the bank has technically the obligation to pay out the loan money (in cash): instead it credits the customer's amount with bank money, whereby at the same time the customer becomes debtor as he is borrower of the bank money lent. The

---

[210] § 3 (3) Gesetz über das Kreditwesen of 10 July 1961 (BGBl. I, no. 149, p. 881).

[211] § 2 Gesetz gegen Missbrauch des bargeldlosen Zahlungsverkehrs of 3 July 1934 (RGBl. I, p. 593). The law of 1934 was a typical product of economically interventionist and posturing paternalist fascism, but also sought to suppress the emergence of complementary currencies.

[212] See Jörg Schäfer, *Die zivilrechtliche Qualifizierung des Interbankenabkommens* (Berlin: Duncker und Humblot, 1990), 21.

[213] Andreas Schwennicke, § 3 n. 20 in Andreas Schwennicke, Dirk Auerbach, *Kreditwesengesetz (KWG). Kommentar* (München: C H Beck, 2009), 220; Andreas Schäfer, § 3 n. 30 in Karl-Heinz Boos, Reinfrid Fischer, Hermann Schulte-Mattler, *Kommentar zum Kreditwesengesetz*, 5th ed (München: C H Beck, 2016), 228, both with further references.

[214] § 54 Kreditwesengesetz 1998 (fine or imprisonment for up to five years). The offenders would be the directors and other organs entitled to act on behalf of the company or bank.

[215] The relevant statement in the preparatory material for the draft Banking Act 1961 is quoted in Schäfer, § 3 n 20 in Boos, Fischer, Schulte-Mattler, 226, and at length in Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), *Merkblatt verbotene Geschäfte* (15 Nov 2012), pt. 4. See www.bafin.de (visited 30 Nov. 2016).

[216] Schäfer, § 3 n 19 in Boos, Fischer, Schulte-Mattler, 226; Schwennicke, § 3 n 15 in Schwennicke and Auerbach, 218.

[217] This is at least what Schäfer, § 3 n 21 in Boos, Fischer, Schulte-Mattler, 226, maintains.

customer could theoretically withdraw the money lent from his account and so obtain cash, if the loan agreement allows this. If not, this appears to be an unacceptable exclusion or restriction of cash withdrawal of a credit amount or a deposit under § 3(1)(3).

Commentators regard the prohibition of § 3(1)(3) as applicable only if cash withdrawal is excluded altogether, either by agreement, or factually made difficult, for example because of disproportionately high withdrawal fees, but the exclusion of cash withdrawals in individual cases is arguably not covered.[218] A German court has decided that if a bank does not generally exclude or inhibit cash withdrawals of its loans or deposits, it does not fall under § 3, even where the bank excludes frequently cash withdrawals from loan deposits in individual cases.[219] There is also authority to the effect that if cash pay-out of a loan is not available, but only crediting to an account opened for the borrower instead from which giro transfers can be made, this is not a violation of § 3.[220] The main justification for the court's view was that 'this practise corresponds to an ever-increasing need for cash-less transfer of money' and the bank does not evade the monetary policy measures of the German central bank in this way.[221] The court seems to have had the practicalities of business transactions in mind but apparently has not appreciated the conceptual basis of money creation. Capital investment business is not considered as being subject to § 3 either.[222]

Credit agreements are often silent on the question of cash withdrawals since bank money and cash are generally considered as effectively equivalent. But if the customer can insist on a cash withdrawal of the loan amount (so that the prohibition of § 3(1)(3) is definitely avoided),[223] then even a fairly small number of credit customers will bring about the immediate melt-down of the banking system, because only an insignificant amount of the granted bank loans is backed by cash. In Germany, as in other countries, only cash is legal tender.[224] What does it mean if the customer can exercise his right in law but almost never in fact for systemic reasons? For example, can a customer claim from an insurance company because the insured event has occurred, but only if not too many other customers in the same situation do the same? Thus the exercise of certain rights granted to all depends on the number of people availing themselves of this right at any one time: a legal rule which benefits all

---

[218] Schäfer, § 3 n 23 in Boos, Fischer, Schulte-Mattler, 227; Schwennicke, § 3 n 17 in Schwennicke and Auerbach, 219.
[219] OLG Stuttgart, 7 December 1971, *Versicherungsrecht (VersR)* (1972), 380-387, at 381.
[220] OLG Frankfurt am Main, 29 March 1972, *Wertpapier-Mitteilungen (WM)* (1972), 1196-1198, at 1197.
[221] Ibid.
[222] Schäfer, § 3 n 24 in Boos, Fischer, Schulte-Mattler, 227.
[223] The same applies if the customer directs the bank to pay out in cash to a third party, for example, the seller from whom the customer has bought goods.
[224] § 14 Bundesbankgesetz 1992.

but not everyone in a given concrete situation. It always applies in general but never in (all) individual cases, a legal version of Zeno's paradox, and it reflects accurately the core of banking business.

If the rule of § 3 does apply, then the violation of the prohibition theoretically vitiates the loan agreement, so the borrower need not repay the loan. Judicial interpretation has watered down this consequence considerably: the loan agreement as a whole would not be rendered void, only the prohibition of cash withdrawal would be, because the purpose of the prohibition is not to prevent bank loans.[225] One needs to ask whether the cash withdrawal is not the most crucial part of the loan agreement, and whether the prohibition of § 3 is not exactly directed at preventing banks from inflating their credit capacity by avoiding to honour their cash obligations in – all? – individual cases of loan deposits. By creating bank money through credit, commercial banks increase enormously the quantity of money circulating in the economy (at least about 95% of all money is created in this way), and the cash withdrawal of that bank money (credit amount) is, if not prevented altogether, significantly hindered through normal business practice ('*geschäftliche Gepflogenheit*'), which is precisely what the prohibition of § 3(1)(3) envisages. And yet, the creation of bank money through credit by commercial banks exists in Germany as anywhere else.[226]

In an attempt to solve this problem, the author conducted an interview with Hans Scharpf, attorney-at-law in Frankfurt am Main, Germany,[227] a specialist in commercial law and in the combat of white-collar crime, in his offices in Frankfurt on 18 June 2015. Scharpf also produced information leaflets and gave talks about the legal foundations of the monetary system in Germany, and has been engaged in legal battles with banks by asserting that bank loans granted are void and unenforceable.[228] The interview focused on the following questions: the regulation of the (bank) loan in German private law and the prerequisites for its enforceability in court; whether or not bank loans are enforceable and why; the experience with banks and law courts when maintaining the critical position about the legality of the method of creating money by credit.

The interviewee's experience has been that the prohibition of § 3(1)(3) of the German Banking Act 1998 should actually cover the creation of money by way of credit by commercial banks, but the courts do not really engage with that legal argument; their only counterargument is that banks are not 'undertakings' or

---

[225] OLG Stuttgart, 7 December 1971, *Versicherungsrecht (VersR)* (1972), 380-387, at 381.
[226] As is also described by the German Central Bank, see Deutsche Bundesbank, *Geld und Geldpolitik*, ch. 3: *Das Buchgeld* (2015), 69-74.
[227] https://www.anwalt.de/scharpf (visited 26 Nov 2016).
[228] E.g. H. Schwan, Interview with Hans Scharpf: 'Im Schuldenstreik', *Frankfurter Allgemeine Zeitung*, 18 May 2013.

businesses in the meaning of § 3, so that this prohibition is not directed at banks.[229] This view cannot be maintained because banks are undertakings in the sense of § 1 of the Banking Act,[230] and § 3(1)(3) obviously has commercial banks in mind: these are the only 'undertakings' that can benefit from the accounting privilege of reclassifying deposit accounts instead of creating trust accounts, which is the basis of the money creation. The German and the British practices are the same. Either lack of interest, or lack of understanding makes the German judiciary not apply § 3 and so turns it effectively into a dead letter.

Since the prohibition of § 3 does not seem to operate, Scharpf uses (also in litigation) a different argument to show that the money creation scheme by commercial banks seems incompatible with German law. The basis of this reasoning is private law and the loan provision of the German Civil Code or BGB. The BGB distinguishes between a loan of money under § 488 BGB (*Gelddarlehen*) and a loan of physical things (§ 607 BGB, *Sachdarlehen*). According to the rule of § 488 the lender's obligation under the loan contract is to place the agreed loan amount of money at the borrower's disposal. The mere crediting of bank money against the customer's account is not a placing of the loan amount of money at the borrower's disposal, this would only be cash. § 488 speaks of a '*Geldbetrag*' (amount of money), and a clear legal definition of '*Geld*' (money) does not exist.[231] However, legal commentators regard bank money as money, and so the lender's obligation is not restricted to paying out in cash only,[232] and there are pronouncements by the German Supreme Court (BGH) in this regard.[233] This view is nevertheless at variance with the peculiar principle in German private law[234] that property objects or things (*Sachen*) in law are only corporeal things (§ 90 BGB). This means that (physical) cash is a thing in law, but not (incorporeal) bank money, a debt, since debts/claims are not things according to the BGB.[235] Often money is seen as an example for fungible things

[229] Interview Hans Scharpf, 18 June 2015.
[230] § 1(1) Banking Act (KWG) 1998: 'Banks are undertakings …' ('*Kreditinstitute sind Unternehmen* …'), Schwennicke, § 1 nn 1-4 in Schwennicke and Auerbach, 19.
[231] Interview Hans Scharpf, 18 June 2015.
[232] Gerd Nobbe § 488 n 28 in Hanns Prütting, Gerhard Wegen, Gerd Weinreich, *BGB Kommentar*, 10th ed (München: Luchterhand, 2015) 879.
[233] BGH 11 Oct 1995, VIII ZR 325/94, BGHZ 131, 66-75, at para. 24: the loan amount has accrued to the payee if the amount has been paid in cash or credited (as bank money), but not if only a cheque has been handed over.
[234] This derives from Savigny; for the history of this development contrary to the general *ius commune* principle which recognises incorporeal things as things in law, for example also § 285 Austrian ABGB, see Thomas Rüfner, *Savigny und der Sachbegriff des BGB*, in Stefan Leible, Matthias Lehmann, Herbert Zech (eds), *Unkörperliche Güter im Zivilrecht* (Tübingen: Mohr Siebeck, 2011), 33, 42-46.
[235] Alexander Peukert, *"Sonstige Gegenstände" im Rechtsverkehr*, in Stefan Leible, Matthias Lehmann, Herbert Zech (eds), *Unkörperliche Güter im Zivilrecht* (Tübingen: Mohr Siebeck, 2011), 95. The details are more complex, which cannot be discussed here.

(*vertretbare Sachen*, § 91 BGB),[236] and one can infer this from other provisions,[237] but some authors restrict the category of fungible things to cash only.[238] One could therefore argue that only cash, being a thing, is money, while bank money, not being a thing in law, is not, in which case the lender's obligation in § 488 BGB to provide 'an amount of money' has not been discharged. The uninformed legal practice seems to see cash and bank money equally as 'money', while the BGB still adheres to a nineteenth-century notion of money.[239] This is possibly the same with many lawyers who may still think that bank money is somehow backed by deposits or other (cash) reserves.

A further problem is that bank money is really only a promise to deliver cash, but does not make cash (automatically) available to the borrower, which a strict reading of § 488 BGB would require.[240] According to that rule, money is only made available to the borrower when the borrower has received the loan amount, and that is when the loan money has left the lender's assets and has definitively become part of the borrower's assets;[241] only at this point the borrower's duty to pay interest arises.[242] This seems to envisage the loan of a private person to another person and applies presumably even to bank money. But the money creation mechanism by commercial banks does not seem to comply with this rule: the loan money in form of bank money does not come from existing bank assets and does not leave the bank's assets but becomes a re-classified obligation (hence the balance sheet extension in the books of the bank). Thus the loan is theoretically voidable, and the borrower could exercise a retention right and suspend repayment because the lender has not delivered.[243] The last argument also applies if one discards the specifically German restrictive interpretation of things/property as being physical objects only. In accordance with the notion of dematerialised property, the *res* as the legal concept – irrespective of whether or not reified in some corporeal form – must finally leave the lending bank's assets and must finally become part of the borrower's assets to constitute an enforceable loan agreement with an enforceable claim to capital and interest.

Mr Scharpf affirmed that the German courts consider § 488 BGB as the appropriate basis for bank loans and enforce claims arising from these. The lines of

---

236 Barbara Völzmann-Stickelbrock, § 91 n 3 in in Hanns Prütting, Gerhard Wegen, Gerd Weinreich, *BGB Kommentar*, 10th ed (München: Luchterhand, 2015), 77.

237 E.g. § 783 BGB (order, '*Anweisung*'): 'money, negotiable instruments or *other* fungible things …' (emphasis added).

238 Köhler, § 23 n 6, 342.

239 § 488 BGB (loan of money) was introduced in an amendment in 2002, when the present banking practice was already fully established. Whether the amending legislator appreciated modern banking practice or based the amendment on an out-dated idea of money is unclear.

240 Interview Hans Scharpf, 18 June 2015.

241 Nobbe § 488 n 26 in Prütting, Wegen, Weinreich, 879.

242 Nobbe § 488 n 40 in Prütting, Wegen, Weinreich, 881.

243 Under § 273(1) BGB. Interview Hans Scharpf, 18 June 2015.

argument set out before have, so far, not shown any real effect. The courts enforce the loan agreements and do not deal with any argumentation that questions the legal foundation of the underlying money creation system bringing about these loans. However, some judges seem to have voiced some doubt in private conversation that the legal basis of the money-creating bank loan is not that clear.[244] 'Enforcement' can really mean the application of the English law equivalent of a writ of execution. At this point (arguably not at the point of the grant of the bank loan) property of real value changes hands. Where loans are embodied in a directly enforceable documentary title (e.g. the *Hypothekenbrief*, a form of asset-backed security, mortgage deed), enforcement by seizing immoveable property, for example, can be effected immediately without an intervening trial in court where submissions could be made.

The interview with Mr Scharpf confirmed the author's thesis. Money is a legally enforceable debt. It is the law which creates money and makes it operative, either through specific legislation (for example, the designation of legal tender) or through enforcement by the law courts of claims arising out of loans where specific legal rules are absent and the exact legal basis is uncertain. It is the courts' recognition and enforcement of a particular sequence of accounting entries by *banks* which turns these into a normative text and confers on them the status of money (unlike with the same accounting procedure if done by non-banks). That may be the result of insufficient understanding of the money creation process as the source of the enforced bank loans, but, in any case, the courts' enforcement makes bank money to money. Thus the usual definition of money as a means of exchange, unit of account, store of value does not describe adequately the essence of money. This view may startle economists, but they often take money for granted without much reflection.

6 Conclusion

The concept of dematerialised property explains better the phenomena of money in the modern commercial world. It shows that there is no conceptual reason to limit a definition of money to cash only and so to leave out the practically infinitely more important type of money, bank money as a form of debt, as older theorists of money have however done.[245] Some assumptions lawyers make about money may derive from an incomplete understanding of the money creation process, especially in relation to bank money. A distinction between cash, bank money, credit, debt may be

[244] Interview Hans Scharpf, 18 June 2015.
[245] Mann, 5-6.

inappropriate in view of the realities of the modern monetary system. The article has also demonstrated that the legal sources of the money creation process by commercial banks are rather obscure: they are presupposed and implied by the judiciary and legal practice rather than specifically regulated by the legislature. The enforcement of a certain system, on the assumption that it is already in existence, in fact brings the system into effect. Money is therefore a legally enforceable debt (obviously not all legally enforceable debts are money) and it is this enforceability which gives a phenomenon (especially a set of accounting entries) the quality of money in law as the instrument of payment. Goode's pragmatic idea – what money is, is determined by what payment is[246] – only makes sense with this theoretical underpinning. Initially it is not about payment, but about enforceability by way of creating a debt through a specific accounting method. Payment is only a consequence.

This also shows that money is not a store of value outright, because the debt quality of money only embodies a value of expectation. A legal understanding of money also shows that the economists' distinction between a 'Chartalist' or state theory of money[247] and a functional theory of money[248] is really a false dichotomy, because all forms of money are ultimately creatures of the law:[249] where there is no (perceived) legal enforceability, the means of exchange will not operate as money.

---

[246] McKendrick, 488.
[247] Knapp has commonly been regarded as the principal representative of this theory, see Georg F Knapp, *The State Theory of Money*, H M Lucas and James Bonar (eds) (Mansfield Centre CT: Martino Publishing, 2013), 1. The same view also in Mann, 13-20.
[248] Mises, 70-71. An early predecessor is Savigny, 408, 432, but he contradicts himself in effect when he discusses paper money (at 413) and the withdrawal of currency (at 451-452).
[249] For historical backing of the argument that money is a legal institution, see Christine Desan, *Money as a legal institution*, in David Fox, Wolfgang Ernst, *Money in the Western Legal Tradition: Middle Ages to Bretton Woods* (Oxford: Oxford University Press, 2016), 18, 29.