

Chapter 2

On the Conventional Nature of Money

2.1 Background

By now everyone is likely to be aware of the numerous worrisome events that have taken place on the monetary and financial markets during the past decade. 1

Many refer to the combination of these worrisome events as “*the* financial crisis”, although it would probably be better to speak about a sequence of successive financial crises which according to some even have resulted in an “economic recession”. Recent research even seems to indicate that these events are evidence of a so-called “system failure” (that very well may be of a permanent nature).¹

It has not been the intention to hereafter give an umpteenth journalistic view on these events which evidence the failure of the current monetary and financial system. 2

One can find myriad publications doing just that. Many of them entail excellent further reading which can be strongly recommended.²

The present book merely aims to outline a number of personal considerations about money and the monetary system, including thoughts on the underlying causes of the aforementioned system failure (see in particular this chapter and Chap. 3).

As already mentioned in its Chap. 1, the present book will also make an attempt to conceive an alternative approach for the current organization of the monetary system (see in particular Chaps. 4 and 5).

¹See especially Galbraith (1990).

²See *e.g.* Achterhuis (2011), p. 319; Engelen (2011); Boatright (2010), p. 592; Chérot and Frydman (2012), p. 302; de Bettignies and Lépineux (2009), p. 258; Harvey (2010), p. 296; Kerste et al. (2011); Giovanoli and Devos (2010), p. 610; Kerste et al. (2011), p. 225; Kirton et al. (2010), p. 345; Leader and David (2011), p. 519; Middelkoop (2009, 2014); Mishkin (2012), p. 832; Pagliari (2012), p. 274; Peil and Van Staveren (2009), p. 626; Piketty (2014), p. 696; Sedlacek (2011), p. 368; Shaxson (2012), p. 272.

3 The following quite revealing statement is attributed to Henry Ford (1863–1947)³:

It is well enough that people of the nation do not understand our banking and monetary system, for if they did, I believe there would be a revolution before tomorrow morning.

After reading the present book, every reader will hopefully understand this statement, albeit that the intent of this book is not to call for a (violent) revolution, but for a democratically conceived and fundamental revision of the monetary (and financial) system, for which some lines of thinking will be proposed in Chaps. 4 and 5.

Perhaps bankers, described by some as the “prophets” of the neo-liberal religion, truly have prophetic gifts (see marg. 4 of Chap. 1 of this book), as evidenced by the following extract from a letter (with a content quite similar to the aforementioned quote by Ford). Said letter is attributed to the Rothschild brothers and deals with the significance of the banking and monetary system. It was purportedly addressed to some of the employees of the Rothschild brothers (New York, 1863)⁴:

The few who understand the system will either be so interested in its profits or be so dependent upon its favors that there will be no opposition from that class, while on the other hand, the great body of people, mentally incapable of comprehending the tremendous advantage that capital derives from the system, will bear its burdens without complaint, and perhaps without even suspecting that the system is inimical to their interests.

4 The second chapter of this book therefore is necessarily one of “demystification”.

Often the monetary and banking system is considered to be very complex. This is undoubtedly the case for the many, highly specialized financial products and services that have been created during the past decades and that, generally, constitute complicated agreements which, in particular when things go awry, become the object of equally complex rules and regulations, being issued by legislators and/or supervisory authorities at a huge cost for society.⁵

³<http://www.brainyquote.com/quotes/quotes/h/henryford136294.html#MU7bvrjhhrdCGGBu.99/>; see also <http://www.themoneymasters.com/the-money-masters/famous-quotations-on-banking/>.

⁴<http://www.themoneymasters.com/the-money-masters/famous-quotations-on-banking/>.

⁵In the documentary “*Capitalism – a love story*” film maker Michael Moore goes looking for the underlying causes of the financial crisis of 2008. When interviewing several financial and financial law specialists, he asks them to explain certain complex financial products. This leads to embarrassing moments when the specialist cannot provide the answers to the said questions.

For a general overview of some of the numerous documentaries and movies on the subject of the financial crisis of 2008, see <http://documentaries.about.com/od/populardocsubjects/tp/EconomicDocumentaries.htm>.

Yet the mechanism at the base of the monetary and banking system, at least when looked into from an elementary historical angle, is inherently not so complex.⁶

As this chapter and Chap. 3 of this book intend to demonstrate, the present-day monetary and financial system is simply a very handy, albeit perverse mechanism used by the capital backers of the banking and monetary system to acquire as much wealth as possible for themselves, without any significant concern for the immense sorrow this causes to the rest of mankind.

The second chapter of this book is furthermore the result of a(n elementary) 5
research trip through the history of the monetary and banking system, above all aiming at demonstrating that, in essence, money is nothing else than that which “we”—mankind—consider to be money.

Yuval Noah Harari refers to this as to a continuous “*trust in the fabrications of the collective imagination*”⁷.

The said historical analysis above all aims at demonstrating that money has an intrinsic changeable nature, and hence that “we”—mankind—might just as well “choose” to use something else as money instead of what we currently use.⁸

As already mentioned, this browsing through the (uncommonly fascinating) 6
history of the banking and monetary system must necessarily remain concise, so during our tour we only look at a number of major milestones.

The primary intent hereof is to explain the essentially conventional, and therefore even somewhat “arbitrary,” nature of the monetary mechanism, and not to provide a high degree of historical detail.

The reader should hereby above all avoid getting the impression that the monetary system has been created in a thought-out or premeditated way, as this was not (or hardly) the case.

⁶This insight is expressed as follows by John Kenneth Galbraith:

The study of money, above all other fields in economics, is one in which complexity is used to disguise truth or to evade truth, not to reveal it. The process by which banks create money is so simple the mind is repelled. With something so important, a deeper mystery seems only decent. (see Galbraith 1975, pp. 18–19), also quoted on <http://www.themoneymasters.com/the-money-masters/famous-quotations-on-banking/>.

See furthermore Galbraith (1990), p. 19:

The rule is that financial operations do not lend themselves to innovation. What is recurrently so described and celebrated is, without exception, a small variation on an established design, one that owes its distinctive character to the aforementioned brevity of the financial memory. The world of finance hails the invention of the wheel over and over again, often in a slightly more unstable version. All financial innovation involves, in one form or another, the creation of debt secured in greater or lesser adequacy by real assets.

⁷Harari (2014), pp. 200–201.

⁸See, for instance, the recent development of “bitcoins” as an alternative for government issued money used in certain internet transactions.

On the contrary, the process through which money has evolved to what it is today, has been a very gradual one, and in particular one of (a lot of) trial and error.⁹

2.2 The Essentially Conventional Nature of (the) Money (System)

2.2.1 *Money as a Conventional Instrument Since Its Very Creation*

7 In essence, money is a purely conventional system (in the widest sense of the term) which relies on a significant degree of mutual trust between the people who handle it, as is the case for any agreement.¹⁰ As such, money and the monetary system are part of the so-called “social contract” underlying the societal order.¹¹

In this approach, money is whatever mankind (or a certain organized society, for instance “a state”), considers to be money.¹²

This basic premise also implies that, as any conventional mechanism, money is inherently variable. Mankind’s current vision of money is not necessarily forever frozen in time, since the social contract which deals with money can be modified, just like any other contract.

Put otherwise, within the monetary and financial system, there is no (unalterable) law that would be established forever.

8 Money and the set of legal rules that have further shaped today’s money and monetary system, are moreover the result of historical developments.

9 Whoever takes the trouble to study the history of money and the monetary system in some depth will soon notice this “evolutionary” (and therefore, by definition, inherently variable) nature of money (and the monetary system).

It will hereby become as clear that these changes often did not take place in leaps and bounds, but rather gradually.

⁹One could even argue that, throughout all human endeavor, “trial and error” has been the usual “method” or rather “process” of creating societal systems, and for coming up with solutions to problems arising from living together (see Popper 1940, p. 403).

On the subject of the history of money and the banking system, see especially Bogaert et al. (2000) (also available in Dutch and French; see Bogaert, Kuran-van Hentenryk and Van der Wee 1991; Bogaert, Kuran-van Hentenryk and Van der Wee 1991); see also Galbraith (1975); Galbraith (1990).

¹⁰Harari (2014), p. 201.

¹¹The term “contract” is here not so much used in its traditional legal meaning of a “private law agreement” between two or more persons, but in the sense of a set of norms adopted by a society by means of all kinds of international and state law mechanisms. As is the case for private law agreements, such mechanisms are themselves also subject to change and evolution.

¹²For further reading, see especially Galbraith (1975) and Galbraith (1990). Compare Brook and Watkins (2012), p. 77.

In some cases, these historical changes (resulting in the forms of money and the monetary system in use today) were motivated by the search for answers to problems arisen with former money (use).

Especially moments of financial crisis often caused tinkering with the monetary system in force at a given time. *On the one hand*, this resulted in the gradual establishment of a monetary system embedded in legal regulations. *On the other hand*, this contributed to the creation of a gradually increasingly globalized approach, as a result of which present-day money is in most countries in the world based on the same underlying philosophy (namely economic neo-liberalism).

It should therefore come as no surprise that money and the monetary system do not constitute a philosophically neutral commodity, but are to a large extent the fruit of a view, or better yet, of a combination of various views on society. This nevertheless does not contradict the starting premise that money and the monetary system are not the fruit of one premeditated and abstract (economic/philosophical) doctrine, but rather of a gradual and evolutionary process which throughout the ages has been fertilized by theoretical, philosophical, religious, ideological, political and other considerations, often during or subsequent to (financial) crises.

It is, as said, not the intention of the current book to give a comprehensive or detailed outline of the genesis of money and/or its history.¹³

We can instead make do with an outline of a number of major milestones, for the sole purpose (as mentioned above, at marg. 6 of this chapter) of showing that money has always had a conventional (intrinsically variable) and to a certain extent even “arbitrary” nature.

Consequently, the forms of money we know today (in addition to the underlying mechanisms of money creation), should in no way be considered to be “immutable”.

Allegedly, it is not possible to trace an exact creation date for money or for the economy based on a monetary system.

On the contrary, it seems that different societies—in economic terms we might speak of “national economies”—adopted the “money” mechanism at specific moments in history.

The aforementioned “process” (which presumably occurred several times, in different parts of the world and at different times¹⁴) most probably interacted with the transition from a nomadic lifestyle to an agrarian society.

While an intensive commercial system (based upon money and a monetary system) was not needed to satisfy the economic needs of nomadic societies (consisting of relatively small, nomadic tribes mostly living off the proceeds of hunting and fruit gathering), the situation changed once societies evolved into agrarian ones, composed by larger, sedentary groups of people.¹⁵

¹³See the vast literature on this subject, e.g. Galbraith (1975); Galbraith (1990); Alvard (2013), p. 216; Bogaert et al. (2000), p. 422; Davies (2002), p. 720; Nussbaum (1950), p. 618; Fase and Vleminckx (1995), p. 192; Korteweg (1970); Kleinpeter (2000), pp. 59–64; Crockett (1981).

¹⁴Harari (2014), p. 197.

¹⁵Harari (2014), p. 194; Pinxten and De Munter (2006), pp. 47–48.

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In these “agrarian” oriented societies, the individual became increasingly reliant on (barter) trade to satisfy his needs.¹⁶

The increasing use of barter trading in its own turn formed the breeding ground for the ascent of money (and the financial system). Direct barter trade hereby gradually evolved into a system of “indirect barter.” A particular good, which usually had little or no intrinsic use, hereby began to function as the good against which all other goods and services could be exchanged.¹⁷

Thus money came into being.¹⁸

- 14 The intrinsically conventional nature of money was quite evident from the very beginning: money was “created” when a consensus grew within a given society that choosing a good against which all other goods and services could be exchanged, would be beneficial for sound economic trade planning.

2.2.2 *Origins of Coin-Based Monetary Systems*

- 15 The aforementioned so-called “social contracts” concerning the use of money were not only based on a consensus on the use of money as a generally accepted (= universal) means of exchange for the acquisition of other goods and services, but also about which material good might be appropriate to serve as money.

In the first stages of this money genesis process, various goods have been assigned as money. Different societies used different goods for this purpose.

However, throughout the centuries and all over the world, a strong preference would arise for the use of metal (often so-called “precious metals”¹⁹), mostly because these could be easily “coined”. It therefore does not come as a surprise that the monetary system had already become a full-fledged coin system²⁰ in *e.g.* the Ancient Greek²¹ and Roman²² civilizations, being in essence agrarian societies which conducted trade and had most of the (hand) labor done by slaves²³.

¹⁶Harari (2014), p. 195. See also Pinxten and De Munter (2006), pp. 57 a.f.

¹⁷Ferguson (2009), p. 24.

¹⁸According to Plato, society itself originated when (coin) money came into use. In this approach, indirect trade economy is what gave shape to the economy and state organization (see Plato 1987, p. 61).

See also Galbraith (1975), pp. 7 a.f.

¹⁹See further Graeber (2012), p. 26; Ferguson (2009), p. 27; Korteweg (1970), p. 35.

²⁰Bogaert et al. (2000), pp. 19 a.f.

See also Martin (2013), p. 15; Harari (2014), pp. 200 a.f.; Mandel (1962), pp. 254–258.

²¹Bogaert et al. (2000), pp. 23 a.f.

²²Bogaert et al. (2000), pp. 44 a.f.

²³Galbraith (1987), p. 9.

Slavery still expresses the love of capitalism, especially of the rich and the powerful, to exploit other people’s labor as cheaply as possible (in order to get themselves as rich as possible), a love that regretfully still prevails in modern societies.

While large parts of the world evolved towards a coin based monetary system, coining—i.e. the creation of money out of metal—became to an increasing extent the prerogative of state (or other public) authorities.²⁴

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As mankind organized itself increasingly into basic organizational legal structures, many of those structures started to gradually organize their own monetary system. Making abstraction of the name given to such organized “social structures,” they usually had in common that a group of people considered themselves to be part of the same structure (*e.g.* a country, a sovereign city or region, etc.), generally controlled by a central leadership, often having sovereign claims on a given territory, where people who were not part of this structure did not have free access, but needed authorization from the central leadership.

It need not surprise that in society models relying on coin-based economies, the coining gradually became a prerogative of such central leadership. In such cases, only the ruler (sovereign, emperor, king, prince...) could coin money, which was evidenced by the fact that the coins in such an economy often bore the picture of its sovereign.²⁵

This formula proved to be very successful. Coin-based money systems hereby gradually gained more and more confidence in view of the fact that the government became responsible for the money coining.²⁶

In some cases, rulers responsible for issuing coin money, gradually wielded the coining even as a source of income. When such rulers needed (more) money themselves, they bought precious metal and minted coins with a fineness and weight that yielded them a profit. As a result, the value of the metal used in the coins became lower than the face value of the coins themselves²⁷, which could reduce trust in such “alloy” coin money.²⁸

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This for instance happened in Ancient Rome, where at a certain point in time even local authorities refused to accept money issued by the state and, gradually, also the soldiers of the Roman legions lost confidence in the coin money, which, eventually, hardly contained any gold at all. This attributed to the understaffing of the Roman legions and would consequently contribute to the fall of the Western Roman Empire itself.²⁹

During this historical evolution towards money creation based on coinage by the government, the conventional nature of the money system was essentially not

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²⁴Graeber (2012), p. 27.

²⁵Graeber (2012), pp. 27 a.f.

²⁶Harari (2014), pp. 203–204; Vandewalle (1976), p. 8.

²⁷Vandewalle (1976), p. 8.

²⁸Galbraith (1975), pp. 8–9.

²⁹Eagleton and Williams (2007), pp. 54 a.f.; Pfister (1941), p. 211; Breasted s.d., p. 125; Galbraith (1975), p. 9.

This clearly illustrates that “currency” (= money issued by the government) at all times is to be embedded in the social contract on which the state authority itself is based (see *e.g.* Vandewalle 1976, pp. 9 a.f.). When this trust is lost, the population will refuse to use the currency, which in turn, in extreme cases, can disrupt the organization of society itself.

altered, especially taking into account that a legal society structure itself may be considered as the outcome of a social contract.³⁰

In this approach, a group of people keeps subjecting itself to a certain organizational legal structure to shape their society because they voluntarily choose to do so. In the course of time, they have “agreed” on the outlook of the organizational legal structure of society.³¹

In other words, the monetary system, originating within and by any organizational legal structure shaping society, is itself part of this social contract. More specifically, the money created by the government is accepted by the population on account of the trust that the people have in the authority of the government and its ability to maintain the purchasing power such money represents.³²

Conversely, the power of the sovereign became also increasingly relying on the trust that his population put in his monetary system³³. In this way, the historical tone for an ever increasing interdependence between money and power was set already at an early stage in the history of money.

2.2.3 Money Within Modern States

- 19 In contemporary societies, where the most common organizational legal structure that shapes societies is the so-called modern (central) (nation) “state”, the creation of money is allegedly part of the sovereign state authority.³⁴

Hence, the public bodies or administrations authorized under the constitution of such a modern state determine what constitutes money and what the legal organization of the monetary system looks like³⁵, using procedures that are to a greater or lesser degree “democratic”.³⁶

³⁰Galbraith (1975), pp. 8 a.f.

³¹See Rousseau:

Si donc on écarte du pacte social ce qui n'est pas de son essence, on trouvera qu'il se réduit aux termes suivants. Chacun de nous met and commun sa personne et toute sa puissance sous la suprême direction de la volonté générale; et nous recevons and corps chaque membre comme partie indivisible du tout. À l'instant, au lieu de la personne particulière de chaque contractant, cet acte d'association produit un corps moral et collectif compose d'autant de membres que l'assemblée a de voix, lequel reçoit de ce même acte son unité, son moi commun, sa vie et sa volonté. Cette personne publique qui se forme ainsi par l'union de toutes les autres prenait autrefois le nom de Cité, et prend maintenant celui de République ou de corps politique, lequel est appelé par ses membres État quand il est passif, Souverain quand il est actif, Puissance and le comparant à ses semblables. (Rousseau 2001, p. 53; see also Rolland 1940, p. 53; Brimo 1968, pp. 95 a.f.).

³²See the historical examples summed up by Harari (2014), pp. 203–205.

³³Harari (2014), pp. 203–204.

³⁴See furthermore Martin (2013), pp. 66 a.f.; Shuster (1973), pp. 3 a.f.

³⁵Harari (2014), pp. 200 a.f.

³⁶For further reading, see Shuster (1973).

In many of these “modern” states (especially in the Western world), this legal organization of the money and of the monetary system is based on a more or less cohesive system of laws (or other “law-making” instruments with similar legal force). As a result, the monetary system is (or ever has been) voted in, or at least supported by, a democratically elected parliament, so that it is a reflection of the will of society.³⁷

Even in such a formalized society model, where the conventional nature of money and the monetary system is supported by the “social contract,” their changing characteristic remains an essential characteristic. **20**

Moreover, it appears that (nation) states in general have not been able to monopolize the creation of money entirely. On the contrary, throughout history, there have been several forms of so-called “privately” created money. This fact even still strongly determines the processes of money creation within contemporary societies where privately created money, both in numbers and in general societal impact, has become far more important than money issued by public authorities (see especially Sect. 2.5).³⁸

2.3 Evolution of the Conventional Nature of the Monetary System in the Middle Ages

2.3.1 *The Early Medieval Banking System*

2.3.1.1 Predecessors of the Medieval Banking System

As has been pointed out in Sect. 2.2, already early in Western history, coins composed of precious metals became gradually accepted as money in most parts of the world (usually under the auspices of a public authority).³⁹ Even so, the essentially conventional nature of money and the monetary system remained quite evident throughout Western history, in particular in light of the banking system that arose during the Middle Ages (especially as of the eleventh and twelfth centuries on).⁴⁰ **21**

Without entering in too much detail,⁴¹ some interesting key moments in this particular phase of the genesis of the currently prevailing monetary and financial system will hereafter be dealt with.

The emergence of the modern Western private banking system can be traced back to the Middle Ages⁴² (the period from 500 to 1500 AD).⁴³ **22**

³⁷Deweirdt et al. (1997), p. 27, pointing out the political symbol meaning of money.

³⁸Harari (2014), p. 201.

³⁹Galbraith (1975), p. 10.

⁴⁰Eagleton and Williams (2007), pp. 77 a.f.

⁴¹See further Martin (2013), p. 32; Graeber (2012), p. 534.

⁴²Martin (2013), pp. 88 a.f.

⁴³Graff et al. (2014), p. 9.

Although also in Classic Antiquity there already had been some forerunners of the medieval banks and hence of today's modern banking system,⁴⁴ the latter has principally been shaped by a number of developments which have occurred in the Middle Ages.⁴⁵

23 In medieval Western Europe, mainly from the twelfth century onwards,⁴⁶ there were institutions of all sorts that engaged in one way or another in monetary transactions.⁴⁷

These institutions can be considered as the predecessors of the current banks.

For instance, there were the so-called "money changers." In an era when many cities and regions used their own local coins and inter-regional and international trade became increasingly important,⁴⁸ these money changers more and more played a crucial role in society.

Another example of institutions dealing with money professionally were the "jewelers" (also-called "gold and/or silversmiths"). Gold and silversmiths especially played an important role in the manufacture and storage of money, especially in areas and periods in which private individuals were allowed to have precious metals minted into coins.⁴⁹

Also the so-called "pawn shops" have played a pioneer role in the genesis of modern banking.⁵⁰

Moreover, within large mercantile houses arose affiliates responsible for preserving, transporting and exchanging money (a typical example was the mercantile house of the famous Italian Medici family⁵¹).

⁴⁴Bogaert et al. (2000), p. 19:

The trade of banker (...) appeared for the first time in Greek history towards the end of the fifth century B.C., following the invention of money in Lydia in the last years of the seventh century B.C.

See also Galbraith (1975), p. 8; Ferguson (2009), p. 25.

⁴⁵Mankiw (2011), p. 627.

⁴⁶Bogaert et al. (2000), p. 71.

⁴⁷Bogaert et al. (2000), pp. 75 a.f.; see also Vandewalle (1976), p. 8.

⁴⁸Bogaert et al. (2000), p. 83.

⁴⁹Middelkoop (2014), p. 51.

⁵⁰Bogaert et al. (2000), p. 75.

⁵¹Graeber (2012), pp. 291–292; Ferguson (1998); Bogaert et al. (2000), p. 111; Galbraith (1987), pp. 37 a.f.; Bogaert et al. (2000), pp. 95 a.f.; Middelkoop (2014), p. 52.

Though others had tried before them, the Medici were the first bankers to make the transition from financial success to hereditary status and power. They achieved this by learning a crucial lesson: in finance small is seldom beautiful. By making their bank bigger and more diversified than any previous institution, they found a way of spreading their risks. And by engaging in currency trading as well as lending, they reduced their vulnerability to defaults. (Ferguson 2009, pp. 48–49.)

Initially also ecclesiastical institutions, *e.g.* convents and abbeys,⁵² have played an important role in money circulation, in particular the “Order of the Poor Knights of Christ and the Temple of Solomon” (Lat.: “*Pauperes commilitones Christi Templique Solomonici*”), better known as “the Templars”⁵³. Their main monasteries in Paris and London have even been referred to as “the principal banking houses” of their time and were both major lenders of money and major cashiers for various ecclesiastical and secular powers.⁵⁴

When some of the clients of the Templar banking houses faced increasing (re-) payment difficulties, they started to blame their problems on the banking houses themselves and viewed them as a threat to their power. This would motivate Philip IV the Fair, then King of France (1258–1314) to plead with Pope Clement V (1264–1314) for the dissolution of the Knights Templar, in its own turn leading to the papal bull “*Vox in Excelso*”. Afterwards the role of the clergy in the financial sector largely disappeared, and they were gradually replaced by worldly “financial” institutions (in particular the ones mentioned in marg. 23 of this chapter).⁵⁵

Out of the wide amalgam of institutions listed in marg. 23 of this chapter would gradually emerge the forerunners of today’s banks in (using modern terminology) a process of continuous interaction between private and government initiative.

2.3.1.2 The Medieval Mechanism of Coin Deposits

The institutions listed in the aforementioned marg. 23 of this chapter saw the light at a time when money creation—in essence, the coinage of precious metals (gold, silver, bronze, copper ...) into coins—was increasingly performed by or under the auspices of local sovereigns. Although a lot of variation prevailed, one common factor was that, in most cases, the strongest authoritative body in a specific region often arrogated coinage.⁵⁶

To put it in modern terminology: in such monetary systems, coinage became based on government authority. Otherwise put, money creation had gotten basically in public hands, as at that time in Western history, there was not yet other money besides coins.

With regard to this publically created coin money, the diverse institutions mentioned in marg. 23 of this chapter offered a variety of “financial services”,

⁵²Bogaert et al. (2000), p. 81.

⁵³Delisle (1975), p. 248; Graeber (2012), p. 291; Bogaert et al. (2000), p. 103; Van Houtte (1942), p. 95.

⁵⁴Eagleton and Williams (2007), p. 81; Van Houtte (1942), p. 95; Zilioli and Selmayr (2001), p. 40. See also; Le mystère sans fin des Templiers. In: *Le Vif—l’express* (hors série), January 22nd 2016.

⁵⁵Barber (1978), p. 311; Hamblin and Seely (2007), p. 125; Van Houtte (1942), pp. 95–96.

⁵⁶Eagleton and Williams (2007), p. 77; Martin (2013), p. 74; Galbraith (1975), pp. 8 a.f.

such as the exchange, storage, transportation, coining and melting down of said coins.

As a result, in their respective professional capacity, these types of institutions often accumulated large quantities of coin money (mostly for the benefit of their clients).

In other words, these institutions increasingly functioned as “custodians” of the (cash) money on behalf of their clients (especially merchants, but also other well-off people), who for various practical reasons—many of them related to safety⁵⁷—no longer wanted to keep their own (cash) money (= their coins), but entrusted its custody to said institutions.⁵⁸

Thus came into existence an economic specialism, namely that of “custody” of (cash) money (= coins), in which we can recognize the predecessor of the current deposit function of the banking system, still one of the bases of the present-day financial and monetary system, hence of the prevailing private money creation system itself (see also further, under Sect. 2.5).

27 Since the task of such custodian institution(s) was initially limited to keeping and guarding the entrusted coins, under the commitment to return them to the depositor at the latter’s simple request, they did not yet play a true “bankers’ role”.

In modern terms, the function these institutions performed could be considered a mere “cashier’s function”.⁵⁹

It goes without saying that a sound administration was a crucial element for the success of the respective service suppliers, besides offering guarantees for adequate surveillance (among others, by means of safes, of employing guards and through other security services).

28 However, some further evolutions of this custody function would prove to be of decisive importance for the development of the banking system. Once again, these evolutions were hardly based on preconceived, abstract concepts or systems,⁶⁰ but rather occurred simply while responding to practical opportunities and/or looking for ways to meet the growing needs of the clients of these respective professional “coin custodians”.

29 During these development phases of the modern banking system, an essential characteristic of the “primal form” of the contract of deposit for coins became gradually tinkered with.

The classic contract of deposit goes back to Roman law and essentially applies to a very specific type of agreement, whereby a depository receives a specific item from the depositor under the obligation to give back that very same item (and not

⁵⁷ Among which the risks and inconveniences of moving (huge amounts of) coins (see Eagleton and Williams 2007, p. 81).

⁵⁸ Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 83.

⁵⁹ Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 83.

⁶⁰ Martin (2013), p. 111.

another one), unmodified (and in principle even unused), whenever he is asked to do so by the depositor.⁶¹

Yet this basic characteristic of the deposit contract was soon found no longer to be essential for the deposit of money.

As explained above, money in the Middle Ages meant coins minted by or under the auspices of a (local) government authority. However, when a depositor deposited such a sum of money, i.e. a certain number of coins, he did not necessarily expect to get back those very same coins, but rather the same quantity of coins of the same kind—or possibly even other types of coins for a same total value.

Pretty soon, this principle of “fungibility” became prevalent for money deposits (in coins), even though this meant a departure from the classic deposit contract in a strict legal sense of the word.

The depository thus ended up in a position where he could “use” the coins entrusted to him by a particular co-contractor, on the condition that he managed to meet any repayment request from his co-contractor at any given time (consisting of the same quantity of other coins of the same kind, or possibly in coins of a different kind, provided their value was the same).

Moreover, the co-contractors of a professional coin depository tended to leave the coins in the custody of the depository for increasingly long periods because they did not need the coins themselves (otherwise put: as such co-contractors started to acquire more and more wealth, they also started to “save” money, or, in economic terms, they started to postpone its basic use of spending it), while a parallel payment system developed based on the debt instruments issued by the depositaries (see further, at marg. 38 of this chapter). The professional depositaries thus accumulated increasingly large stocks of coins which they could “use,” on the condition that they were at all times able to honor any repayment requests from their clients.

2.3.1.3 The Medieval Mechanism of Lending Coin Money

As during the aforementioned processes (referred to above, at marg. 29 of this chapter), more and more “depositors” kept delaying their requests for repayment, thus extending the average deposit period of the coins handed over to their depository, the basis was created for a new economic activity for the depository, namely the “lending” of said coins to third parties.

As already mentioned, this evolution required a departure from the classic contract of deposit. Little reservation against such practice seems to have been raised, which may be explained by the fact that, throughout the ages, commercial

30

⁶¹It goes without saying that this characteristic is essential to the deposit of specific objects.

For instance, when someone deposits a coat (to which he is attached), he expects to receive back that same coat, in the same condition. Obviously he will not settle for another coat, save in very exceptional circumstances, for instance if the depository would instead offer him a much nicer, more expensive coat. However, the latter situation would require a new contract between depositor and depository.

law has been shown to easily drop the strictness of classic, civil law requirements in cases where this is useful for commercial practice.⁶² As a result the depository institutions which so far mainly had profiled themselves as depositaries of coin money, gradually developed into “loaners” of the latter to third parties in need of credit.

Initially, this lending activity was restricted by the so-called “papal prohibition on interest charging” and later in time, on “usury”⁶³, which was one of the reasons that such institutionalized “money-lending” against payment of interests, initially, fell mostly into Jewish hands, since Jews were not subject to the aforementioned papal prohibition on interest-charging⁶⁴. (See also further, under Sect. 3.3.3 of Chap. 3 of this book.)

However, soon commercial practice sought for practices allowing depositories to escape the strict (papal) rules on the charging of interest (a topic which will be further explored in more detail in Chap. 3 of this book).

Thus, the predecessors of modern banks evolved into institutions which not only accepted coins in deposit (under the obligation of repaying an equivalent amount when so requested), but also started to loan out these coins to third parties in need of credit.⁶⁵

- 31 In this evolution whereby depositories evolved into loaners of coin money, the “practical experience” of such a professional depository who also lent the coins entrusted to him to third parties, had to ensure a sound treasury management, since at all times he had to have sufficient coins in stock to be able to honor repayment requests from his (original) clients/“depositors.”⁶⁶

2.3.2 *The Medieval Evolution Towards Privately Issued Paper Money*

- 32 A second development would gradually resolve the economic restriction on the lending capacity of the specialized institutions referred to at marg. 31 of this chapter.

This development concerned the methods of proof used in the legal relationship between the professional depositaries and their clients-depositors.

- 33 Initially, when entering into a classic contract of deposit, very often an equally classic document of proof was drafted by the depository.

⁶²Byttebier and Wera (2016), p. 2.

⁶³See also Byttebier and Flamée (2012), p. 22.

⁶⁴Byttebier and Flamée (2012), p. 25.

⁶⁵Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 83; Middelkoop (2014), p. 51.

See also Galbraith (1987), pp. 140 a.f.

⁶⁶As will be made clear in what follows, this has remained one of the main principles of modern-day banking.

For instance, the depositor of a certain sum of money—i.e. a certain number of coins—thus received a debt instrument in his name (which was usually not freely transferable, except under strict conditions imposed by civil law) mentioning a precise description of the restitution obligation of the depository. This kind of debt instrument, moreover, initially merely served as a method of proof of the right of the depositor to be repaid a specific number of coins or a number of coins for an equivalent nominal amount (and, consequently, of the corresponding obligation of the depository to repay the coin money).⁶⁷

This commercial use would gradually evolve. As the earlier mentioned principle of “fungibility” of the coins to be returned became more important (see above, at marg. 29 of this chapter), the debt titles also changed form. Gradually, the debt titles were no longer made out in the name of the depositor, but got issued “to bearer”. In addition, in order to facilitate the handling of the reimbursement requests at the counter of the depository, the debt titles which served as proof of the restitution obligation of the depository of the coins, got written out in advance for rounded figures. Whoever “deposited” a certain amount of coins, henceforth received in exchange several pre-issued debt titles written out for rounded amounts, adding up to the value of the deposited coins.⁶⁸

Translated into more modern (financial) terminology, the situation of the fore-runners of modern banks at the point in history reached in the foregoing marg. 33 of this chapter, can be described as follows: private entities, initially functioning within the economy as professional depositaries of cash coins (at the time: the only form of money) started to issue—for reasons of proof—written documents granting the holder a right to repayment of coins for a nominal value (i.e. equivalent to the amount mentioned in the document). In order to facilitate the counter activity of the depository, there was an evolution towards the development of paper documents (debt instruments) mentioning rounded values and these eventually got issued to bearer.

The “pay-to-bearer” nature of the abovementioned paper documents had as an interesting side effect that the (initial) holders of such documents could fairly easily transfer them to third parties.

The general rule for pay-to-bearer documents is—in most law systems still—that its mere possession provides a sufficient legal value of proving the title contained in it.⁶⁹ As a result, the transfer of such pay-to-bearer paper can easily be accomplished by physically handing it over to a third party. The said proof of debt documents were moreover issued (eventually: to bearer) by relatively trustworthy parties, i.e. professional coin money depositaries which generally attached great importance to

⁶⁷Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 153; Eagleton and Williams (2007), p. 81.

⁶⁸Eagleton and Williams (2007), p. 177; Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 165.

⁶⁹Martin (2013), p. 97; Weatherford (1997), pp. 123 a.f.

their market reputation, in particular as to their repayment capacity (in modern terms: they strove for a high level of “liquidity” and “solvency”).

This eventually led to a practice whereby the proof-of-debt documents themselves gradually started to function as an appropriate instrument of payment themselves.

The debtor of a payment obligation towards a third party who was at the same time the holder of proof-of-debt documents issued by a professional depository of coin money (thus being himself a creditor of this depository) had two options: either (i) exchange the proof-of-debt documents for coin money at the depository’s/ issuer’s, and pay his own creditor with that coin money; or (ii) if the third-party creditor agreed, hand over the debt instrument itself to his creditor in order to settle his debt (which legally speaking amounted to a system of tender payment by transfer of a claim); in such a case, the latter creditor himself became the rightful holder of the debenture documents and, in case he himself needed to pay his own creditor, he in turn got confronted with the same choice as the first-mentioned debtor himself had been (and further so, as Galbraith describes, “*ad infinitum*”).⁷⁰

36 As confidence in the issuers/depositaries of the mentioned debt instruments grew, the practice of repayment of debt through tender payment of such debenture documents issued by professional custodians of coin money also became more and more common (with less and less need to bring the underlying coins back into circulation).⁷¹

In this way, the debenture documents issued by professional custodians of coin money evolved into payment instruments themselves, more precisely into “privately emitted paper money”.

A fundamental requirement for this system to work was that there had to be sufficient trust in the repayment capacity (liquidity and solvency) of the (private) issuers of the said debt instruments; without it, holders of such debenture documents would obviously be very likely to resort back to the underlying coin money.

37 It is hard to underline just how important this evolution has been as pivotal in the genesis of a real banking system (still lying at the basis of the modern banking and monetary system).

Martin⁷² has phrased this as follows:

It was here – in the creation of a private payments system – that the invention of modern banking originated. Such a humble birth may sound disappointing. Today, the banking sector’s unglamorous routine of providing payments services takes a distant second place in the popular imagination to the exciting business of lending and trading. But their ability to finance and settle payments is the more fundamental activity. This is banks’ specifically monetary role, and what makes them special.

⁷⁰Galbraith (1975), p. 20.

⁷¹Martin (2013), pp. 100 a.f.

Comp. Galbraith (1975), pp. 18–19, in this regard having pointed out that

the process by which banks create money is so simple that the mind is repelled. Where something so important is involved, a deeper mystery seems only decent.

⁷²Martin (2013), p. 101.

2.3.3 *Medieval Private Paper Money Creation Based on Lending*

The practice described under Sect. 2.3.2 of using the aforementioned debenture documents soon was followed by another development. 38

In their daily practice, issuers of bearer debenture documents started to experience that (i) the exchange of these documents for coins by their holders got more and more postponed in time, and (ii) on the contrary, the debenture documents evolved to a means of payment of debts themselves, while the holders no longer felt a need for an (immediate) exchange for coins.

This growing realization added a new dimension to the lending activity of coin depositories.⁷³

Thus far (and as explained above), the lending activity of said coin depositories had been based on loaning out (the underlying) coins to parties in need of credit.

However, gradually a new lending technique would evolve whereby the issuer of the aforementioned debenture documents simply provided newly issued debenture documents (which did not rely on additionally deposited coins) to a counterparty in need of a credit.

As a consequence—and by definition—such issuer of bearer debenture documents would bring into circulation higher values (or amounts) of documents than he had coins in stock (cash). By definition, his cash resources consisting of coins became smaller than the value of the debenture documents put into circulation by him.⁷⁴

The success of the technique of private (paper) money creation based on the lending activities of coin depositories, would furthermore be influenced by the evolution of the so-called “church prohibition on charging interest” (see further, under Sect. 3.3.3 of Chap. 3 of this book).⁷⁵ 39

⁷³Bleaney and Greenaway (1996), p. 382; Crockett (1981), p. 19.

⁷⁴Galbraith (1987), p. 142; see also Galbraith (1977), pp. 164–166, having summarized this evolution as follows:

With banks came the power, given to few private citizens, to create money.

⁷⁵This church prohibition on charging interest had already been in vigor in the Western European (Catholic) territories since the early Middle Ages, but got more and more contested in the later Middle Ages, first in practice and then also in thought. As a result, it became for early bankers more and more lucrative to engage in massive lending (especially by issuing privately emitted paper money exceeding their cash reserve of coin money). They hereby started making agreements with the borrower, whereby the latter agreed not only to repay the capital made available, but also an additional interest, thus acting in defiance of the church restrictions on charging interest. This however gave a boost to the development of private paper money, as it prompted bankers to grant more and more credits in order to increase their profits (see Galbraith 1975, p. 13).

Moreover, the technique of interest generating credits also allowed for an increasingly “reckless” way of granting credits, as the interest mechanism made it possible to compensate losses from non-refunded credit with the gains of effectively repaid credit. This led to a proper free riding

40 It has probably not been a coincidence that the aforementioned technique of granting credit against interest by issuing amounts of paper money above the coin reserves of the issuers thereof, took a very strong hold in the early Protestant areas, i.e. in some areas of Germany (in the sixteenth century)⁷⁶ and in the Netherlands and the UK (in the seventeenth and eighteenth century).

This may, to some extent, be explained by the fact that renowned scholars such as Luther and later Calvin were among the first “Christian thinkers” endeavoring to make the practice of refundable credits and/or charging interest acceptable for Christians.

Hence, the mentioned territories were able to evolve into “capitalist powers *avant la lettre*” that thrived on private money creation based on interest.

41 As will be further explained in the next Chap. 3 of this book, this newly developing economic system would soon entail several pernicious emanations, such as “colonialism”, “imperialism” and “slavery”.

The “previous generation” of imperialist countries, in particular Spain and Portugal, had still based their colonial behavior (in the sixteenth century) to a much larger extent on a money system backed by gold and silver coins which has been one of the reasons for the historical gold and silver raids in South America.⁷⁷ The seventeenth century colonialism of the Netherlands and the United Kingdom would soon take an even bolder and more mercantile dimension, in a process where gradually the rest of the world would see itself reduced to an exploitation area for the economic interest of the leading European powers of that time.⁷⁸

42 Once the technique described in the previous marg. 40–41 of this chapter started to take hold, the coin depositories/debenture issuers evolved into actual bankers, i.e. institutions implementing so-called “private money creation”.

A reverse side of this evolution was that any banker (depository/issuer of paper money) engaging in these credit activities by definition was no longer able to meet all and every request to exchange the paper money for coins, even though this was (still) the underlying legal obligation that such a banker had pledged to the holders of the paper money (i.e. the bearer debenture instruments).

mechanism where “bad” debtors (those who did not pay back their loans) could benefit from the efforts of “good” debtors (those who did pay back their loans).

The tone was hereby set for a society model that would increasingly rely on greed as a guiding principle of its socioeconomic relations. As Galbraith has put it:

The discovery that banks could so create money came very early in the development of banking. There was that interest to be earned. Where such a reward is waiting, men have a natural instinct for innovation. (See Galbraith 1975, p. 19.)

The ethical side of this evolution will be further elaborated upon in the next Chap. 3 of this book.

⁷⁶For further reading, see for instance Steinmetz (2015).

⁷⁷Ferguson (2009), p. 22; Bieler (1961), p. 143; Beaud (1994), pp. 18–21 and 26 a.f.

⁷⁸Beaud (1994), pp. 137 a.f.; Becket (2014), pp. 98 a.f.

Evidently, all of this required a great confidence⁷⁹ by the holders of the paper money in their respective banker. Such confidence had to be strong enough to deter these holders from “*en masse*” exchanging the paper money they held for the underlying coins, since their banker was by definition no longer able to meet such requirements of all the paper holders combined. On the contrary, when confronted with exchange requests for an amount greater than his stock of coins, the banker would find himself—to put it in modern terms—in a state of bankruptcy.⁸⁰

2.3.4 *Synthesis: Status of the Monetary System at the End of the Middle Ages*

By the end of the late Middle Ages, the techniques described in the previous margins of creating privately issued paper money had become common in several Western countries.

43

As a result, two distinct forms of money got in use in the countries (or territories) in which the aforementioned practice took place.

On the one hand, there was still a use of coin money. This coin money was (still) minted out of precious metals (especially silver), which in most countries (territories) could only be done by or under the auspices of a more or less central public authority.⁸¹ These coins functioned as cash money which formed the basis for deposits with the developing bankers who were under the obligation to pay out coins against the paper money they had brought into circulation themselves.⁸²

On the other hand, a second type of money consisted of privately issued paper money.

⁷⁹The primary element of trust on which this form of money use relied, is also evident from the definition “fiduciary” paper money, as opposed to the notion of “representative” paper money which refers to cases whereby a sufficient amount of underlying coins (or bars of precious metal) are at hand (see *e.g.* Bytnebier 2001, p. 32, no 34, a.o. referring to Bank of England (2000), 1; Bogaert 1988, p. 43; Fase and Vleminckx 1995, pp. 16–17).

Historically, paper money has gradually evolved away from being “representative” and became (more and more) “fiduciary”.

⁸⁰See *e.g.* Martin (2013), p. 104:

In the same year [1321] the Catalan authorities revised their 1300 order that failed bankers be forced to live on bread and water until all their clients were reimbursed. Henceforth, any banker who failed to meet his clients’ demands was to be publicly denounced and then summarily beheaded in front of his bank. It was no idle threat, as the hapless Barcelona banker Francesch Castello discovered in 1360. Under such uncompromising regulatory regimes, domestic banking really was a risky business.

⁸¹Yet for some time the population in various territories was allowed to supply the raw precious metals for minting by the authorized public authority. The latter however had (often) the sole power to actually mint the coins and insert the required marks, which usually included the picture of the sovereign.

⁸²Crump (1981), p. 17; Nussbaum (1950), pp. 32 a.f.

The choice for paper was a consequence of the fact that it was physically based on originally handwritten, and later printed documents which were created as debt instruments (in the sense used in civil law). These debt instruments got more and more issued to bearer and for rounded amounts. As the general public started to hand them to other parties to pay off debts (in classic terms of civil law: “transfer in lieu of payment”), they evolved into a second form of “paper money”. Said paper money was a form of money put into circulation by private institutions, initially without any government involvement. Hence, for some time, no legal rules or restrictions regarding the issuing of this privately issued paper money prevailed.

This second type of money was “privately issued” and as it was exchangeable against coins, it could be considered as an early form of “representative” (later: “fiduciary”) paper money.

2.3.5 Evaluation of the (Late) Medieval Money Creation

2.3.5.1 Advantages of the New Money Creation System

44 It is needless to say that the late medieval development described at marg. 38 a.f. of this chapter has been of paramount importance from both a general societal and socioeconomic point of view.

45 First, the creation of paper money got more and more detached from chance discoveries of silver and gold ore, which had become the metals most often used for coinage.⁸³ As a result, the privately created paper money, issued by “private circulation banks,”⁸⁴ could be issued much more abundantly than coins, as the latter required an increase in the supply of the relevant precious metals.

On the contrary, the only restriction on the issuing of (private) paper money was the need to keep a sufficient cash stock of coins in order to be able to honor the agreed upon obligation to pay back coins against bank notes upon the simple request of the holder of the latter.

For obvious reason, this new money creation mechanism had an important leverage effect on economic growth.⁸⁵

⁸³Pdoa-Schioppa (2011), pp. 51–73, especially 58.

⁸⁴Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 246.

⁸⁵Galbraith (1975), p. 28 has phrased this as follows:

The miracle of money creation by a bank (...) could stimulate industry and trade, give almost everyone a warm feeling of well-being.

but adding to this the question:

How to have the wonder without the reckoning?

Compare to a more recent observation by Oxfam (see Oxfam 2016, p. 8):

As a result, money also started to play a more and more important role in government and in society in general than it had in the ages before. For instance, medieval governments ceased to rely on the old feudal levy to raise armies, which through tradition and precedent was more and more considered to be too circumscribed and inflexible, and instead started to supply and pay troops in cash money. Feudal tenants themselves started to commute their labor services into cash rents, while their lords started relying more on such cash payments or on exploiting their estates to produce surpluses which were saleable against money.⁸⁶

In this way, the increase money supply through the private banking sector also contributed to the decline of the medieval feudal system to the advantage of a pre-capitalist society model.⁸⁷

Second, the “new money creation system” was also an extremely liberal system, as the private market players themselves were able to determine the amount of paper money they put into circulation, solely based on their proper experience. 46

However, in some areas, the private money creation produced an ongoing conflict with local authorities, which often tried to get a solid grip on the private banking system. Such authorities were usually eager to request credit, but not always very diligent in paying it back. In some cases, this even resulted in a dramatic outcome, with as an early historical example the sad fate of the “Templars” (see above, at marg. 24 of this chapter).⁸⁸

Third, the aforementioned evolution (re)introduced the private initiative at the monetary level, i.e. a larger participation by the population of the national economies. As a result, issuers of private paper money got involved in the process of money creation by either honoring or not honoring requests for credit from members of their economy. 47

Ever since, such private money issuing institutions have kept on playing this role and have, in modern-day economic terminology, become full-fledged “bankers”. Needless to say that their particular role in the money supply and creation granted them a key role in the emerging capitalist economies.

Today, bankers still play this role, in particular when they grant credit to other economic agents. However, where during the Middle Ages this process of creating money by granting credit consisted in the issuing of new private paper money exceeding the value of the underlying cash reserve (coins), today’s money creation

The size of the global economy has more than doubled over the past 30 years. In 2014, its value reached nearly \$78 trillion. As production and output continue to grow, there have been absolute increases in gross domestic product (GDP)—one of the main indicators of economic prosperity—in every region of the world over this period. In South Asia, combined GDP in 2014 was more than five times what it was in 1985.

⁸⁶Eagleton and Williams (2007), p. 83.

⁸⁷Eagleton and Williams (2007), p. 83.

⁸⁸Martin (2013), p. 115. See also Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 103; Galbraith (1987), p. 143.

For further examples of defaulting worldly authorities causing severe banking problems, see Eagleton and Williams (2007), p. 82.

by banks through the granting of credit usually takes place through a booking on a bank account (leading to a so-called creation of “scriptural money”⁸⁹) for amounts exceeding the cash reserve a bank holds (presently usually under the form of coins and bank notes). (See furthermore, under Sect. 2.4.5.)

- 48 Finally, the particular characteristic described under the previous marg. 47 of this chapter, moreover, once again highlights the essentially conventional nature of money, especially given the fact that it was people themselves who started to “accept” the private debt instruments issued as a means of proof of coin deposits, as a new form of money, hence as a means of payment for other commodities and services offered within the commercial field.

Otherwise put may also this evolution be considered within the larger social contract on how a society gets organized, especially vis-à-vis the societal consensus about what is accepted as money, or about what money “is.”

2.3.5.2 Precarious Nature of the New Money Creation System

- 49 A major drawback of the (private) money creating system that was shaped during the late Middle Ages, was its inherently precarious nature (which Galbraith correctly refers to as money creation mainly based on cycles of euphoria and panic⁹⁰, a characteristic of the money creation processes which has largely remained in force since then).

- 50 Under the system described in the previous marg. 38 a.f. of this chapter, it did indeed not take much to get a banker into trouble. By definition, this could happen each time when such a banker would meet requests for reimbursements exceeding the amount of his coin cash reserve.

Hence, a crisis of trust, whatever the cause, was sufficient to tackle a banker and could *de facto* result in a destruction of money. This could result in a loss of purchasing power of the collectivity of bearers/owners of the privately issued paper money (which, when occurring, would amount to the difference between the total amount of paper money issued by this banker minus the value of his coin cash reserve).⁹¹

As bankers started to make investments in each other’s paper money, the problems experienced by one banker could, furthermore, very easily create a cascade of similar problems with other bankers and hence for the whole banking sector. History has shown ample proof of this.⁹²

- 51 It can hereby not be underlined enough that the practice of issuing paper notes was inherently based on an underlying conventional mechanism. Especially the bankers themselves were bound by obligations contained in the very paper notes

⁸⁹Martin (2013), p. 13.

⁹⁰Galbraith (1975), p. 21.

⁹¹Galbraith (1975), p. 21.

⁹²Galbraith (1990), p. 20.

themselves. According to these obligations, a banker was obliged to pay out coins for the value mentioned on the notes he had issued.

This system was inherently precarious, as each banker would issue notes representing amounts (far) exceeding his cash reserve. By definition, no banker was ever able to comply with exchange requests for the total value of the bank notes he had issued.

This late medieval mechanism of private money creation by the banking system thus had a strong “fiduciary” nature and required a consistent trust of the population in the paper money, in particular, in the fact that paper money would continue to play its role as a generally accepted payment instrument, i.e. as money.

On a psychological level, this required the population of an area in which private paper money was brought into circulation to remain confident that the issuing banker would be able to comply at all times with any request to exchange paper notes for coins.

It is obvious that such a form of trust inherently had an irrational nature, as is the case with so many economic processes. Objectively, the said required trust made little sense, since, as bankers issued paper money for far larger amounts than their cash reserve of coins, by definition, it was impossible to comply with exchange requests for all the private notes issued by any particular banker.

This very dimension of extreme irrationality characterizes the conventional basis of money (as part of the social contract organizing society) and demonstrates that money is but that which the population of a given economy “believes” or “accepts” that it is money, putting their acceptance in something that intrinsically⁹³ is not (expected to be) of much value at all.⁹⁴

A further striking characteristic of the banking system that emerged during the late Middle Ages has been that any breach in trust could fairly easily crash the entire fiduciary monetary system of a given region.

For instance, a certain part of the population might suddenly lose its confidence in paper money while keeping confidence in coins, hence deciding to exchange their paper money for coins.

This might happen without or with a rational motive. An example of the latter could, for instance, have been the case when a competitor of a given banker massively collected bank notes issued by this particular banker and requested them to be repaid all at once, knowing that the banker in question would not have been able to honor such a request.

At the moment that a banker having issued paper money had spent all the coins of his cash reserve to comply with exchange requests, he was no longer able to honor any further requests. He then effectively defaulted on his contractual obligations, since he was no longer able to honor his basic contractual commitment to exchange bank notes for coins. Such a banker found himself in a state of failure and literally had to close his doors.

⁹³Harari (2014), pp. 202–203.

⁹⁴Galbraith (1987), pp. 65–66. See also Ferguson (2009), p. 28.

In such cases, there rarely has been an easy way to remedy such a situation as the clients of the banker were no longer willing to keep on holding their deposits of coins. To put it in modern terminology, the banker in question went bankrupt.

53 Such bankruptcies of bankers occurred from the very beginning of the modern banking profession and had often dramatic consequences for the monetary system.⁹⁵

In several cases whereby a private banker went bankrupt, the population did not just lose confidence in the paper money of the banker in question⁹⁶, but often in paper money in general, including that issued by other bankers.

Bankrupt bankers would furthermore be excluded from commercial trade. Hence, the paper money they had issued no longer represented any underlying commitment and became effectively worthless. This meant that the bearers, in particular those who had not managed to exchange even part of their paper money for coins, lost all the purchasing power previously contained in the paper money.

This might even lead to economic cascade effects. For instance, bearers of paper money who were themselves debtor to third parties, found themselves no longer able to pay their own debts. Manufacturers and merchants would as a result be confronted with impecunious clients, which in turn resulted in proper cash flow difficulties.

It comes as no surprise that such an abrupt loss of the purchasing power of fiduciary paper money could have dramatic societal and socioeconomic consequences, and in the worst cases even disrupted the very society model itself.

54 Society in general, and its public authorities in particular, obviously became eager to avoid such disruptions of the (new) monetary system, and aimed at techniques of avoiding and remedying them.⁹⁷

As *e.g.* a massive number of private bankers went bankrupt in the sixteenth to seventeenth century⁹⁸, this would lead to various radical government interventions and in many countries even to the establishment of a (new) government monopoly on the creation of paper money (which will be described in more detail in Sect. 2.4).

2.3.5.3 (Preliminary) Ethical Perception of the New System of Money Creation

55 There was obviously also an “ethical” downside of the (late) medieval “new system of paper money creation”.

⁹⁵For an overview of some financial crisis moments, see Schemmann (2013), pp. 22 a.f.; Galbraith (1990).

⁹⁶While the latter might even lose his head; see above, at footnote 80 of Chap. 1 of this book.

⁹⁷In present day terms, this topic a.o. translates as the moral hazard question of “bail outs of banks” (see especially Stiglitz 2010, p. 200).

⁹⁸Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 249.

As will be further elaborated upon in more detail in the next Chap. 3 of this book, the technique of private paper money creation based upon credits which private bankers provided to other economic agents and which generated interests, would open the doors for a society model increasingly characterized by greed and egoism (which would later on in history become known under the names “capitalism” and, subsequently, “the free market system”).⁹⁹

In this way, it could even be correctly argued that the industrial revolution of the nineteenth century was to a large extent preceded by a financial revolution of the seventeenth century which has made the industrial revolution possible.¹⁰⁰

2.4 Genesis of the Central Banking System as a Reaction to Financial Crises

2.4.1 *Banking Crises as Triggers for Government Intervention*

As a result of the difficulties referred to under the marg. 52 a.f. of this chapter, the “newly” created European private banking system would find itself under increasing pressure, especially as of the seventeenth century.¹⁰¹

In view of the aforementioned characteristics of the late medieval banking system, it is no surprise that there were frequent crises of confidence, sometimes with disastrous effects, such as massive bankruptcies.¹⁰²

In many cases, these crises of confidence turned out to be the result of excessively reckless and greedy behavior of the bankers themselves. Driven by an increasing desire for profit, bankers were more and more prepared to take increasingly big risks, in particular when granting credit to market players who were insufficiently creditworthy. The main reason of this evolution was that the said credits yielded interest—sometimes disguised as “fees” with other names—at a

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⁹⁹As will be elaborated upon in more detail in the third chapter of this book, private bankers, given their unbridled search for profits, started granting ever more credit to a.o. manufacturers (in addition to other economic agents). As a consequence, the latter were themselves driven to enhance production both in order to be able to pay back these credits (including the agreed upon interests) as for making ever more profits themselves (an evolution which led to the present-day “production for production’s sake”). As economic production itself can only thrive when consumption also increases, consumers themselves were increasingly invited to start to “consume for consumption’s sake”, a.o. manipulated by marketing techniques which even led to so-called “created wants”. Finally, within this societal model, public authorities themselves got increasingly manned by people more and more looking out for their own interests, instead of for the general good of the communities they are suppose to lead.

¹⁰⁰Ferguson (2009), pp. 53–54.

¹⁰¹Galbraith (1975), pp. 21 a.f.; Schemmann (2013), pp. 29 a.f.

¹⁰²See e.g. Galbraith (1990).

time when the aforementioned classic church prohibition on charging interest was gradually losing its grip on society. As a result, bankers saw opportunities to become rich quickly without much personal effort, simply by creating, out of nothing, excessive amounts of private paper money.

As a result, the amount of paper money brought into circulation by the private bankers expanded while the quantity of (underlying) coin money remained relatively stable.

It needs not much explanation that in a banking system where the obligations (to exchange paper money against coins) of the bankers kept increasing, while the number of the underlying coins economically remained virtually the same, sooner or later problems were to be expected

Moreover, this reckless behavior of bankers resulted in credit being granted to parties that were not sufficiently creditworthy, among which even worldly sovereigns and church authorities. An especially risky situation occurred when public authorities started relying on borrowed money to finance wars, per definition a completely counterproductive activity hardly ever to be made profitable for society as a whole¹⁰³. The problems that arose when such credits would not be paid back would often lead to cascade effects.¹⁰⁴

2.4.2 *Genesis of (an Early) Central Banking System*

57 In view of the often disastrous consequences of massive bank failures, governments saw themselves forced to intervene. From the late seventeenth century on, this resulted in various sorts of policy gradually shaping the basis for a central banking system. The latter would in many countries become characterized by (i) a (public) monopoly on issuing bank notes, and (ii) a task set to support private banks (ultimately giving rise to the creation of the *lender of last resort*-function still in vigor today).¹⁰⁵

58 Once again, one must observe that there has never been a preconceived “blue-print” to shape the central banking system in any Western European country, its genesis rather also having been the result of a process of trial and (a lot of) error (see also above, footnote 9 of this chapter), sometimes inspired by foreign examples while at the same time taking local particularities into consideration.

Consequently, government measures drafted to support the private banking system (and in particular to protect it from the pitfalls of pernicious banker

¹⁰³ Albeit obviously very profitable for certain interest groups, such as arms producers and other members of the leading classes.

¹⁰⁴ Galbraith (1987), p. 143.

¹⁰⁵ Schemmann (2013), pp. 33 a.f.; Bogaert, Kuran-van Hentenryk and Van der Wee (2000), pp. 249 a.f.; Galbraith (1975), pp. 32 a.f.; Eagleton and Williams (2007), pp. 179 a.f.; Ferguson (2009), pp. 50 a.f.

behavior) came into being as a reaction to the occurrence of practical problems, in a gradual “*trial and error*” process. In many countries, it hereby took several consecutive measures to keep the private banking system afloat and/or on the right course. During a process of ongoing legislative interventions, the model was continually tinkered with, often even abolishing previous measures that had proven to be ineffective.

In hindsight, one can observe that during the eighteenth and the nineteenth centuries, the measures in question crystallized into a central banking system based upon the following pillars:

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- 1) the founding of “a central bank” (in some cases government was its only shareholder; in other cases government was its main shareholder, while other shares got in private hands; there even have been cases where the government shareholding was limited or non-existent, and central bank shares got mainly or entirely in private hands);
- 2) the granting of special, often exclusive competences to this central bank, the most far reaching being an exclusive competence to issue (fiduciary) paper money;
- 3) a task description of “general good”; in particular the central bank got the assignment to supply other (private) banks with necessary paper money, based on a system of lending against collateral; the central bank hereby started acting as a “*lender of last resort*” of paper money (potentially newly issued for this very purpose); in such cases, the private bank acted as borrower under an obligation to pay back the amount of the loan to which interest was added.¹⁰⁶

Henceforward, the private banker had to generate sufficient funds from the services rendered to his clients in order to pay back the money borrowed from the central bank, plus interest. The private bankers became themselves the ones putting into circulation the paper money issued by the central bank when granting credit to their clients, the private bankers.

2.4.3 *Genesis of a Central Bank Policy*

As part of the evolving monetary policy referred to in the previous marg. 58 of this chapter, private banks were more and more encouraged to satisfy their financing needs among each other. For instance, a private bank with a cash surplus (coins and bank notes, the latter issued by the central bank) might “invest” this surplus by loaning it out to a bank with a cash shortage (i.e. not having enough banknotes and coins in stock to be able to pay its short-term obligations towards its own co-contractors).

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¹⁰⁶Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 275.

Borrowing money from the central bank hereby became a “*last resort*” mechanism. The central bank discouraged this by means of its interest rates, thus further motivating private banks to borrow (already existing) money from each other.¹⁰⁷

61 Gradually, the practice referred to under the marg. 59 of this chapter evolved into a so-called “(central) interest rate policy”. Hence, the central bank started positioning its central interest rate for loans to private banks systematically (a little) higher than the market interest rates, in order to discourage the private banks from knocking at its door.

This furthermore allowed the central bank to implement a policy for controlling the quantity of money that was put into circulation in function of the needs of the economy. Initially this concerned only paper money, but later it included a new form of privately issued money, namely the so-called “scriptural money” or “book money”; see further, at Sect. 2.5).

For instance, when economic growth needed to be stimulated, the central bank could lower its interest rates, thus encouraging private banks to borrow from the central bank in order to offer cheap loans to their own clients (thus putting into circulation more newly created paper money). When there was a threat of inflation, the central bank might raise its interest rates in order to confine borrowing (and the purchasing and investment behavior based on it).

62 In this way, central bank policy resulted in various countries in a strong mutual interweaving of private banks (on the so-called “interbank lending market”), but at the same time in a mechanism of steering the economy.

In this process, private bankers gradually started organizing themselves in so-called “*clearing houses*” in order to settle their mutual obligations. Initially, these clearing houses were physical spaces where the (representatives of the) bankers, on regular moments, gathered in order to settle their mutual obligations. Later on, the notion “clearing (house)” more generally started to refer to the practice of settling mutual positions between bankers (also in a virtual way).

Moreover, this system facilitated the financial soundness of private bankers and hence the upscaling of the private banking system. As they could no longer issue private paper money themselves but had to turn to their central bank in order to obtain (new) paper money, said private banks were (purportedly) moved to a more prudent behavior. As long as they respected the government directives (including those regarding their investment behavior), private bankers were in this way fairly sure they would be able to keep up with their financing needs (= the ability to comply with their obligations towards their clients).

Gradually, central banks themselves started to issue guidelines which were more and more detailed (often as part of their lending conditions) which purportedly encouraged the private banks to control their risk behavior even more.

63 The fact that the private banking system thus became *de facto* subjected to central bank supervision also allowed upscaling and professionalization.

¹⁰⁷Bogaert, Kuran-van Hentenryk and Van der Wee (2000), pp. 275 a.f.

As a result, in many Western countries, small local banks grew into national market players (in Europe: also into European market players) that played an increasingly important role in various sectors of economic life.

Perhaps without having realized it explicitly, the banking system was thus being prepared for its role as the financial motor of the industrial revolution of the nineteenth century.¹⁰⁸ In this regard, as has been mentioned before (see above, at marg. 55 of this chapter), the industrial revolution of the nineteenth century was preceded by a financial revolution starting at the end of the seventeenth century which has made the industrial revolution possible.¹⁰⁹

2.4.4 Impact of the Aforementioned Evolutions on the Monetary System

At this particular point in the genesis history of the “modern” banking system, there now were still two types of “cash money” in play, albeit the nature of one of these had changed.

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There still were the coins minted by the government, which would for a long time continue to be made out of precious metals.

On top of that, there now was also cash “paper money” issued by the central bank (which often had a monopoly on issuing it).

Both forms of money functioned as full-fledged money, fulfilling all the functions usually attributed to money. Both forms of money could, for instance, be used in payment transactions, but also fulfilled a savings and credit function. Economic residents with a savings surplus could, for instance, deposit coins or paper money (or a combination of both) with a bank and expect to be repaid (upon request) in both forms of money.

To the degree that both forms of money were issued by a government (sometimes the same), the system would even get further rationalized in many countries. In this evolution, gold and silver coins got gradually taken out of circulation and melted down to gold and silver bars which were kept by the central banks as a monetary reserve to cover their obligations.¹¹⁰

Furthermore, instead of precious metal, metals or alloys of a far lower value (for instance copper and nickel) got used for the making of coin money. In many cases, the nominal value of these copper or nickel coins was significantly higher than the intrinsic value of the metal they were made of. The issuing government often also abolished the liberty of minting and melting coins.

¹⁰⁸Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 292.

¹⁰⁹Ferguson (2009), pp. 53–54.

¹¹⁰This was furthermore a consequence of the collateral mechanism that lay at the base of the central bank’s lending policy.

While (central) governments, for practical reasons, even limited the purchasing power of coin money, coins evolved from “token mints” (minting and melting of which became the prerogative of the government) to so-called “token money” (which could only be used for payments of limited amounts).

On top of that, a new form of private money creation entered the banking and monetary system, namely the so-called “scriptural money” (also: “book money”).

For reasons of clarity, the latter will be further dealt with under Sect. 2.5.

65 Further on, appropriate legislative interventions were implemented to take gold and silver coins out of circulation and melt them into bars to be used as monetary reserves.

This evolved to a system of gold coverage of the paper money issued by central banks. In some countries, legislation hereby obliged central banks to hold a sufficient reserve of gold (bars) to match the nominal value of the banknotes in circulation. In other words, the banknotes had to be “covered” by underlying gold (so-called “*gold coverage*”).¹¹¹

In many countries, central banks themselves accumulated a major part of the national gold reserves to serve as such a monetary reserve. At that point, silver was in most cases taken out of the monetary scene.

At the same time, the exchange obligations of the central bank gradually became more flexible, for instance by applying the coverage rules only to large amounts. As a result, only those economic players that held banknotes amounting to the value of a certain (large) quantity of gold (for instance a gold bar with a certain standard weight) were henceforward allowed to submit an exchange request.

66 The United Kingdom would take a leading role in the processes described in the previous margins and eventually ended up at the head of a (*de facto*) “gold (bar) standard” monetary system, allegedly the first truly international monetary system in which the central banks of the participating countries subjected themselves to a strict monetary discipline characterized by the fact that the quantity of the banknotes in circulation had to correspond to a determined amount of underlying gold (bar) reserves.¹¹²

From an ethical point of view, it has to be observed that already from the start, this system was intrinsically “unjust”, since under this “gold standard system”, the money supply within a given economy, and hence its growth potential, depended on the amount of gold the country in question had managed to build up in the past (in most cases by having robbed other territories).¹¹³ As a consequence, countries that

¹¹¹Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 270.

¹¹²Weatherford (1997), p. 164; Bogaert, Kuran-van Hentenryk and Van der Wee (2000), pp. 267 a.f.

¹¹³This is probably why Keynes himself would dismiss the gold standard as a “barbarous relic”. (See Ferguson 2009, p. 59.)

had shown the strongest drive for conquest and war, were also the ones most likely to maintain and even expand their wealth.¹¹⁴

Poorer countries were often unable to participate in the gold (bar) standard, or had to resort to “tricks”, such as maintaining monetary reserves in banknotes issued by countries that themselves managed to follow the rigorous discipline of the gold (bar) standard. For the latter countries, a parallel gold exchange standard emerged, based upon central bank monetary reserves consisting of, for instance, Pound Sterling. This in turn tended to further strengthen the currency of the “strong” countries (with the Pound Sterling evolving into a so-called “strong currency”).¹¹⁵

Needless to mention that the inherent unjustness of the gold standard monetary system still leaves traces today, mainly as a result of the unfair distribution of the world’s wealth it has caused.

2.4.5 Further Crystallization of the Monetary System in the Nineteenth Century

As a consequence of the aforementioned genesis of the central banking system, the commercial banking system, and hence the money system itself, to some degree returned under state control.

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This process started hesitatingly in the seventeenth century (for instance in Sweden and England¹¹⁶), and spread all over Europe in the course of the eighteenth and nineteenth centuries¹¹⁷.

As the central bank in many (European) countries often obtained a monopoly on issuing bank notes, money creation once again ended up in the hands (or at least under the auspices) of governments.

Coin minting, on the other hand, had in most countries remained in government hands for centuries and had itself hardly or not been affected by the rise of the medieval banking system.

As a result, both paper money and coin money now had a “public” character. However, this would merely be a temporary situation, as gradually a new form of private money creation was about to manifest, namely the creation of “scriptural money” (which, at present, is by far the most important form of money).

The evolution which led to the technique of scriptural money creation will be further dealt with in a more detailed way in Sect. 2.5.

¹¹⁴It has, for instance, not been a coincidence that Great Britain, which had absorbed a large part of the world into the so-called “*British Empire*” (in particular between the sixteenth and the eighteenth centuries) was the leading country under this gold standard system (see Weatherford 1997, p. 162).

¹¹⁵For further reading, see Schuker (2003), pp. 77–93; Drummond (1987); Eichengreen (1985).

¹¹⁶Flandreau and Ugoletti (2011), p. 47.

¹¹⁷Galbraith (1975), pp. 31 a.f.; Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 275.

68 The further historical evolution of cash money would witness an escalating “demonetization” of precious metals.¹¹⁸

Also this development has not been sudden and/or thoroughly meditated upon, but has rather been a gradual process by which the central banks of more and more countries would systematically lower the coverage ratio of the paper money they issued, until the obligation to “cover” paper money with precious metals eventually got completely abolished in most countries (albeit the central banks of some countries would continue to hold on to their reserves of precious metals as so-called “monetary reserves”).

At that moment in time, cash paper money also became entirely “conventional”. Its value was no longer determined by the fact that it represented precious metals against which it could be exchanged, but instead now depended on a simple government ratified agreement between economic agents who “accepted” (or: “agreed”) to consider paper money as money.¹¹⁹

69 This gradual “demonetization” of precious metal coins and the gradual evolution of paper money from “representative” to entirely “conventional” even prompted an economic scientific debate about what exactly constitutes the value of paper money.

This debate was prominent in nineteenth century England¹²⁰, which is not coincidental given the fact that this was the leading economic (and hence also monetary) power of the time.¹²¹

In this debate, there were two main currents, namely “metalism” (which held that the value of paper money lies in the underlying precious metal coins or bars) and “nominalism” (which held that the value of paper money is not based on any underlying commodity, but is of an intrinsic nature based on a convention between economic agents).¹²²

Eventually, the nominalism current would come out as the victor of this debate.

This would by the end of the twentieth century result in an uncontrollable—and hence uncontrolled—growth of the money supply, characterized by the fact that, worldwide, numerous economic agents, including governments, have found themselves sucked into an ever more unrestrained credit behavior, with as sole winners

¹¹⁸Pdoa-Schioppa (2011), pp. 51–73.

¹¹⁹Nussbaum (1950), pp. 5–9; Fase, and Vleminckx (1995), p. 17.

See also Bank of England (2000), p. 1.

¹²⁰Graeber (2012), pp. 46 a.f.; Galbraith (1975), pp. 36 a.f.

According to Galbraith, this debate is indistinct, albeit wholly recognizable, still continuing to the present day. It concerns the basic question where economic change originates, either with those who are responsible for money creation (in our economy, mainly private banks providing credit to other economic agents), or with those who produce. Otherwise put, the question is if money (should) influence(s) economy, or if money should respond to the economy. (See Galbraith 1975, p. 36.)

¹²¹Galbraith (1975), p. 36.

¹²²For further reading, see Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 363; Berend (2006), p. 193; Nussbaum (1950), pp. 28 a.f.; Hirschberg (1976), pp. 53 a.f.

of this evolution private banks themselves (see further Sect. 2.6.3 and Sect. 3.4.5 of Chap. 3 of this book).

2.5 Scriptural Money as the New Privately Created Money

2.5.1 *Background*

In the evolutionary processes described in the previous Sect. 2.4, the commercial banking system—and hence private initiative in general—for a brief period of time, appeared to have lost its participation in the money creation process, as the latter had become to a large extent under the control of central banks which came into existence as of the seventeenth century.¹²³

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Yet it would not take long for private banks to discover new opportunities to participate in money creation, this time by developing so-called “scriptural money”.¹²⁴

2.5.2 *Deposits and Money Substitution*

To put it simply, the creation of scriptural money starts with the deposit of cash money (which at the point in history we have reached in the previous margins consisted of both coins and publically issued bank notes).

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In its elementary form, such a deposit of cash money is the legal action by which an economic agent (the depositor) hands over a certain sum of cash money to his bank. The latter, by way of proof, opens an account indicating the deposit and as a result becomes obliged to immediately repay this sum of money at the simple request of the depositor.¹²⁵

It should be observed that this legal technique of deposit forming was almost identical to the medieval custom of economic agents entrusting their coin money to a financial institution such as a goldsmith or money changer, who supplied them with a debt instrument as proof of his repayment obligation. As explained above, it were precisely these (late) medieval debt instruments that had evolved into privately issued paper money.

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¹²³See for instance, as regards the Bank of England, Galbraith (1975), p. 34.

¹²⁴Today, private banks still hold a central position in the process of creating “scriptural money” to the extent that, in most countries, the quantity of scriptural money is much larger than the quantity of chartal money, as a result of which scriptural (hence: privately created) money has become the primary form of money.

¹²⁵See for instance Treyvaud (1972), p. 166.

There were some differences, though. The aforementioned deposit custom of the Middle Ages initially only pertained to coins, whereas the practice of deposits emerging in the seventeenth to eighteenth century pertained both to coins and to (publically issued) bank notes. Another difference was that the medieval practice involved issuing debt instruments, whereas the deposit mechanism of the seventeenth and the eighteenth century involved the opening of a deposit account.

73 From a legal point of view, such a deposit entails a legal action resulting in a contract between the depositor and the bank in question, regulating the obligation to repay the deposit in cash money (coins or banknotes). Furthermore, the contracting parties usually agree upon other ways of using the deposit and the deposit account, in particular with regard to various payment facilities offered by the bank (initially: checks, later: bank transfers and eventually: electronic and internet based payment techniques).

Moreover, as a result of such an initial deposit of cash money, a conversion of cash money into scriptural money occurs for the amount of cash money deposited.

Henceforward, cash money could be defined as money with a physical existence and which owes its value as a generally accepted payment instrument to a government decision. Scriptural money is then a debt instrument expressing a receivable of a depositor towards his banker, including the right of reimbursement of the deposit in cash.

This conversion process is the so-called “money substitution” which does not result in the creation of new money, but in a process whereby existing cash money is “converted” into scriptural money.

Reclaiming the deposit then causes an “inverse money substitution effect”.

2.5.3 *Creating New Scriptural Money Through Commercial Bank Lending*

74 The further historical evolution of commercial banks creating new scriptural money “*ex nihilo*” has been quite similar to the process of, *on the one hand*, displacement of the standard coin money by the token coin and, *on the other hand*, the origination of paper money (firstly “representative”; subsequently “fiduciary”; and eventually completely “conventional”) as an alternative money form to precious metal coins.

The historical origination of both privately issued paper money and scriptural money illustrates that when the government tries to monopolize the monetary system, private market players will look for alternative money forms, usually motivated by an unrestrained desire for profits (see further Chap. 3 of this book, in particular Sects. 3.2–3.4 for further details).

75 The way in which the private banking system started creating new scriptural money once again was based on the practical experiences of (commercial) bankers.

Initially, the latter got involved in the process of converting cash money into scriptural money, which, as described earlier, is a form of “money substitution”. As

explained before, this happened at a time when, due to legal restrictions, said bankers were no longer able to issue banknotes, as this had in most countries become the privilege of the central bank.

Just as in the (medieval) origination of privately issued paper money as an alternative to precious metal coins, bankers would soon, once again, observe that the whole of depositors would at a given moment in time only convert a fraction of the sum of all deposited amounts (coins and banknotes) back into cash.

This empirical observation soon motivated the private bankers to engage in so-called “scriptural obligations” without having received a cash deposit, in particular in the context of their credit activities.

The process of creating (new) scriptural money became common practice in the nineteenth century¹²⁶, and once again the English banking system has played a crucial role¹²⁷.

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Nevertheless, its historical origins go back much further. For instance, the renowned “*Amsterdamse Wisselbank*” (which could be freely translated as the “*Exchange Bank of Amsterdam*”) already performed scriptural transactions in the seventeenth century,¹²⁸ thus performing an as yet unequaled creation of (private) money through the granting of credit, which even became one of the motors of the Dutch economy during Holland’s “golden age.”¹²⁹

Private banks were hereby able to engage in scriptural obligations for an amount exceeding their cash liquidity (= cash reserve), based on the observation that, at any given moment in time, only a fraction of the scriptural credit was converted back into cash by the original depositors.

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As a result, engaging in scriptural obligations above the amount of his cash reserves became part of the credit policy of banks towards their diverse clients.

Based on their stash of cash money, banks started to calculate the maximum amount of liabilities they could engage in without ending up short of liquid assets and hereby avoid becoming unable to comply with a depositor’s request for exchange. Such calculations were based on their daily experience: the amount requested by the depositors to be converted from scriptural credit into cash money at any given time.

As a result, the scriptural liabilities of the banks became much larger than their cash reserve, which implied the creation of new (scriptural) money.

To this day, the cash reserve held by banks is still one of the foundations of the prudent policy that private banks are supposed to adopt.¹³⁰

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A bank which receives a deposit from a client must at all times be able to repay this deposit *ad nutum* in cash at a simple request (at least for the classic type of

¹²⁶Korteweg (1970), p. 45.

¹²⁷Bogaert, Kuran-van Hentenryk and Van der Wee (2000), p. 274; Middelkoop (2014), p. 54.

¹²⁸Bogaert, Kuran-van Hentenryk and Van der Wee (2000), pp. 196 a.f.; Galbraith (1975), p. 19.

¹²⁹Harari (2014), pp. 355–356; Galbraith (1987), p. 141; Ferguson (2009), p. 49; Van Houtte (1953), pp. 89 a.f.

¹³⁰Deweirdt et al. (1997), pp. 43 a.f.

deposit). Moreover, a bank that has granted a credit through a booking on an account is even so committed to pay out his amount at the (simple) request of the holder of such an account.¹³¹ This obligation to pay out in cash the amounts that a bank account shows is more precisely the basic object of the deposit agreement, and it is in various legal systems even qualified as a “performance” obligation. It is hereby obvious that such a bank must adopt an investment policy which allows it to comply at any given time with a depositor’s request for repayment.¹³²

79 As a result of the evolutions described in the previous margins, already in the nineteenth century the banking system had largely crystallized into the form that it still has today.

Its further evolution in the nineteenth, twentieth and twenty-first century consisted at the very most of some emphasis shifts which hereafter, in the next marg. 80 of this chapter, will only be mentioned in a general way.

80 The most important of these emphasis shifts was probably the fact that “lending” (or “the granting of credit”) evolved into the most characterizing banking activity through which (private) banks got involved in the process of private money creation twice in history, the first time when they commenced issuing private paper money and the second time when they started creating scriptural money.

Throughout the second half of the twentieth century, deposit banks became furthermore more and more daring in developing all sorts of high tech investment techniques.¹³³ *On one hand*, this allowed them to supply the necessary appropriations to the developing capitalist economy. *On the other hand*, banks at the same time developed an increasingly risky speculation behavior, mainly motivated by greed¹³⁴.

This evolution will be further dealt with in Chap. 3 of this book.

Another emphasis shift in the wake of this evolution has been an increasing specialization of the banking institutions which resulted in the genesis of several varieties of the “modern” bank.

¹³¹ Albeit other means of use are also usually agreed upon, such as access to scriptural payment techniques.

¹³² Harari (2014), p. 343.

¹³³ These will here not be summed up in detail, as they are basically all based upon some elementary basic principles of banking. As has been remarked by Galbraith:

The rule is that financial operations do not lend themselves to innovation. What is recurrently so described and celebrated is, without exception, a small variation on an established design, one that owes its distinctive character to the aforementioned brevity of the financial memory. The world of finance hails the invention of the wheel over and over again, often in a slightly more unstable version. All financial innovation involves, in one form or another, the creation of debt secured in greater or lesser adequacy by real assets. (See Galbraith 1990, p. 19.)

¹³⁴ De Grauwe (2012).

As a result, alongside the classical deposit banks emerged several other banking institutions, such as business banks (which deal less with deposits), all sorts of investment institutions, etc.¹³⁵

2.6 Further Aspects of the Modern Banking and Money System

2.6.1 General Characteristics of the Modern Banking System

Today's deposit banking model and the monetary system based upon it are the outcome of the aforementioned evolution, which started in the Middle Ages and crystallized throughout the nineteenth century.

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It must therefore be once more observed that the current banking and monetary system is not at all the result of a deliberate and calculated process. Instead, the prevailing banking and monetary system basically came into being through "trial and error," with the interaction between private and government initiative as general "leitmotiv". More precisely, governments often had to intervene to put an end to malpractices of commercial bankers, especially in cases when, usually motivated by excessive greed, the latter had put themselves and society at too much risk.

In particular, the founding of a central banking system was aimed at disciplining commercial bankers, mainly by removing their capacity for (paper) money creation. This initially also put a major brake on the profits that commercial banks could draw from lending and other investments, but, as explained before, said bankers would soon circumvent this prohibition by scriptural money creation through the granting of credit.

As a result, and as will be dealt with further in the this book, the efforts of disciplining private money creation by means of establishing central banks even seem to have had the reverse effect of giving private banks ever more economic influence and general societal power (see more in detail in Chap. 3 of this Book).

Also, the emphasis shifts of the second half of the twentieth century have furthermore raised the question whether the current banking model is compatible with the excessively risky behavior of today's bankers, who are merely driven by an ever increasing drive for profits.

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¹³⁵Banks and the banking groups they eventually formed, hereby became also more and more dexterous in applying company law techniques in order to expand, in many cases even on a global scale. Banks for instance got specialized in dividing their various activities into subsidiaries. Shares of the latter were sometimes even made available to the clients of the bank who, in many cases, were hardly aware that an investment product offered by their bank constituted a risky participation in a branched-off (special purpose) investment vehicle.

This essentially moral question will also be covered more in detail in Chap. 3 of this book.

83 By way of summary, the deposit banking model as we know it today, in headlines functions as follows:

- Deposit banks manifest themselves within the economy as the collectors of the savings surplus of the economic players. In some jurisdictions, banks even have a legal monopoly in this regard. Such an initial deposit of cash money (= “coins” and (publically emitted) “banknotes”) results in a process of so-called money substitution, “converting” the deposited cash money into a scriptural claim for repayment or for use in scriptural transactions.
- Within the bank itself, the cash money collected from the deposits functions as a so-called “cash reserve.” As a result, the latter is no longer taken into account when calculating the amount of cash money in circulation among the public.
- Based upon its practical experience, the bank discovers what the size of its cash reserve must be in relation to its liabilities. Based upon this information, bankers work out their scriptural money creation whereby they engage in scriptural obligations representing an amount of money exceeding their cash reserve.¹³⁶
- The process of creating scriptural money (which is the method of private money creation by banks currently in use) forms more precisely part of the credit activity of said (deposit) banks.¹³⁷

From an economic point of view, the granting of credit by a bank is thus an activity of a peculiar nature, as it results in the creation of additional (scriptural) money.¹³⁸

Within Western and Western-inspired economies, the creation of scriptural money has evolved to be the most important method of money creation, which according to some authors to a large degree falls outside the influence of the monetary authorities.¹³⁹

As a result, most of the money in circulation does not emerge from the creation of “chartal” money by the central banks (or other (government) institutions), but rather from scriptural money creation by the private banking sector. According to some estimations, the latter amounts to at the very least 90% (and probably far more) of the total money supply (see further, at marg. 88 of this chapter and Chap. 4 of this book).

Needless to say that this provides private banks with an almost unlimited economic and political influence which in present-day societies is hardly counterbalanced by anyone or anything else.

- Based on the diverse agreements with each of its depositors, the deposit bank is subject to “restitution obligations” towards these depositors.

¹³⁶See further Friedman (2002), p. 47.

¹³⁷For a general description of the bank lending mechanism, see *e.g.* Hughes (2006), pp. 9 a.f.

¹³⁸Deweirdt et al. (1997), p. 30.

¹³⁹Deweirdt et al. (1997), p. 44. See also Pettifor (2014).

The latter basically obliges the deposit bank to pay out a scriptural claim in cash when the holder of the claim so requests, yet the agreements between the bank and its depositors may include some extra stipulations. For instance, the bank is usually also obliged to perform so-called scriptural money transactions at the request of the depositors (mainly transfers between different bank accounts).

- As a result, the granting of credit by deposit banks plays a key role in Western and Western-inspired economies, since it supplies economic agents with (new) money for investment needs (all sorts of investment lending) and consumer needs (for instance construction loans and consumer credit).
- Hence, whenever a banker grants a credit, it should be a key moment of reflection as to the creditworthiness of the borrower. Otherwise it could be a case of too frivolous money creation, where the beneficiary does not contribute to the economic development, which could *de facto* result in economic “*free riding*” (see also further, under Sect. 2.6.3).
- Precisely on account of their role within the economy (the gathering of deposits and private money creation through the granting of credit), banks have over time been submitted to regulations motivating them to more “careful” or “prudent” behavior. The creation of such “prudential” regulation has moreover in a lot of countries formed a response to the major banking crises of the late 1920s and early 1930s.¹⁴⁰
- In order to avoid banking crises, the commercial deposit banking system has, furthermore, been embedded in a monetary system, as a result of which, in most countries, a private bank can turn to a (usually, albeit not in all cases, government founded) central bank for additional funds when its cash reserve is not sufficient to meet the restitution requests of its depositors (and when it cannot get cash elsewhere, for instance through a loan from a colleague banker on the “interbank lending market”).
- As a result, the banking system is typically monitored in two ways: (i) the monetary authorities provide direction through their “*lender of last resort*” function and (ii) banks are moreover subject to a “prudential” legal framework, which in most countries subjects bankers’ activities to rigorous legal rules, the compliance of which is monitored by a supervisory authority.
- In most (Western) countries, a central bank which is in charge of cash creation has a so-called emission privilege for banknotes, and sometimes also for coins. In other countries minting coins is the competence of other authorities, often some organ of the executive power.

Hence, the central bank, by definition, can always create new cash money by either minting coins and/or printing banknotes.

Its interventions, however, will be part of its monetary policy, such as an interest policy with respect to commercial banks, aimed at monitoring the solidity of commercial banks requesting an intervention or at safeguarding the value (hence: “the purchase power”) of money. Hence a commercial (deposit)

¹⁴⁰Bogaert, Kuran-van Hentenryk and Van der Wee (2000), pp. 343 a.f.

bank cannot unlimitedly request for new cash money from the central bank. Needless to say that a commercial deposit bank that loses the support of its central bank, is in dire straits and is usually headed for bankruptcy (unless in cases when it is “bailed out” by its government).

- In this monetary and financial system, the central bank ultimately controls the money supply, at least in theory.

Since the central bank, at least within a given territory, exclusively supplies the commercial banks with newly created cash, it is also, at least in theory, able to put a brake on the growth of the scriptural money amount. It is hereby understood that commercial banks which have restricted access to new cash money will become more prudent in creating private money, in order to avoid the risk of not being able to comply with exchange requests from depositors. The central interest rate policy is one of the mechanisms used by the central banks to keep the scriptural money growth within reasonable limits (or, inversely, to try to stimulate it).

2.6.2 *The Continuous Conventional Nature of Modern Forms of Money*

- 84 The aforementioned overview also demonstrates that, throughout the ages, money has kept its essentially conventional nature from antiquity till now.

In most current Western and Western-inspired economies, cash money (= “coins” and “banknotes”) and scriptural money (= banking liabilities) together constitute “money” which the population within a national economy accepts as a universal payment instrument for commercial commodities and services.

- 85 The social contract that shapes money is hereby based on numerous regulatory texts, but also on various agreements between bankers worldwide and their clients (such as depositors and borrowers) and with other bankers (*e.g.* to establish arrangements prevailing on the so-called “interbank lending market” and to set up “*clearing and settlement*”-mechanisms).

Albeit the social contract concerning the use of money is, hence, to a large degree shaped in legal texts and various “agreements,” acceptance of the common forms of money remains also evident by the population’s behavior.

A clear (recent) illustration of this was a call by former football/soccer player Eric Cantona in 2010 (which was picked up by a French movement called “*StopBanque*” which used *Facebook*¹⁴¹ and other means to publish its announcements). Cantona urged Europeans to massively reclaim their deposits in order to crash, or at least seriously hurt the banking system, as a way of protesting against the bankers’ (mis)conduct which had caused the 2008 banking crisis. If this call had

¹⁴¹<https://www.facebook.com/pages/StopBanque/119038221489346> (last consulted on October 21st 2014).

been successful, it would have been a sign of collective mistrust in the commercial banking system and the scriptural money it creates. The fact that this call was not successful enough to affect the solidity of the scriptural money system, illustrates the so-far still prevailing acceptance of this money form within the European economies.¹⁴²

2.6.3 *Credit as Money*

From the foregoing, it has become obvious that in the prevailing inherently precarious system of money creation, a large degree of prudence and caution is expected from the antagonists in the process of money creation, namely the commercial bankers operating under the auspices of a central bank.¹⁴³

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Any commercial deposit bank participating in the process of money creation must be aware that when it lends out money—be it to individuals, families, enterprises or governments—and hereby engages in scriptural liabilities exceeding its cash reserve, it is creating new money *ex nihilo*.¹⁴⁴

As a result, it becomes crucial for the bank to monitor the creditworthiness (including the solvency) of its borrowers, even more so than for other market players who grant credit based upon their own (existing) funds.

New scriptural money created by the bank through the granting of credit is moreover immediately full-fledged money, which the borrower can spend as desired, respecting the conditions and modalities agreed upon with the lender. The borrower hereby instantly acquires purchasing power to make payments within the economy.

In other words, such types of credit are expected to stimulate economic growth, since an increase in purchasing power is expected to stimulate consumption and hence production (unless in case prices of goods and services are rising).

However, it also must be observed that if such a credit is not paid back and the legal system is too tolerant in its mechanism for absolving debts, one ends up with „easy money“. The latter is of no benefit to the economy, since the credit that has been made available to the borrower is economically not „earned back“ in case of a default of the latter. This situation may even be referred to as a form of economic „free riding“.

Hence, the (present-day) social contract underlying the creation of scriptural money by commercial banks granting credit is (and, under the capitalist system, should remain to be) based on the premise that the borrower will effectively be able to pay back the credit he has received. Otherwise put, within capitalism, the prevailing monetary system is to a large extent founded on the underlying

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¹⁴²Willsher (2010).

¹⁴³Galbraith (1977), pp. 166–167.

¹⁴⁴Ingham (2005), p. xix. See also Ingham (1984).

credibility of the collectivity of borrowers' ability to repay the credits through which (privately created) money is brought into circulation.¹⁴⁵

As a result, through his own efforts within the economy, the borrower of a credit must succeed in acquiring enough income in order to repay the credit to the borrowing bank (usually increased with an agreed upon interest charge). This is usually the basic obligation stipulated in any credit agreement.¹⁴⁶

The banker, in turn, must check that the borrower will effectively be able to meet his reimbursement and interest obligations. At the very least, said banker is expected to perform a preliminary investigation as to the creditworthiness of a candidate borrower before a credit is effectively granted. If the candidate borrower turns out not to be creditworthy, the requested credit should not be granted. Furthermore, said banker must also perform some (elementary form of) "permanent" supervision during the duration of the credit agreement.¹⁴⁷

88 Especially within the doctrine of "capitalist thinking" itself, any credit that is not paid back has pernicious economic consequences.¹⁴⁸

Some of these consequences are:

- The borrower of a non-reimbursed credit initially received purchasing power (or put otherwise: money), yet does not contribute proportionally to economic development.

By definition, such a borrower has performed a form of *free riding*, at the cost of the rest of the economy. This may even constitute parasitic behavior, since the borrower received (newly created) money, *ergo* purchasing power, but did not perform proportional efforts for the benefit of the economy. Too many borrowers ending up in a state of default may hence affect the economic structure in a negative way.

- The bank/lender of a non-reimbursed credit loses an (active) asset.

Initially the bank-lender will try to compensate this loss with the profits of the credits that are diligently paid back.

Once again, this shows that diligent payers may become the victims of bad payers, who enrich themselves at the expense of the former. Ultimately this may affect all of society, to the degree that its members acquire their money from the mechanism of private money creation based on bank lending. As a result, lending banks must include the risk of defaults in the price they charge for granting credit (i.e. in the interest it charged to borrowers). Hence, an increase in credit defaults may increase the total cost of credit.

Massive defaults may even endanger the very existence of the bank/lender.

There is indeed for any economic player a crucial point where the deficits resulting from an excessive number of defaults of its debtors can no longer be

¹⁴⁵Ferguson (2009), p. 31.

¹⁴⁶Hughes (2006), p. 10.

¹⁴⁷Byttemier (1994), pp. 1497–1574, especially p. 1518, no 29 a.f.

¹⁴⁸See also Galbraith (1990), p. 19.

compensated by the payments from its diligent debtors. When in case of a bank this point is reached, the bank will face own difficulties in repaying its own creditors (including the central bank which supplies cash money through specific lending techniques). In extreme cases, in particular when the central bank loses trust in a bank with too many poor payers, this can result in the bankruptcy of such a bank.

- Banks threatened by bankruptcy as a consequence of too many “defaulters”, create a particular paradigm for the economy.

The balance of a bank is essentially made up of a set of debt claims (resulting from credit and other related forms of investment) on the active side of the bank balance and the sum of its debts towards its own creditors (obviously in addition to its capital) on the passive side of its balance.

The main categories of creditors of a bank are: (i) the depositors who have entrusted the bank with their savings surplus in the form of a deposit (which creates the initial cash reserve of the bank); (ii) professional creditors who offer bridging loans to banks facing a cash shortage; (usually these are competitors on the so-called “interlending banking market”) and (iii) the central bank as the *lender of last resort*.

As always, the bankruptcy of a commercial bank will mainly affect its creditors.

Practice hereby shows that the depositors are among the most vulnerable of the bank creditors. The reason hereof is that, being non-professional counterparties of the bank, such depositors do in most cases not enjoy any guarantees for the reimbursement of their deposit.¹⁴⁹

The bankruptcy of a bank can also cause a cascade effect vis-à-vis other banks/creditors, which can end up in a difficult position if they cannot cash their claim on the bankrupt bank. Due to the interweaving on the interlending banking market, this may even lead to their own bankruptcy.

Even the central bank, which usually makes sure it has enough guarantees (often collateral from the capital resources of the bank/creditor) may lose its investments, which in turn might affect the value of the currency issued by the central bank in question.

Hence, the bankruptcy of a bank may have a major disrupting economic effect. Depositors lose their savings; depositors of other banks may lose their trust in the banking sector and may reclaim their deposits and masse; other

¹⁴⁹In some jurisdictions, legislators have made it mandatory to establish some elementary deposit guarantee mechanism; see for instance “Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes” (*OJ L 135*, 31/05/1994, pp. 0005–0014), as in the aftermath of the financial crisis of 2008 amended by “Directive 2009/14/EC of the European Parliament and of the Council of 11 March 2009 amending Directive 94/19/EC on deposit-guarantee schemes as regards the coverage level and the payout delay” (*OJ L 68*, 13.3.2009, p. 3–7).

For an overview of the European policy, see http://ec.europa.eu/finance/bank/guarantee/index_en.htm#maincontentSec2 (last consulted on April 13th 2016).

bankers run the risk of ending up in trouble too (including the bankers who have lent money on the interlending banking market and those confronted with massive reimbursement claims based on a lack of trust in the banking sector); in extreme cases the mone(tar)y system itself may be disrupted.

The events of 2008 on the global financial markets are a poignant illustration of this.

- Based on their past experiences with banks going bankrupt, the governments of many Western and Western inspired nations view this as a doom scenario to be avoided at all costs, especially as regards large banks.

This concern is expressed as the “*too big to fail*” paradigm (or better: “*too specific and big to fail*”). Or, as Sheila Bair, former chair of the US “*Financial Stability Board*” has put it: the “*too interconnected to fail*” paradigm¹⁵⁰.

This paradigm explains why governments of many countries have in the past not hesitated to help banks in trouble; much more readily than when confronted with requests for assistance by other enterprises facing financial difficulties.

Such “state aids” to banks in distress can be accomplished in various ways: through capital injections in the equity capital of such a bank; through government guarantees to cover the obligations of the bank to its creditors; by taking over bad investments (often incorporated in a separate “*bad bank*” branch), etc., and have in the past usually been referred to as so-called “*bailout*” operations.¹⁵¹

A side effect of governments’ readiness to provide the banking sector with extended non-market-conform safety nets, is an even more reckless behavior by bankers. The latter sarcastically reason that “their” government will not allow them to go bankrupt. In this way, banks are sometimes even supported in and rewarded for their past misconduct, which is another reflection of the *too big to fail* paradigm (but also of the further in this book elaborated upon “*socialization of losses*”-principle).

- The government intervention methods to help bankers in trouble can have a very negative impact on government finances.

Since the government of Western and Western financed countries, ultimately funds itself by withdrawing money (and hence purchasing power) from the general population (individuals, families and enterprises) by means of taxes and similar contributions (see also further, under Sect. 3.4.6 of Chap. 3 of this

¹⁵⁰Sorkin (2010); Smithers (2013), p. 87; Claerhout (2014), pp. 36–38 (containing an interview with Sheila Bair, former chair of the US “*Financial Stability Board*”), especially p. 38.

¹⁵¹Schemmann (2013), mentioning several examples thereof.

See also Galbraith (1992), pp. 48–49:

Similarly, support to failing financial institutions—the great savings and loans rescue and later that of the commercial banks—is a fully defended function of the government, however evident the financial extravagance and extensive and visible larceny that made it necessary. Were the appropriations for these rescue operations applied instead to government expenditures for welfare, they would be deemed burdensome and otherwise wholly intolerable.

book), even global prosperity within a particular national economy may be negatively affected.

The “*free riding*” of defaulting borrowers (or more generally: debtors of bank investments) thus may become a problem for society at large. When the behavior of the poor payers requires government intervention, the complete economic system may be affected.

The situation in several European countries which helped their banking sector in the wake of the 2008 banking crisis, once again presents a poignant illustration of this paradigm.¹⁵²

2.6.4 Further Monetary Issues Within a Credit Economy

From the foregoing, it should, among others, be clear to what extent private banking is of a very peculiar nature, especially given the role of private bankers in (privately) creating new money.

In a gradual process which, throughout the ages, first got tolerated and later validated by the governments and population of most world countries, the commercial banking sector has in this way become responsible for a major part of money creation.

It is estimated that, in some countries, privately created money amounts for, at the very least more than 90% (and probably even far more) of the total money supply.¹⁵³

Otherwise put, it is in most countries private commercial banks that decide whether the residents of a particular national economy (individuals and families, enterprises...), and even governments themselves, get access to “newly created money” to finance their activities and/or their various expenses.

Moreover, the commercial banking system also plays an important role in intermediating in the process of channeling existing savings surpluses within a national economy by using a vast set of methods that allow holders of savings surpluses to make these available to those who need new funds (again: individuals, families, enterprises, governments, . . .).

This can take various legal forms, going from shares to various types of debt instruments.

In many countries, the commercial banking sector, furthermore, supplies a variety of services to directly allocate existing savings surpluses to those in need of capital or credit (for instance: organizing financial markets; intermediating on these financial markets; providing support for financial markets entry; providing

¹⁵²As regards the Belgian situation, see e.g. Michielsens and Sephina (2009), pp. 187 a.f.; Peersman and Schoors (2012), pp. 68 a.f.; see also Commissie voor het Bank-, Financie- en Assurantiewezen, *Jaarverslag 2008–2009*.

¹⁵³Martin (2013), p. 13.

support for share issues; providing services for handling purchase and sales of financial instruments; . . .).

Otherwise put, within (national) economies based on capitalist principles, the commercial banking sector holds numerous key functions concerning the availability and the circulation of money.

91 It is, furthermore, a very striking aspect of the present-day monetary systems prevailing in the world that in most cases no economic agents other than commercial banks themselves can turn directly to monetary authorities (i.e. central banks) to obtain newly publically created (or so-called “chartal”) money.

Hence, anyone other than banks (be it individuals, families, enterprises or governments) who is in need of new money to finance a new project has only the following two choices:

- *Either* try to find existing money in the private market, where it can be available in the form of other economic agents’ saving surpluses.

The money “requester” hereby has access to several legal procedures to try and convince the “(potential) supplier” to make his “saved” money available to the former.

The choice of the legal procedure hereby often determines the risks for the supplier (*e.g.* an investment in the capital of a limited liability company will generally be more risky than a credit (instrument)), the yield to be expected (a share in the profits in case of capital investment *versus* fixed yield in case of a credit), the agreements regarding repayment; etc.

As said, throughout the centuries, financial institutions have developed a great number of intermediate services to facilitate matching the demand and supply of existing money.¹⁵⁴ They have for instance set up specialized financial markets (formerly: “stock markets”), services for intermediation, specialized savings and investment products, etc.

Through these various techniques, existing savings surpluses find their way to those who need new funds without resort to the creation of new money.

- *Or* they turn to a commercial bank in order to obtain a credit, hence access to newly privately created money.

The commercial bank honoring such a request by granting a credit that is made available in an account of the borrower, hereby creates new scriptural money.

It should be clear that, although the public attention is often strongly drawn to the first of the aforementioned functions of the banking system, namely the intermediary function which makes it possible that existing saving surpluses are invested in all types of endeavors, it is above all the second of the mentioned

¹⁵⁴In recent times, one may for instance witness the emergence of “new” techniques of making the supply and demand for credits match without intervenience from specialized financial institutions, such as, for instance, technique(s) of “crowd funding”. (See *e.g.* De Buysere et al. 2012; Willermain 2015, p. 3; Levy Morelle 2015, p. 302; Raes 2015; Lewalle 2012, p. 224; Belleflamme and Lambert 2014, p. 288.)

functions, namely the power to create new money, which distinguishes banks from all other types of enterprises.¹⁵⁵

It should be clear that, as a result of the foregoing, private banks currently possess a powerful set of instruments to steer the money and capital markets, not in the least by their role in scriptural money creation.

The most important restriction on money creation that commercial banks hereby face is the set of legal and conventional banker guidelines which regulate the assets of other economic agents vis-a-vis commercial banks.

When they grant credit, commercial banks literally create (new) scriptural money *ex nihilo*. By definition, as explained before, their cash reserve will as a result not suffice to honor all their pending scriptural liabilities, among which the obligations resulting from the credit they grant themselves. Yet banks are at the same time bound by the very obligation to honor, without delay, any request for repayment in cash money of any scriptural liability—including the scriptural obligations resulting from the credit they have granted—by its titular.

This creates a remarkable “paradox” in the banking institution as, by definition, a (ny) banker accepts obligations for larger amounts than the amount of the cash reserves he holds. Moreover, this paradox has characterized the Western banks ever since the Middle Ages.

As already explained before, central banks offer a way out of this paradox by granting commercial banks access to new chartal (cash) money they need, be it at a price.

By organizing this so-called “lender of last resort”-function, such a central bank finds itself in a situation whereby it can supervise the money supply and, at least in theory, can put brakes on the growth of the total money supply, for instance by raising the price for supplying new cash money. The latter is supposed to motivate commercial banks, in turn, to be more prudent in granting new credits, *ergo* in creating new scriptural money.

In other words, in the capitalist economies, the money supply process has two layers. In a first layer, the economic agents other than private banks themselves mainly depend on private money creation by the commercial banking sector, whereby, obviously, a private bank cannot grant a credit to itself for its own needs. The second level of money creation is that of cash money creation by the monetary authorities, to which only commercial banks have a direct access.

Since the total scriptural money supply is much larger than the cash money supply, the system is inherently vulnerable, which has throughout the ages motivated governments (but also monetary authorities) to work out mechanisms of supervising the liquidity and solvency of commercial banks.

This explains a.o.:

- The enormous attention in Western (and Western inspired) legal systems going to so-called “prudential regulation” (including, for instance, setting up deposit

¹⁵⁵For further reading, see especially Galbraith (1992) and Galbraith (1990).

guaranties), used by the regulators of most (Western and Western inspired) countries to instill a high level of “prudential behavior” in the commercial banking sector.

Since it is often the very private sector that prepares this type of regulations—see for instance the activities of the Basel committee(s)¹⁵⁶—this approach can be characterized to a large extent as a system of self-regulation and has so far mainly appeared to be inherently unworkable in times of real crisis.

- The readiness of governments of most Western (and Western inspired) countries to go very far to help commercial banks in trouble (so-called “*bailout*”) in order to avoid bank failures (the so-called “*too big*”—or “*too important*”, “*too specific*” of “*too interconnected*”—to fail paradigm).

This will be dealt with further in the text in more detail.

94 As a result, and as has been proven throughout history, the current social contract regarding money creation resembles a true “hostage drama” (see also further, at marg. 112 of this chapter).

Historically, commercial banks have assumed a key role for themselves in the process of money creation. Hence, the money supply process within capitalist economies has largely gotten in their hands, not only as a result of their intermediary role in the money and capital markets (= matching supply and demand of existing savings surpluses), but in particular also because they have to a large degree assumed the process of money creation.

All of this explains why, while commercial banks behave as the most aggressive market players in their quest for the greatest possible profits, society must at the same provide disproportionate efforts (often at great cost) to support them.

For example, as of the seventeenth century, so-called “central banks” had to be established which were primarily designed for the comfort of the commercial banking system. Furthermore, in the course of the twentieth century, complex prudential regulation had to be promulgated and a stable banking supervision had to be organized, with all its inherent societal costs, among which the fact that during moments of banking crises, costly bailout measures have to be taken (leading to a “*socialization of (bank) losses*”).

95 It may already be obvious that interweaving money creation, which is (or should be) essentially a public function, and private commercial banking, which is entirely based on capitalist principles, is inherently unhealthy.

For this reason, it will be proposed in the Chaps. 4 and 5 of this book (see especially, at marg. 24 a.f. of Chap. 4 of this book) to resolutely withdraw money creation from the commercial banking system in the belief that money is (or again should become) a so-called “public good”, hence that the processes to create it do not belong in private hands.

A further proposal will be that, henceforward, private commercial banks would only be allowed to provide intermediation services as regards the demand for and

¹⁵⁶See <https://www.bis.org/bcbbs/>.

the offering of existing surplus savings, but would no longer be involved with the processes that lead to the creation of money themselves.

2.7 The Monetary and Banking System in a Globalized Context

2.7.1 *Interplay Between International Trade and International Payment Transactions*

The workings of the international money and capital markets in an increasingly “globalized context”¹⁵⁷ merely accentuates some of the inherent problems of the monetary system, without changing its inherently conventional nature. 96

In the present-day world, it is the so-called principle of “national sovereignty” that prevails in monetary and financial matters.¹⁵⁸ 97

This principle of national sovereignty implies that every state may determine in a sovereign way the classic functions of the currency that is used as money within its economic system.¹⁵⁹ Indeed, the so-called “*ius cudendae monetae*” is considered as one of the fundamental attributes of State sovereignty, which enables the State to issue money in defined units of accounts; to regulate its use as currency within the territory of the State, and in particular the conditions, including (exchange) rates, of its exchange for foreign currencies.¹⁶⁰ Furthermore, the monetary sovereignty principle also applies to money as a (generally accepted) payment instrument, as a value indicator, and as a savings and credit instrument (see also further, at Sect. 3.2.2 of Chap. 3).

Each state can in this regard freely set and apply rules (including, if so desired, restrictions), in order to regulate these (classical) functions of money.¹⁶¹

¹⁵⁷See for instance Steger (2013), p. 15; see also Bruckner (2002), p. 36.

¹⁵⁸Shuster (1973), pp. 1 a.f.; Hollenberg (1942), p. 103.

For critical reflections on the “national character” of money, see Pdoa-Schioppa (2011), pp. 51–73, especially pp. 57–58:

Under the influence of deep-seated forces ranging from technology to the rise of the nation state and to the growing political influence wielded by the masses, the creation of money was freed from the blind influence of gold discoveries and entrusted to human discretion. This permitted greater progress toward more rational policies, but also to surrender to the temptations of nationalism and demagogue. New risks arose, in the form of instability at the domestic and the international levels.

¹⁵⁹Such as, specifically in the international sphere, *inter alia*: (1) currency valuation (exchange rate mechanism); (2) exchange restrictions; (3) correction of balance of payments disequilibria and (4) international liquidity. (See Shuster 1973, p. 1.)

¹⁶⁰Shuster (1973), pp. 1–3.

¹⁶¹About these “classic” functions of money, see also Sect. 3.1 of Chap. 3 of this book.

In most countries, a chosen “national” currency fulfills the aforementioned traditional functions of money, although there are countries that have chosen another system (for instance the countries participating in the so-called “Eurozone” where the euro is used as one common currency).

98 As a consequence, since the advent of the modern (nation) states,¹⁶² in most countries only the currency put into circulation by (or under the auspices of) the State qualifies as a legal payment instrument for goods and/or services and performances within the national boundaries of such a country. Otherwise put may only this chosen currency fulfill the function of money as a generally accepted payment instrument.¹⁶³

Due to the principle of national sovereignty, the use of a currency created by a particular state as a generally accepted payment instrument (hence as money) becomes by definition geographically limited, since the currency of one state will not be generally accepted as payment instrument within the territory of other states. In light of the principle of national sovereignty, these other states will have created their own currencies which, on their own turn, within their respective territories, will function as the (only) generally accepted exchange instrument.

As a result, the currency a country has created does, in principle, not fulfill monetary functions outside its territory. Hence, the money of one state will not be considered as money in other states, but rather as a regular commodity which may (or due to legal restrictions: may not) be purchased by the residents of these other states against payment of their own currency.¹⁶⁴

Inversely, as a result of the national sovereignty rule, foreign currencies—i.e. currencies created by other states—do not fulfill the role of money within the territory of a given state, where they are not to be considered as legal payment instruments, but merely as a commodity that can be acquired by paying a certain sum of the own currency.¹⁶⁵

99 Obviously, the aforementioned principle of monetary national sovereignty has important repercussions on international payment transactions and, hence, on international commercial and capital transactions.

100 During the twentieth century, the world economy has witnessed an increased internationalization of (international) trade and payment transactions.¹⁶⁶

Steger mentions that, during the post WWII era, the total value of global trade “exploded” from 57 billion USD in 1947 to a staggering 14,900 billion USD in 2010. In the latter year, China was reported to be the world’s biggest commodity

¹⁶²Mackenzie (2014), pp. 55–65, especially 58; van Caenegem (1977), p. 383 p.; Harari (2014), pp. 407–408.

¹⁶³Hollenberg (1942), p. 103.

¹⁶⁴De Grauwe (1994), pp. 1116–1117.

¹⁶⁵Fase and Vleminckx (1995), pp. 57 a.f.

¹⁶⁶Steger (2013), pp. 41 a.f.

producer¹⁶⁷, accounting for 11% of the total world export, while the USA, the then most voracious consumer country in the world, accounted for 13% of the global import.¹⁶⁸

This increase in world trade went hand in hand with (and was to a large extent made possible by) an escalating liberalization of international trade (for instance by the WTO¹⁶⁹) and international payment transactions (for instance through efforts of the IMF). Key elements of the latter have been the deregulation of interest rates, the abolition of credit checks, the development of international (electronic) payment and clearing systems and the privatization of government banks, all having attributed to an explosive growth of business and investment banks.¹⁷⁰

As a result of this “globalization” of trade and finance, the financial markets have on a global scale been heavily integrated with numerous financial institutions currently operating outside their national territories on a massive scale, which makes supervising them extremely difficult. In many cases, financial institutions have evolved into true “trans- or multinational” enterprises that escape any true supervision by national authorities.¹⁷¹

This extreme internationalization of the financial system has, *on the one hand*, offered perspectives for enormous profits, but, *on the other hand*, made the financial sector also extremely vulnerable for all types of risks.

As a result, the failure of such a financial institution that functions in a globalized context may affect the stability of the financial markets in the various countries where it is active (possibly worldwide), and even in countries where counterparty financial institutions are active.

This has already been poignantly illustrated by the financial crisis of 2008.

The further question arises what the impact of this internationalization or globalization of the financial system has been on money and its use.

In order to answer this question, a general knowledge in how international trade works is needed.¹⁷²

At the risk of generalizing too much (in particular from an economic point of view): within the scope of international commercial trade, the residents of a given state (hence the entire national economy of such a state) acquire goods and/or

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¹⁶⁷Van der Borcht (2014), p. 2, mentioning that in 2014 China became the world’s biggest economy.

¹⁶⁸Steger (2013), p. 41. See also De Grauwe (2007); De Grauwe (2014).

¹⁶⁹Referred to by Chomsky as the result of the exportation of American values (as those especially took shape under the Reagan-administration) (see Chomsky 1999, pp. 68 a.f.).

¹⁷⁰Stiglitz (2006), pp. 7 a.f.; Khor (2008), pp. 215–259, especially pp. 216 a.f.; Steger (2013), pp. 41–43; Sono and Kanda (2010), pp. 506–516; Berend (2006), pp. 263 a.f.; Chomsky (1999), pp. 65 a.f.

For further considerations on this topic, see also further, at marg. 172 a.f. of Chap. 3 of this book.

¹⁷¹Sono and Kanda (2010), pp. 506–516, especially 511; Khor (2008), pp. 215–259, especially 216 a.f.

¹⁷²For a more profound description, see Krugman (1992), pp. 45 a.f.

See also Hume (1985), pp. 39–48.

services produced outside the territory of this state—i.e. “abroad”—either because these goods or services are not (as easily) available¹⁷³ within their own national territory, or because they are considered to be of a different quality.

In such cases, the residents of the state in question will be inclined to “import” the goods or services in question from abroad, hence by acquiring them out of the hands of residents of another state.

The former state is sometimes referred to as “import(ing) country” (or “import (ing) state”) and the latter one as “export(ing) country” (or “export(ing) state”). However, these concepts are not entirely accurate as it is usually not the countries or states themselves that import or export the goods or services, but rather their respective residents (so that the use of the terms “import” and “export state” rather refers to the trade activity of the collectivity of inhabitants of these states).

Reversely, the residents of a given state may also sell their goods or services abroad in case the residents of another state wish to acquire these goods or services for reasons similar to the aforementioned ones. In that case, the residents of the former state “export” their goods and/or services.

102 As explained above, such cross-border trade (import and export) may be hindered by the fact that, on account of the national sovereignty principle, the respective currencies of the states involved cannot be used as “money” in each other’s territory.

103 Hence, an importer will face the need to exchange his own currency for the currency of the state of the exporter (= the export(ing) country) in order to be able to pay for the import operation to the exporter.

Practically, this implies that the foreign currency from the export(ing) country should be freely purchasable in the import(ing) country (where by definition it does not function as money, but rather as a simple commodity) against payment in the own currency of that import country.

104 Among others¹⁷⁴, in order to insure the freedom of the so-called (money) exchange (for payment transactions within the scope of international trade), in

¹⁷³ An important factor determining the “easiness” of such availability may be the cost of production. In a globalized economy, probably all goods thinkable can be produced on any place on earth, however not at the same cost. As a result of several factors, among which especially the cost of labor, producing goods in one country may be a lot cheaper than producing the same goods of a same quality in another country. Taken into account the impact of transactions costs (among which the cost of transporting the goods), production is in such a case likely to shift to the country where it will be the cheapest. As a result, the impact of production costs, among which particularly the cost of labor, may have an enormous impact on the international trade flows, which has especially become clear during the last decades (especially since the liberalization of world trade by several treaties, among which especially the WTO-treaty). (See also Chomsky 1999, pp. 68 a.f.)

¹⁷⁴ On the sources of international law on money and monetary transactions, see Shuster (1973), pp. 3 a.f.

On the types of international agreements on money from a historical perspective, see Shuster (1973), pp. 11 a.f.

1944, the IMF-treaty was concluded (see especially the so-called “*Articles of Agreement of the International Monetary Fund*”¹⁷⁵).

Within a free market economy, making foreign currencies available for international payments ultimately has become the responsibility of the monetary and financial institutions of the countries whose inhabitants are active as importers and/or exporters.

This currency exchange activity has, among others, led to the trading of currencies between financial institutions (usually using foreign “correspondents” established in the export(ing) countries) and to the building up of international reserves (based on past export) which may be used to perform payments within the international scope.

In this way, the amount of international reserves that a country possesses basically reflects the purchasing power such a country has acquired by past export, which the country in question can spend abroad to finance its own future import.

It is hereby to be observed that in the current monetary systems where money has a purely conventional character (whereby even former underlying gold backing obligations have been abandoned), international trade has mainly come to rely on a huge mutual trust of (the residents of) countries in each other’s currencies.

This is to be explained by the fact that in exchange for exported goods and/or services, a so-called “export(ing) country” (= the country the residents of which export more goods and/or services than they import) ultimately “only” acquires money issued by the import(ing) country.

The reason for this is that, although the exporter (for instance an enterprise producing goods or services and selling them to a foreign importer) himself will generally require payment in his own currency, the mechanism of international exchange ultimately results in (the monetary authority of) the export(ing) country building up monetary reserves consisting of money issued by (the monetary authority of) the import(ing) country.

In other words, from a “collective” perspective, international trade results in the fact that the national economy of the export(ing) country will produce real goods (and/or services) and transfer them to the national economy of the import country. The latter merely substitutes these with a sum of its own created money, i.e. a fictitious product with no (significant) intrinsic value whatsoever.

¹⁷⁵<http://www.imf.org/external/pubs/ft/aa/index.htm> (last consulted on October 29th 2014). See also Shuster (1973), pp. 5–6.

One of the key stipulations of this treaty with regard to the freedom of payments is its Article VIII, Section 2:

Section 2. Avoidance of restrictions on current payments:

(a) Subject to the provisions of Article VII, Section 3(b) and Article XIV, Section 2, no member shall, without the approval of the Fund, impose restrictions on the making of payments and transfers for current international transactions.

(b) Exchange contracts which involve the currency of any member and which are contrary to the exchange control regulations of that member maintained or imposed consistently with this Agreement shall be unenforceable in the territories of any member. In addition, members may, by mutual accord, cooperate in measures for the purpose of making the exchange control regulations of either member more effective, provided that such measures and regulations are consistent with this Agreement.

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107 Ultimately in such an import-export system, the national economy of the export country will put a lot of effort (resources, intellectual and physical labor, energy, transportation. . .) into producing goods and/or services, in exchange for the fictitious entity of (foreign) money issued by the import country.

108 Although from a rational approach, the effect described in the previous marg. 106–107 of this chapter may seem somewhat astonishing, this effect of international payments does not essentially differ from any other exchange based on the use of money.

Since the very introduction of money, inherent to the very money mechanism, transactions have taken place whereby goods (or services) representing a real intrinsic value are exchanged for something with hardly any intrinsic value at all, be it “sea shells” (which historically were one of the first forms of money in many areas), “precious metal coins” (the principle form of money since the Ancient Greeks until the late Middle Ages) or our current “nickel coins”, “paper (central) banknotes” or “electronic bits” which represent a bank liability.

Such an astonishing mechanism can only be put into use to the degree that the seller of goods and/or services retains sufficient faith in the (permanent) purchasing power of money, the “fictional entity” one receives in exchange for his real goods and/or services. This is as much true for our prehistoric ancestor who “sold” part of his kill after a successful hunt to a less fortunate tribe member, as within our “modern” economies, where an export economy considered as a whole sells part of its painstakingly manufactured production to a foreign economy against the mere payment of money which originated in the latter.¹⁷⁶

109 Within the context of international exchange, this premise of sufficient faith has been “collectivized” to the faith that the national economy of the export(ing) country (through its monetary or other authority responsible for managing its currency reserves) puts in the currency issued by the national economy of the import(ing) country (under the auspices of its own monetary authority).

110 Still, within the context of such international trade and payment transactions, the presumed faith has moreover been “personalized” to a level never seen before in history.

Since the abolition of the “gold standard” (and later the dollar-standard *de facto* functioning as a “gold exchange standard” which was in force during the first decades of the IMF, i.e. the period from 1944 to 1971¹⁷⁷), the value of a country’s money is no longer based on (partial) gold backing.¹⁷⁸

As a result, present-day currency reserves (held abroad) merely represent a claim on the national economy of the country that issued them.

In this way, the present international payment systems differ vastly from the former, historical international monetary systems, in force well into the twentieth century.

¹⁷⁶Ferguson (2009), p. 31.

¹⁷⁷Mertens de Wilmars and Lucas (1973), pp. 145–165, especially p. 150.

¹⁷⁸For further reading, see e.g. Buckley (2008), pp. 5 a.f.; Flandreau (2003), pp. 17–50.

When money used to consist out of precious metal coins (in national economies with a coin standard), as a result of “international trade”, the national economy of an exporter of goods and services still acquired coins issued by another region in exchange for its exported goods or services. Although these coins represented, as such, no valid currency in its own region, when the faith in the national economy of the import(ing) region disappeared (for instance because the expectations regarding productivity and export of the import(ing) region in question were not met), the national economy of the export(ing) region at least could melt down its stash of coins issued by the import(ing) region and mint them into new own coins. In this way, the income obtained from a country’s export activities could serve to increase the own money supply of the export(ing) country (consisting of newly minted precious metal coins) and to finance import from third regions.

In essence, this same mechanism would continue to apply to international payment systems in later times, namely within economies based on paper money backed by precious metal (usually gold) (so-called: “representative paper money”).¹⁷⁹ The latter was backed by gold and could be converted back to it, usually on further account of treaty agreements. In case a national economy of an export(ing) country lost its faith in the purchasing power of its reserve of paper money from the import(ing) country (hence in the future productivity and export of the national economy of the import(ing) country), it might still exchange its foreign paper money reserve into gold with the monetary authority of the import(ing) country. In this context, the export(ing) country would still acquire gold for its past production, while the import(ing) country would see its gold supply decrease as a result of not meeting production and export expectancy. Consequently, the export (ing) country could use the thus acquired gold to purchase currency of a third country and thus obtain purchasing power in the latter country.¹⁸⁰

When the USA abolished the convertibility of the dollar for gold in 1971¹⁸¹ (in this way unilaterally revoking various parts of the IMF treaty)¹⁸², this mechanism came to an end.

Ever since, world trade and international payments have been based entirely on mutual faith and trust. A national economy exporting goods and/or services to another country, merely does so with the (more or less justified) expectation that the currency of the import(ing) country (of which it is building up a reserve) will (continue to) represent purchasing power in said import(ing) country—and solely in that country—for acquiring goods and services (to be) produced by the national economy of the import(ing) country.

¹⁷⁹Often, this conversion possibility was governed by bilateral treaties between the countries involved.

¹⁸⁰For further reading, see Tew (1977).

¹⁸¹As publically announced by then president Nixon in a famous television discourse on 15 August 1971 (see <https://www.youtube.com/watch?v=iRzr1QU6K1o>; last consulted on January 22nd 2016).

¹⁸²Mertens de Wilmars and Lucas (1973), pp. 145–165, especially p. 150.

111 For instance, the enormous monetary reserves held worldwide in USD by monetary authorities of countries the residents of which export goods to the USA, (merely) represent purchasing power which (ultimately) can only be spent in the USA, unless the national economy of a third country would also accept payment in USD for its own export.

In the latter case, this third country will in its own turn build up its own reserve of USD which ultimately can only be spent in the USA as well.

Otherwise put, a country the currency of which is used as monetary reserve in other (export(ing)) countries (such as the USA in the example above) faces the challenge of realizing a level of future production (and export) that allows the foreign purchasing power to be effectively spent within its territories.

In the present-day globalized world economy, international trade and in particular international payments are, because of this mechanism, to a large extent based on this supposed faith in balanced trade streams which are spread out over time.¹⁸³

Hence, it needs not surprise that the same premise continues to lie at the base of the systems for monetary aid stipulated in the IMF Treaty.

Serious dents in this faith can disrupt the international payments system. For instance, the value of the currency of the import(ing) country may plummet on the exchange markets so that the import(ing) country can no longer afford any future import. Also the export(ing) country may lose the currency reserve it built up with its (real) past production and export, hence, its formerly acquired purchasing power abroad (even in a third country). This situation occurs when a foreign national economy with such a currency reserve can no longer trust that the currency in question (of the import(ing) country) represents any purchasing power.

112 As a result of the abovementioned, within the context of the international relations between export(ing) and import(ing) countries, a rather irrational hostage situation is taking place in an almost chronical way.

In particular when the international trade flows are out of balance for an extended period of time, causing a country to systematically be an export(ing) country vis-à-vis another country (which reversely becomes a systematic import (ing) country), sooner or later a breach of faith in the future production and export capacity of such a systematic import country may arise.

¹⁸³One may wonder whether the USD itself has not somehow escaped the applicability of this way of reasoning. As pointed out by Emmanuel Todd, for a long time, the general acceptance of the American dollar as monetary reserve has been in contradiction with its weak export position during the same time periods. (See Todd 2003, p. 88; Todd 2002, pp. 106–107, having pointed out that

the American dollar has remained fairly strong despite having the largest deficit in world history. Why? Because the world's money has tended to flow to the United States. Everywhere, companies, banks and institutional as well as private investors decided to buy dollars thus keeping its value high. In this context these dollars do not serve to purchase consumer goods; instead, they allow direct investment in the United States or indirect investment through treasury bonds, as well as corporate stocks and bonds.)

In the latter case, the question will be how long the export(ing) country (which sees its reserve of currency from the import(ing) country ever increasing) will be willing to wait for a corresponding production and export of the import(ing) country.¹⁸⁴

2.7.2 *Legal Premises and Systems for Smooth International Payments*

From the aforementioned, the basic outlines of the premises for a smooth international payments system can be derived as follows:

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- free international payments require the possibility in the import(ing) country to freely purchase the currency of the export(ing) country against payment of the own currency of the import(ing) country; the currencies of the import(ing) and export(ing) states hence have to be freely exchangeable or “convertible” (this is the premise of “*convertibility*”).¹⁸⁵
- the free convertibility premise in turn requires the availability of the foreign currency in the import(ing) country, *either* as the result of earlier trade relations (export), *or* on account of credit positions; in other words, international reserves must be available in the import(ing) country;
- a balanced system of international payments implies a medium-term equilibrium between import and export of goods and/or services, so that the foreign currency is available for payment abroad, or that prior credit positions in the foreign currency can be paid back; if this condition would not be fulfilled, the import (ing) country may face a chronic shortage of international reserve (which is the case for numerous developing countries (in IMF terminology also called “*Heavily Indebted Poor Countries (HIPC)*”¹⁸⁶);
- When a country systematically exports more than it imports, it will gradually build up monetary reserves. A country that systematically imports more than it exports, will gradually become an indebted country; in order to finance further imports, such a latter country will have to rely more and more on the goodwill of its credit providers, be they other countries, private credit institutions or supra-national institutions such as the IMF or the World Bank.

¹⁸⁴The IMF disposes of mechanisms for tackling these problems, a fact which, in recent times, in some cases seems to have made the monetary and financial problems the world is facing even worse (as may for instance, be illustrated by the notorious example of the financial and monetary problems Greece has been facing in the aftermath of the severe financial crisis of 2008).

¹⁸⁵Several treaties exist according to which the member states have agreed upon the convertibility of their currency, among which the IMF-treaty itself.

¹⁸⁶See e.g. <http://www.imf.org/external/np/exr/facts/hipc.htm> (last consulted on October 24th 2014).

See also Cohen (2008), pp. 150–179, especially p. 167.

114 It is no surprise that the IMF treaty tries to realize the aforementioned principles within the context of the international payment system through various rules and mechanisms (see already above, at marg. 104 of this chapter).¹⁸⁷

Agreements between different countries may even go beyond the scope of the IMF; for instance, countries may go as far as creating a so-called “monetary union” (such as the well-known “European Monetary Union”). As a result, for instance among the member states of the EMU¹⁸⁸, money creation and supervision is mainly entrusted to the so-called European Central Bank (ECB).¹⁸⁹ Even within the scope of the IMF itself, the participating member states have yielded certain competences to the central IMF organs.¹⁹⁰

115 Nevertheless, the basic premises on the “conventional” nature of money and the monetary system—and hence their intrinsic modifiability—remain valid even within the context of such an international money systems embedded in treaty law.

A particular illustration of this is the inherent modifiability of such international treaties themselves. For instance, the IMF treaty has over the years been modified and supplemented several times, leading to several so-called amendments, which in some cases resulted in major changes.

The genesis of the EMU also offers a typical illustration of the essential modifiability of international monetary treaties. Before the creation of the EMU, several other “conventional” systems of monetary cooperation between European member states prevailed. Hence, the implementation of the EMU (and the Eurozone) could even be considered to be the outcome of a lengthy process of gradually ever more further-reaching monetary law agreements.

2.7.3 Disruptions Occurring Within International Payment Transactions

116 In spite of the aforementioned international treaty law systems, the past quarter century has seen some major disruptions in the international financial markets.¹⁹¹

117 In particular in the 1980s and 1990s, world trade got strongly liberalized.

¹⁸⁷ Restrictive and protectionist practices of which many were contrary to the principles referred to at marg. 134 adopted in the 1930s hereby served as an important source of inspiration for the IMF treaty.

¹⁸⁸ See <https://www.ecb.europa.eu/ecb/history/emu/html/index.nl.html>; last consulted on November 27th 2014.

¹⁸⁹ For further reading, see Zilioli and Selmayr (2001).

¹⁹⁰ See <http://www.imf.org/external/about/govstruct.htm>; last consulted on November 27th 2014. See also Bergsten (1998).

¹⁹¹ Khor (2008), pp. 215–259, especially pp. 220 a.f.; Stiglitz (2006), pp. 7 a.f.

This process of liberalization was even further enhanced by the quasi disappearance of communism as an economic model, which up till the late 1980s and the early 1990s had represented a certain “counterbalance” to the since then all-prevailing capitalist market model.¹⁹² (See also further, under Sect. 3.4.3.2 of Chap. 3 of this book.)

However, this liberalization did not put the various countries in the world on an equal social and fiscal footing. As a result, among the world’s countries, the free market game has since then been deployed on totally unequal playing fields.

Especially within the scope of industrial production (and the consequent export of goods), countries with a large, often poor, population were able to rise, in particular thanks to their flexible fiscal regulation and the low interference level of the labor and social law systems.¹⁹³ The price of this has been an increasing degree of deindustrialization in various Western countries (including several European countries).¹⁹⁴

In such “poor(er)” countries meeting the aforementioned characteristics (among which various Asian and South-American countries)—sometimes also referred to as “cheap labor countries”—the industrial production soared, mainly due to the fact that in these countries, the cost of labor was relatively much lower than in the countries with more strict labor, social and fiscal laws.¹⁹⁵

As of the 1990s, many of these countries emerged as strong export(ing) countries whose corporate sector was able to enter the liberalized world markets with far cheaper products than those of the in foreign competitors in (traditionally richer) countries with a much stronger social and fiscal structure.

The latter countries as a result had to face an increasing deindustrialization (see also further, under Sect. 3.4.3.2 of Chap. 3 of this book).

It is needless to say that the aforementioned displacement of production and the build-up of a strong export position by countries which previously had been far less present in international trade, also had an enormous impact on the global monetary system.¹⁹⁶

As a result of the mechanisms described earlier (see Sect. 2.7.1), strong export (ing) countries build up monetary reserve positions (and their residents also dispose

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¹⁹²Eyskens s.d., p. 107; Menasse (2012), p. 78.

¹⁹³See furthermore Foucault (2008), pp. 199–200:

There is [equally] an effect on international competition, inasmuch as the existence of different social security regimes in different countries means that international competition is distorted, and distorted to the detriment of countries with the most comprehensive social insurance cover for risks. That is to say, here again there is a source of increasing unemployment. Finally, and still due to this increase in the cost of labor, there will be a speeding-up of industrial concentration, and the development of social security has obvious economic consequences.

¹⁹⁴Michielsen (2014), p. 1. See also Menasse (2012), pp. 78–79.

¹⁹⁵Stiglitz (2006), p. 67. See also Michielsen (2014), p. 1.

¹⁹⁶Khor (2008), pp. 215–259.

of larger quantities of money), while import(ing) countries risk evolving into debtor countries.

As a result of the abovementioned liberalization of world trade, a seeming paradox has emerged whereby the traditionally rich countries (*e.g.* the USA and various European countries) have built up large debt positions (also to foreign creditors) in spite of the relative high prosperity of their population, while traditionally poor countries (*e.g.* China and India) saw their supply of international currencies increase in the past years (albeit that in most of these countries, a major part of the population still lives in poverty).¹⁹⁷

Stiglitz mentions the extreme example of Venezuela (referring to the situation back in 2006), a country receiving enormous income through the export of oil, while a large part of the population lives in extreme poverty.¹⁹⁸ This testifies to the paradox that countries with large natural resources (and hence also large monetary reserves) often have a poor population.¹⁹⁹ Obviously, and as will be explained in more detail in the next Chap. 3 of this book, this is one of the consequences of the capitalist mechanisms of socioeconomic planning (essentially: “*laissez faire, laissez passer*”) as devised and promoted by the liberal and neo-liberal economic schools.²⁰⁰

As mentioned earlier (see above, at marg. 112 of this chapter), the abovementioned evolution has resulted in the international monetary situation bearing witness of a “hostage drama:” a group of now richer countries (albeit often with a poor population) holds large currency supplies which can only be spent to the degree that the debtor countries manage to increase their export position. This requires the latter to implement a more competitive production system, which is hindered by the social protection and fiscal redistribution mechanisms prevailing in these countries.²⁰¹

119 To use a metaphor coined by Tom Ronse, the foreign currencies handled as monetary reserves have started to go around in a circle (or better put: an endless, long stretched, downward spiral). The USA and Europe have in recent times relatively consumed more than they have produced, having allowed certain new export(ing) economies—such as China and other Asian countries—to build up enormous dollar and euro reserves, which they loan out to the USA and the European countries so that the latter can finance their balance of payments deficit (*ergo* their import from the export(ing)—and credit supplying—countries).²⁰²

¹⁹⁷Stiglitz (2006), p. 8. See also Piketty (2014), p. 685.

¹⁹⁸Stiglitz (2006), p. 134.

¹⁹⁹Stiglitz (2006), p. 134.

²⁰⁰Pesendorfer (2012), pp. 414–434, especially p. 418.

See however Rand (1992), p. 37. See also Foucault (2008), p. 247, arguing about the differences between economic liberalism and economic neo-liberalism that the latter propagates a far more steering approach towards economic processes.

²⁰¹See also Eichengreen (2008), pp. 210 a.f.

²⁰²Ronse (1992), p. 77.

It is questionable if this can be regarded as the “rational economic behavior” allegedly underpinning the ideas of the (neo)liberal schools.

Once could put it even more bluntly. The question then becomes who behaves in the most idiotic way. The (formerly rich) import(ing) countries which are not willing to drastically adapt their expenses, but prefer to maintain their consumption level and finance it increasingly with foreign debt? Or the (formerly poor) export (ing) countries which are willing to produce cheaply (maintaining low wages for the laborers working within their territory) in order to supply their products relatively cheaply to the (formerly rich) import(ing) countries in exchange for foreign currency, which is under the inherent threat of losing its value on account of the law of supply and demand in the currency exchange markets?

This situation has led to a major pessimism as to the potential outcome of the inherent deadlock.

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Possible outcomes hereof may be:

- *Either* the traditionally rich countries manage to again implement a competitive production.

If they want to maintain their current prosperity level, this will require finding new comparative advantages, for instance by using an increasingly more specialized labor potential to create innovative products. Yet this will only increase their industrialization level and their export position if (i) the currently strong export(ing) countries do not manage to also attract such innovating production themselves and (ii) at the same time, there is a sufficient foreign interest to acquire these “new” products, especially from the current export(ing) countries.

It remains unsure whether US and especially European companies will ever be able to sufficiently meet these challenges, which put great hope in the innovating power of research in various scientific domains (such as technology, biologic science, biomedical and biochemical science) (see the so-called “*fourth industrial revolution*”, allegedly in progress).²⁰³

- *Or* the aforementioned traditionally rich countries do not rise up to the challenge in a sufficient way, which is more and more to be feared.²⁰⁴

If these countries continue to function according to capitalist rules, there might be a further implosion of their economic structure, and even of the global economy (to the degree that the population of these countries keeps acquiring large quantities of products manufactured in the currently strong export(ing) countries).

The currency issued by the current import(ing) countries might at some point lose so much of its value that these countries will have trouble financing further

²⁰³The question thus becomes how many “*Apples*” our planet can assimilate, or even generate and, on top of that, if these ever will be able to supply the world with new, high-tech products at an ever increasing frequency.

²⁰⁴Sassen (2014), pp. 35 a.f.

import. This in turn could depreciate the monetary reserves of the current export (ing) countries.

- *Or* the traditionally rich countries could start reducing the social rights established in the past (including systems of labor protection and social care mechanisms) in order to become more competitive with the countries where such social rights are mostly lacking.²⁰⁵

As will be explained in more detail in the next Chap. 3 of this book, this course of action is what the neo-liberal doctrines increasingly aim at.

During the past decade, said neo-liberal doctrines have moreover been very strongly supported by the media (which are in many cases owned by the most fervent adherents of neo-liberal thinking), through which neo-liberal thinking has in many countries subtly managed to convince the minds of the middle classes and even members of the lower classes²⁰⁶, in addition to these of policy makers.

As a result, the powers of the free market more and more force Western countries to phase out painstakingly established social rights in a process which may be referred to as a true “*race to the bottom*.”

As will be further described in Sect. 3.4 of Chap. 3 of this book, as a result of this evolution, the world is at the risk of being completely forced into the fabric dictated by unrestricted “economic neo-liberalism”, whereby a very small rich elite subordinates (and even “enslaves”) the rest of mankind to its hunger for ever more money.²⁰⁷

- *Or* a new global economic policy will be adopted, which at the very least will favor (i) a global convergence of labor protection mechanisms, including mechanisms of social care, (ii) a global standardization of fiscal policies and (iii) a new monetary system in which money is reshaped into a public good.

Such an alternative model will be formulated in the Chaps. 4 and 5 of this book.

²⁰⁵This is certainly the solution defended by economic neo-liberalism. (See already Foucault 2008, p. 199.)

²⁰⁶For these, adherence of neo-liberal ideas can be considered of being completely detrimental, as the implementation of the neo-liberal thought good is completely opposite to the interests of the poor classes.

²⁰⁷It has already been argued by others that such a world shaped in accordance with neo-liberal ideas lies not all that far from the society model described by Aldous Huxley in his timeless novel “*Brave New World*” (1932). (See Ongenaë 2014, pp. 44–45, especially p. 44.)

2.8 Preliminary Conclusion

The general description of the history of the (Western) money system in this chapter clearly shows that the money and monetary systems in vigor worldwide today, are essentially conventional models based on an underlying social contract, in which society at large expresses what exactly it accepts as money.

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Moreover, this conventional model has rather been shaped as the result of much trial and even much more error, than as the result of a well-elaborated thinking process.

This intrinsically “conventional” nature of money (and of the mone(tar)y system) also implies its essentially “modifiable” nature, since an agreement in force today may be modified tomorrow.

One could even argue that history has witnessed a continuous, often arbitrary genesis and evolution of money and the monetary system(s).

Hence, the money and monetary system(s) that mankind knows today may be considered more as the outcome of a process of organic growth, than as that of a premeditated and calculated system, with all its intrinsic shortcomings as a result.

This means that there is no reason whatsoever why the current money and mone(tar)y system should remain in force forever.

This chapter has also clearly shown that certain private market players, among which private commercial banks, have given themselves an overly important role in the process of money creation, while this has never been given a lot of premeditation, and over the centuries it has never been the subject of a wide public debate.

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This explains why private commercial banks play a crucial role in the process of creating (scriptural) money within the current national economies. One could even argue that the situation strongly resembles a modern hostage drama and that the time has come to question whether this system is still legitimate.

It can at the very least hardly still be argued that the current mechanisms of money creation serve the public interest. On the contrary, as will be further explored in Chap. 3 of this book, the globally widespread spirit of economic (neo)liberalism has above all resulted in a monetary system that primarily achieves an unrestricted money accumulation by a small financial elite at the cost of a lot of suffering and misery for the rest of mankind.

If the mechanisms of money creation that are currently in force, would be the subject to a wide public debate among a properly informed public, it is quite unlikely that they would be approved of by the global world population.

Based on the opinion that money is or at the very least should again become a “public good,” it will hereafter be demonstrated why the mechanisms of money creation should no longer be surrendered to the blind forces of the (neo-)Smithian

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“invisible hand”, but should on the contrary be brought back to the more visible hands of the public arena.²⁰⁸

124 The latter brings us to the subject of the next Chap. 3 of this book which will explore a number of ethical doctrines that have pondered on the issue of unrestricted money and wealth accumulation, which is inherently possible in the prevailing monetary and financial system(s).

Based upon these “moral” insights, a proposal on how to bring money creation back into the public arena will be further described in the subsequent Chaps. 4 and 5 of this book.

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²⁰⁸ Boccaro et al. (2011), pp. 207–221, especially p. 213; Ingham (2005), p. xxii.
See also Ingham (2005), pp. 222–224, especially p. 237:

Money's transformation from, in Simmel's terms, “substance” (commodity) to pure “function” as an acknowledgment of debt (promise to pay) expressed in a money of account and issued by states and banks involved the realization that money was itself a social relation.

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