

# The Legal Status of Intrinsically Useless Currency

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## Abstract

Monetary economists tend to discount the importance of the legal status of money. This view is mostly based on ignorance and misunderstanding. Legal concepts like *legal tender* and *fiat money* are used casually in the economics literature to describe almost anything except for what they really mean in law and in reality. This paper provides economists with a relatively brief, user-friendly guide to the law of money. It clarifies in simple, non-legalistic terms, the meaning and implications of legal tender laws and other laws that promote the circulation of currencies, and explores their relations to existing monetary models.

Keywords: Legal tender, fiat money, convertibility.

JEL: E42, K12, N10

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## 1. Introduction

The joint study of law and economics is well established in many fields, but it is almost non-existent in the field of money. Monetary economists rarely consult texts in law or statutes and legal scholars rarely show interest in monetary economics<sup>1</sup>. This paper deals with the former problem, and its main goal is to bring knowledge of the law into monetary economics. The practical relevance of monetary law to monetary economics can be conjectured from casual observation. The euro was launched by legal acts. Paper money of extinct regimes no longer circulates after they, and their laws, are gone. Private paper money stops circulating once it is clear that its issuer, legally bound to redeem the money, cannot do so any more. And yet, monetary economists usually dismiss the law of money as being as irrelevant as numismatics for the circulation of money.

The problem with this attitude is that instead of being based on careful theoretical or empirical investigation of the issue, it is based on ignorance and misunderstanding of the most basic tenets of monetary law. Legal concepts as *legal tender* or *fiat money* are used in numerous articles, books, and textbooks to describe any of the following: any intrinsically useless, inconvertible money; any government-issued money; money that must be accepted in all transactions or by contractual creditors; the only money that can be legally used in the economy. This is all wrong.

Some prudent economists know the letter of the law but do not understand its implications. The importance of legal tender laws is sometimes discounted because, so goes the economist's claim, these laws do not explicitly prohibit the use of other objects for paying debts and taxes. While this is factually accurate and potentially convincing for anyone not trained in law, any

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<sup>1</sup> Notable exceptions to the latter include Hurst (1973) and Priest (2001), who prove how critical it is for legal historians to understand monetary theory and monetary policy.

legal scholar would realize as a matter of course that such a claim *completely* misses the whole point of legal tender laws. An analogous claim, in the opposite direction, would be for a legal scholar of antitrust law to reject all microeconomic theory as irrelevant because “most people can’t take derivatives and people do not explicitly calculate their utility function when making economic decisions.”

Such confusion and misunderstandings lead economists to far-reaching, negative conclusions about the importance of legal status in monetary economics. For example, if legal tender laws impose money on all transactions (which they do not), then their numerous failures in getting currencies to circulate must imply that they are not effective. However, accurate knowledge of legal tender laws and their implications leads this author to the conclusion that they are very effective in both theory and practice under very specific conditions that can be explicitly modeled and tested.

A few books do account for the legal status of money. The main reason that they have barely affected monetary economics is that most economists are simply unaware of the books’ existence<sup>2</sup>. Just providing references to these books will not help either, for various reasons. First, the most authoritative books, those written by legal scholars specializing in money, have an overly legalistic point of view which most economists cannot easily understand<sup>3</sup>. The extensive use of technical terms in these books is sure to deter most of those not trained in law. Second, legal scholars are mostly interested in questions that arise in actual court cases. In the field of monetary law, the overwhelming majority of cases are about debt repayment after debasement or

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<sup>2</sup> According to the ISI Database, only nine economists have ever cited the main authorities on the law of money (Nussbaum 1950, Mann 1982, Hurst 1973) in academic journals.

<sup>3</sup> Nussbaum (1950) and Mann (1982).

inflation, or about the authority to issue money. The legal books reflect that. The monetary economist, in contrast, is more concerned about the law's influence on the money's success or failure as a general medium of exchange. Third, for historical reasons the books focus too intently on commodity money. As time goes by, the large share that commodity money has in monetary history diminishes, and the existing legal literature does not reflect that. Fourth, most of the books that discuss legal issues focus on only one country's monetary system<sup>4</sup>. Fifth, most of the critical information about legal tender is actually found in books about contract law.

In light of these problems, the main goal of the paper is to provide economists with a relatively brief, user-friendly guide that is neither too country-specific, nor too legalistic, explaining the various real-life legal statuses of currencies. The paper lists the important types of laws that can potentially promote currency circulation, provides a few historical examples of each such law, explains what such laws imply (and, no less importantly, what they *do not* imply), explains the logic that leads legislators to believe that such laws can affect the general acceptability of currencies, and relates such real-life laws to existing models in the monetary literature (where such models exist).

This paper does not aim to provide an exhaustive historical study of all monetary laws ever conceived. Its goal is practical, to help economists understand current and past laws that are likely to be relevant for their research. Every law reviewed here raises many theoretical and empirical questions: How easy was it to evade such a law? Were enforcement costs significant? What were the sanctions imposed on violators of the law (and were they optimal)? Did the law

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<sup>4</sup> Kemp (1956), Nussbaum (1957) and Hurst (1973) describe U.S. history; Breckinridge (1903) analyzes legal tender in England and the U.S.; Carothers (1930) discusses minor coins in the U.S.; Sargent and Velde (2002) discuss a few European countries. Mann (1982) has a broad perspective but is defined as a guide for British lawyers.

create (or could have created) side-effects? Did the promoted currency circulate successfully? If yes, was the law really necessary for that? These issues are mostly disregarded here. By listing and explaining these laws and the legislators' informal reasoning about their potential effects, the paper can facilitate more empirical and theoretical work on these important questions.

The benefits of reintroducing the law of money into monetary economics are numerous. First, monetary economists will be able to re-evaluate the importance of money's legal status, based on accurate knowledge of that status. Second, economists who investigate a particular monetary episode will pay adequate attention to the legal status of the money under investigation. Third, all economists will know things that non-economists expect them to know, such as the meaning of the recent European laws making the euro legal tender. Fourth, textbooks may give a complete and accurate description and explanation of the legal status of modern currency, whereas today no (American) textbook does so<sup>5</sup>.

An extra potential benefit of the article is in bringing back into monetary theory not only the law of money but also legal scholars. Some classic works in monetary theory were written by scholars trained in law<sup>6</sup>. It may seem that the legal status of money reached its "end of history" in that all major currencies are monopolized by governments as intrinsically useless legal tender. However, governments are getting closer to forming large currency areas with varying degrees of monetary and political union,<sup>7</sup> while anti-globalization activists launch an increasing number of

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<sup>5</sup> I surveyed twenty seven current undergraduate textbooks in principles of economics/macroeconomics, intermediate macroeconomics, and money and banking. Graduate economics textbooks "obviously" ignore the issue. Details and references are available by request. A correct explanation is provided at the end of the paper.

<sup>6</sup> Menger (1892), Mises (1952), Hayek (1978).

<sup>7</sup> The distinguished economists Mundell (2002) and Goodhart (1998) are concerned about the legal implications of a common currency without complete political and legal unification.

private, community-based moneys worldwide. Legal scholars can contribute to research on future monetary standards<sup>8</sup> and on the role of various credit market imperfections (e.g., enforcement of contracts) in perpetuating the use of cash in trade<sup>9</sup>. Monetary theorists have been constructing mathematical models to analyze how legal rules (such as legal tender) affect people's decisions on accepting money in trade and how they affect aggregate welfare. Although never phrased that way before, this is really part of the economic analysis of law<sup>10</sup>, so there is no reason for legal scholars to stay on the sidelines.

The paper begins with a brief background of the monetary laws to be discussed (Section 2), followed by a discussion of the all-important convertibility (Section 3) and legal tender (Section 4). Other ways to support money include forcing its use (Section 5), qualifying it as bank reserves (Section 6), paying interest on it (Section 7), using it to offset private debts (Section 8), and enacting measures that support it indirectly (Section 9). Section 10 concludes by discussing the relations between all these legal statuses, including the legal definition of *fiat money*.

## **2. Background**

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<sup>8</sup> See Selgin and White (1994) for a review of the economics literature on this issue.

<sup>9</sup> See Kocherlakota and Wallace (1998) for an example of a theoretical investigation of this issue.

<sup>10</sup> Kaplow and Shavell (2002) begin a recent survey by stating: "The economic analysis of law seeks to answer two basic questions about legal rules. Namely, what are the effects of legal rules on the behavior of relevant actors? And are these effects of legal rules socially desirable?"

The scope of the paper is limited to intrinsically useless<sup>11</sup> currency, namely paper money and token coins<sup>12</sup>. Non-tangible money (such as deposits) and commodity money are excluded. Quantitatively, non-tangible money clearly dominates the modern money supply. However, all that money is convertible, directly or indirectly, into currency. Thus, it is sufficient to discuss the legal status of currency, which is the basis of the monetary system, and convertibility. The legal status of, say, deposits can be then deduced by corollary. Commodity money is left out for three reasons. First, it is virtually gone. Second, its legal status is not critical since it is supported by its intrinsic value. Intrinsically useless currency, on the other hand, is supported only by law and speculation. Third, commodity money complicates the analysis considerably. Its unique issues of weights, metal fineness, measurements, and debasements are worthy of a separate paper.

How is legal status actually determined? The creation of currency by the state is always authorized by a legal act. Real legislation does not make vague declarations or statements. A legal act specifies exact obligations or prohibitions imposed upon various types of agents, or limitations on any rights bestowed on them by the law. A monetary act never merely declares, “this is money,” but lists in detail the obligations imposed on, and rights given to, the government, sellers, buyers, creditors, borrowers, taxpayers, citizens, and foreigners, with

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<sup>11</sup> No tangible money is really intrinsically useless: Even paper money could be used as burning material, and as such it has market value as a commodity. Here money is called *intrinsically useless* if its fluctuating market value as a commodity is *significantly* lower than its face value, and will almost surely never surpass the face value. Carothers (1930), p. 77, brings an interesting example of coins that were issued as token money, but events in the copper market made their commodity value higher than their face value.

<sup>12</sup> The word *currency* is sometime used to describe paper money in particular, as opposed to coins. This is not a problem, as most of the discussion here is indeed about paper money.

respect to that currency<sup>13</sup>. Most of these laws work by ensuring currency holders that they can get rid of that intrinsically useless object in a useful way (e.g., converting it into gold, paying a tax with it, discharging a contractual debt with it). Currencies are usually granted more than one legal status. The reasons for that and the implications are discussed in the Conclusion.

Although this paper is meant to be generic, rather than country-specific, most examples come from American history. This is not so much because of language issues and availability of material<sup>14</sup>, but because Americans have been by far the greatest innovators in the area of intrinsically useless money<sup>15</sup>. The credit actually goes to the English who fought bitterly against any form of money that the colonies devised. England prohibited at this time or another exportation of specie to the colonies, use of foreign coinage, public colonial coinage, private bank notes, and public legal tender notes. In doing so it not only fueled the resentment that led to Revolution, but also pushed the colonists from one monetary innovation to another. The lack of specie in particular prevented the backing of paper money with it, as England and so many other countries did as a matter of course. The Constitution invoked even more creativity by prohibiting the states from issuing money and making any notes legal tender. There is also an ideological factor. The most popular mechanism of supporting currency, cherished and standard in most of the rest of the world for millennia was the practice of dictators to simply force everyone to use their currency in all transactions while outlawing all other currency. The American adherence to freedom of contracts and democracy encouraged its lawmakers to be more creative in promoting

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<sup>13</sup> A very rare exception is that of the copper coins of the previous note. Congress gave them no legal status and repeatedly refused to clarify the situation. Carothers (1930) believes that it probably still did not consider minor coins to be real money. The public concurred and mostly rejected these coins.

<sup>14</sup> The main legal authorities, Mann (1982), and especially Nussbaum (1950), have a broad international perspective.

<sup>15</sup> Galbraith (1975, p. 45), Brock (1975, p. 17).

their currency, and has generally allowed private currency<sup>16</sup>. Finally, Galbraith (1975) emphasizes an “instinct for monetary experiment” as part of the settlers’ general innovative spirit.

### **3. Convertibility**

The classic case of paper money is the warehouse receipt stating that its holder is entitled to a certain quantity of a certain commodity upon demand. Virtually every type of agents issued convertible notes at one time or another: Commercial banks, governments, non-bank firms, merchants, churches or other associations, and individuals. The promised commodity was usually specie but there were many exceptions. These include other goods such as tobacco<sup>17</sup> and land<sup>18</sup>, postal services<sup>19</sup>, financial instruments such as bonds,<sup>20</sup> bills of exchange,<sup>21</sup> and foreign currency (i.e., a currency board).

Non-bank firms usually promised their produced goods or services, or other goods they sold in special company-owned stores. Convertible private money derives its power not from any special monetary legislation, but from the explicit promise written on it, according to contract law. Some associations of local businesses have recently recreated such moneys.<sup>22</sup>

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<sup>16</sup> Hurst (1973), p. 61-62, 225.

<sup>17</sup> This was the case in Virginia in the eighteenth century. See Brock (1975), p. .

<sup>18</sup> E.g., England during the recoinage of the 1690s (Horsefield 1964, p. .) and France during the Revolution ().

<sup>19</sup> This was the case with small denomination notes in the U.S. during the Civil War (Carothers 1930, p. ).

<sup>20</sup> E.g., the Civil War greenbacks and the post-hyperinflation German money (Nussbaum 1950, p. 76).

<sup>21</sup> E.g., Canadian money under French rule (Breckenridge 1893, p. ).

<sup>22</sup> Examples include Ithaca HOURS and Toronto Dollars, which are convertible into goods and services of many local businesses. See Greco (2001) for a survey.

Some note issuers made a lot of effort to avoid redeeming their notes. An extreme example is the “wildcat banking” in the U.S., where issuers avoided redemption by relocating to remote areas where only wildcats roamed. Convertibility was regularly suspended or limited during financial crises and wars. With legalized fractional reserve banking, everyone knew that a bank could not redeem all its notes at once<sup>23</sup>. The Bank of Scotland fought bank runs (initiated by its competitor) by introducing an “optional clause” on its notes. The clause informed note holders that the bank may opt to defer specie payment for six months, with interest, instead of redeeming notes on demand<sup>24</sup>.

Many governments tried to reassure the public by one or more of the following measures: Closing suspending banks, reserve requirements, note insurance, special personal liability for bank stockholders<sup>25</sup>, and conditioning note-issuing on depositing specific securities (typically government bonds) with the government. The notes were not convertible into these securities upon demand, and, strictly speaking, they were usually merely a restriction on the issuer rather than a right conferred upon the note holders<sup>26</sup>. However, note holders could expect that in case of a crisis, their otherwise worthless notes would be converted into these securities. In the case of government bonds, this implicitly pledged the government’s taxing power to provide convertibility<sup>27</sup>. Such an expected convertibility is valueless if the securities promise to pay the

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<sup>23</sup> In the search model of Aiyagari and Wallace (1997), agents randomly meet government agents who must sell goods for paper money. This is similar to fractional backing because at any period an agent can redeem notes only with some probability due to randomness of matching.

<sup>24</sup> The clause was operational from 1730 to 1765, when it was outlawed by the British. See Checkland (1975).

<sup>25</sup> Hurst (1973), p. 54.

<sup>26</sup> Mann (1982), p. 37. See Hurst (1973), p. 291, n. 241, for an exception.

<sup>27</sup> Hurst (1973), p. 53.

same type of money they back: If the money is rejected by everyone, getting a claim to that money does not help at all.

Another form of convertibility is weaker than the classic case in that the issuer may have no specie at all. This happened with the first intrinsically useless moneys in the West. During some wars in Medieval Europe, there was not enough specie for paying the troops. Stamped pieces of paper, leather and other materials were issued, and the king promised to pay specie when the emergency was over<sup>28</sup>. Colonial Massachusetts promised to convert its first (wartime) paper money if and when there was any specie at the Treasury<sup>29</sup>, but it did not actually have specie or tried to obtain it for that purpose so everyone regarded the promise as an empty promise.

Another weak form of convertibility, in which neither the availability nor the price of the commodity is guaranteed, exists when the government commits to accepting money for goods that it sells on a regular basis. Antebellum U.S. Treasury notes and national bank notes were acceptable in purchases of government-owned land. More often, the government's willingness to make the exchange is not in law but in practice (e.g., stamps sold by the U.S. Postal Service, tickets sold by Amtrak)<sup>30</sup>.

Explicit promises to convert a note into a specific object remain today with some private paper moneys, which are convertible by the issuer into the official local paper money. Examples include: Bank notes in Scotland and Northern Ireland, which promise to pay "pounds" (i.e., Bank

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<sup>28</sup> Sargent and Velde (2002), p. 216-224.

<sup>29</sup> Breckinridge (1903), p. 57, 59

<sup>30</sup> Li and Wright (1998), building on Aiyagari and Wallace (1997), endogenize prices and thus make the convertibility more similar to sales of postal stamps because there is no guarantee of quantity given for any unit of money. This model also has random matching, so it too approximates fractional reserves.

of England notes or Royal Mint coins); Toronto Dollars<sup>31</sup>; and the *Raam Mudra*, issued by the Maharishi Yogi's followers in their town of Vedic City, Iowa<sup>32</sup>. A recent reincarnation of the U.S. silver certificate is called Liberty Dollar. It is a simple, supposedly legal, warehouse receipt, convertible to silver upon demand, and enjoying limited circulation throughout the U.S.<sup>33</sup>

#### **4. Legal Tender**

Legal tender applies to all types of payments, contractual and others. It is useful to discuss each of these categories separately, and also distinguish the legal theory from history of such laws.

##### **4.1 Legal Tender in Contracts: Theory**

In law, a commercial contract is created when the parties agree on some fundamental details, such as quantity, price, and time and place of delivery. For example, an agreement to “sell apples at the price of one euro per kilogram, tomorrow, in my store”, is not a contract. It cannot be enforced in court because the quantity is not determined. In contrast, legislatures worldwide have determined long ago that specifying the medium of payment is *not* a fundamental detail. If the above example is modified to specify “ten kilograms of apples” then it is a valid contract, even though the medium of payment (as opposed to the unit of account) is undetermined. This raises a potential problem. A contract has been born and each side now has an obligation. How should the buyer's obligation to pay ten euros be discharged? Almost anything that the parties agree on is acceptable<sup>34</sup>, be it ten one-euro bills, a check, dollar bills according to some exchange rate, or a cheap watch which the seller estimates as worth at least ten euros. This is just one more

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<sup>31</sup> <http://torontodollar.com>

<sup>32</sup> <http://maharishivediccity.net/council/resolutions/08.html>

<sup>33</sup> <http://www.libertydollar.org>. Some convertible money-like objects, such as Disney dollars and casino chips, seem to be traded only with the issuer as gift cards and do not function as media of exchange between non-issuer parties.

<sup>34</sup> Bank of England (2006); Bank of Canada (2006); Williston (2003), vol. 28, pp. 752-3, 778; Hurst (1973), p. 42.

example of freedom of contracts – a fundamental building block of capitalism. Legislatures have outlawed very few things, such as gold (in post Great Depression legislation<sup>35</sup>) or illegal drugs, as being opposed to the “public interest.” It does not matter if the agreement regarding the medium of payment is part of the contract or made after the contract is created.

The main goal of contract law is to solve problems that arise when the parties do *not* agree about something, *after* a contract was created. Suppose that the buyer in my example offers to pay in one ten-euro bill, but the seller, who wants dollar bills, refuses. Given that a contract was formed earlier but a payment has not been made, can the seller sue the buyer in court for breach of the contract? What if the buyer offers one thousand coins of one European cent, or a watch?

“Legal tender” is an object that confers a right on the payer. If the buyer in my example offers the right quantity of an object which is declared by law as legal tender, then the seller’s lawsuit is inconsequential. The buyer may be asked to deliver that object to the court, and then the court would offer it to the seller<sup>36</sup>. The buyer cannot be punished for non-payment<sup>37</sup>, and no interest is accrued on the debt after the date of offering the legal tender<sup>38</sup>. The seller will have to pay the legal costs of the buyer<sup>39</sup>. In the past, creditors were fined or imprisoned for wasting the court’s time. An object that is not legal tender does not give the buyer such peace of mind. Judgment will be entered against the buyer for breach of contract if the goods were delivered.

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<sup>35</sup> Nussbaum (1950), Hurst (1973), Mann (1982).

<sup>36</sup> Williston (2003), vol. 28, pp. 746, 806-9.

<sup>37</sup> Bank of England (2006), Reserve Bank of Australia (2006).

<sup>38</sup> Williston (2003), vol. 28, pp. 805, 812-4.

<sup>39</sup> Williston (2003), vol. 28, p. 746; Corbin (1952), p. 988.

For this very practical purpose, every country specifies which objects are legal tender for debts that are subject to its contract law<sup>40</sup>. Typically, the government gives this status to currency it issues itself, but this is not necessary<sup>41</sup>. The status is given today almost exclusively to intrinsically useless objects<sup>42</sup>.

Since legal tender laws protect buyers, sellers may want to protect themselves from these laws. Usually, it is remarkably easy to do so. *Before* the fundamental details of the contract are finalized, the seller can specify the medium of payment. Now there are two possibilities. If the buyer agrees and the other details are also agreed upon, then the agreed medium of payment becomes part of the newly-born contract<sup>43</sup>. If that medium of payment is not made illegal by *other* laws, then legal tender laws are not applicable.

If, on the other hand, there is no agreement about the medium of payment, then a contract does not come into existence. Going back to my example, suppose that before agreeing on the quantity of apples to be delivered, the seller says (e.g., by posting a sign near the cash register), that he wants to be paid in dollars. If the buyer refuses and negotiations break down, then a contract is not created. Claiming that the buyer can force the seller to accept euros is absurd: How can the buyer force the seller to accept euros when the quantity of apples, and therefore the quantity of euros, has not been determined yet?

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<sup>40</sup> IMF (1997), p. 953.

<sup>41</sup> Exceptions include countries in currency areas (such as Europe, West Africa, and Central Africa), countries with serious economic problems, which resort to dollarization, and countries that are “too small” (e.g., Liechtenstein).

<sup>42</sup> In some countries, coins made of precious metals are still legal tender, but because their quantity is negligible they cannot compete with paper money and token coins for the role of money.

<sup>43</sup> Board of Governors of the Federal Reserve System (2006), Reserve Bank of Australia (2006).

An exception is when a new legal tender law is applied retroactively to pre-existing contracts<sup>44</sup>. Another extremely easy way to avoid legal tender laws is to use a different unit of account. The European legal tender law does not apply to contracts that specify payments in dollars or potatoes.

The conclusion is that no seller is really forced to accept legal tender if he is slightly cautious. All he needs to do is to state in advance that he wants to be paid in a different object, or use a different unit of account. The role of the state, after declaring what is legal tender, is purely passive and negative: To dismiss a creditor's lawsuit if the debtor offers the right quantity of legal tender. Contrary to all the models mentioned above, at least in democracies, there is absolutely *no monitoring of private transactions*.

## **4.2. Legal Tender in Contracts: History**

Current legal tender laws are remarkably uniform. They refer to all contracts, sometimes limiting the use of coins for large payments<sup>45</sup>. However, there were many varieties in earlier times. Historians must be careful not to assume that any money mentioned as "legal tender" was indeed legal tender for all contracts.

### **4.2.1. Timing**

The general rule in law against retroactive legislation should make legal tender laws apply only to contracts created after the legal tender law passes<sup>46</sup>. In the case of the greenbacks, many debtors preferred to keep their gold and pay their pre-existing debts with these intrinsically

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<sup>44</sup> For example, in the U.S. before the Civil War, most sellers only specified "dollars". Later Legal Tender Acts allowed the use of greenback bills, rather than gold coins, to discharge the buyers' obligations to the sellers.

<sup>45</sup> E.g., European Union (1998), Bank of England (2006), Reserve Bank of Australia (2006). Such money is usually called *limited legal tender*, and is usually convertible into unlimited legal tender (Nussbaum 1950, p. 63).

<sup>46</sup> E.g., colonial New York did so four years after issuing its notes (Breckinridge 1903, p. 59).

useless notes. It was especially attractive given that the value of the greenbacks depended on the Union's questionable survival. This very unusual state intervention in the freedom of contracts, together with its questionable constitutionality, outraged creditors and created an unprecedented political and legal mess<sup>47</sup>. With commodity money gone, such political turmoil cannot recur. Every new legal tender law, such as that of the euro, merely replaces one paper money with another<sup>48</sup>.

#### **4.2.2. Type of Debtor**

In the U.S., the national bank notes of 1863 were not officially declared "legal tender." However, they could not be rejected as salaries of government employees and as payments of other government debts. That is, they were effectively legal tender only for debts owed by the government<sup>49</sup>. This feature had already been adopted in China in 1139 and 1385,<sup>50</sup> and applied to the unconstitutional Missouri money of 1821.<sup>51</sup>

#### **4.2.3. Type of Creditor**

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<sup>47</sup> The U.S. Supreme Court first ruled that the greenbacks could not be imposed on existing debts, but reversed itself a year later in a decision that remains controversial. See Timberlake (1989) for a critique. The law was indirectly induced by state bank laws, which threatened closing all banks for suspending convertibility. Banks agreed to accept paper money for government debt only if that paper was made eligible to pay for their own liabilities (i.e., notes) instead of gold. The legal tender quality was not intended to promote private, non-bank acceptance directly, or to affect non-bank, existing contracts, but it inevitably did. See Hepburn (1903), p. 68, and Hurst (1973), p. 45, 179, 284, n. 221).

<sup>48</sup> European Union (1998, 2005).

<sup>49</sup> Hurst (1973), p. 40.

<sup>50</sup> Yang (1952), p. 59, 67.

<sup>51</sup> Hurst (1973), p. 252, n. 24.

Since banks are chartered by the government, it can impose special obligations on them. The same national bank notes just mentioned had to be accepted by the national banks at par, even if issued by other national banks. That is, they were effectively legal tender for debts owed to banks. This feature had already been adopted a little earlier by the Confederacy<sup>52</sup> and later repeated with Federal Reserve notes.

#### **4.2.4. Portion of Debt**

During the Revolutionary War some states made the continental legal tender only for the interest but not for the principal of state bonds<sup>53</sup>. In contrast, in the Civil War the greenbacks were legal tender only for the principal of federal bonds<sup>54</sup>.

#### **4.2.5. Conditional Legal Tender**

The political sensitivities involved with making paper money legal tender induced England to avoid such problems by conditioning the legal tender status of Bank of England notes on their convertibility for almost a century, until 1928.<sup>55</sup>

#### **4.2.6. Disguised Legal Tender**

When England suspended convertibility due to the Napoleonic Wars, Parliament wanted to avoid the appearance of forcing Bank of England notes on private creditors. Instead of an explicit legal tender law it enacted procedural legal obstacles instead, which strongly encouraged creditors to accept Bank of England notes. It merely forced the officials who collected debts for creditors to accept these notes<sup>56</sup>.

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<sup>52</sup> Pecquet (1995), p. 137.

<sup>53</sup> Bolles (1879), p. 175.

<sup>54</sup> Mitchell 1903, p. 76, 79, Nussbaum 1957, p. 101

<sup>55</sup> Nussbaum (1950), p. 48.

<sup>56</sup> Nussbaum (1950), p. 47-8.

At other times the problem was not the unpopularity of legal tender paper money with the public, but with a superior government. In 1690 the colony of Massachusetts was waiting for a new charter from England, and had to issue its first paper money for paying troops. It could not afford to support its money with a legal tender law, given that one of the reasons for losing the earlier charter was the production of local legal tender coins. It therefore enacted a separate law which made grain legal tender for government debts, but with a penalty of one third, thus encouraging the many troops to accept paper money. England did not notice, and so did historians<sup>57</sup>.

In the U.S., the Constitution prohibited states from issuing money and from making any paper money legal tender. Kentucky got around these prohibitions by chartering a nominally private bank, and enacting a two-year delay for any lawsuit by a creditor who rejected that bank's notes<sup>58</sup>. Amazingly, the U.S. Supreme Court approved it.

Other legal tender laws are easy to miss in monetary history not because of such deception, but because the term "legal tender," or its foreign language equivalents, were not used. In other cases this is because there was no written language and we have to rely on reports of travellers and anthropologists<sup>59</sup>.

### **4.3. Legal Tender in Taxes: Theory**

There are other obligations in the economy which are not created by contract, but by court or by law. These obligations involve the same practical issues of contractual obligations. If someone

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<sup>57</sup> See Goldberg (2006a) for a detailed discussion.

<sup>58</sup> Nussbaum (1957), p. 76, Hurst (1973), p. 140-5.

<sup>59</sup> Goldberg (2005).

sends his used car to the tax authority as a tax payment, what can the latter do?<sup>60</sup> Does it have to accept it, or can it sue the taxpayer for not paying the tax? How about paying a parking ticket with foreign currency, or vengefully paying alimony with small change? For this reason, although the legal tender concept originates in contract law, it has been universally extended to include non-contractual obligations as well. The extension also applies to terms such as “debtor” and “creditor”, which also originate in a contractual context<sup>61</sup>. As with contracts, the legal tender law is irrelevant if the tax authority and the taxpayer agree on payment with another object, such as a check or a credit card<sup>62</sup>.

It is crucial for the Treasury to accept the money at least at face value<sup>63</sup> rather than at market value. Otherwise, if people believe that the money’s market value will be zero, then they believe its value for tax purposes will also be zero. At that point, the receivability for taxes no longer anchors the money’s value. This actually happened with the continental (American Revolution)

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<sup>60</sup> Someone actually tried to do that. See United States (2003), p. 27, note 17.

<sup>61</sup> European Union (1998, 2005), especially Articles 1, 8; United States (2003); Nussbaum (1950), pp. 49, 58, 139; Mann (1982), pp. 52, 80-100. Unlike most legal tender laws, the American law explicitly mentions taxes and other payments to the government. This is because American courts now interpret the word “debt” as a contractual debt, as opposed to an obligation imposed by the government (United States, 2003, p. 21). The original interpretation of debt as including tax remains on Federal Reserve notes (“This note is legal tender for all debts, public and private”) for historical reasons, and even in some American legal literature (e.g., Hurst 1973, p. 274, n. 159). Obviously, the official U.S. Code is what legally matters for the notes’ legal status. Nothing of the sort is written on U.S. coins.

<sup>62</sup> Federal tax forms in the United States have the following warning: “Do not send cash”. This is plain rudeness. The tax authority can politely ask taxpayers not to send cash, for their own protection, but it will surely lose in court if it rejects legal tender cash, because the law is crystal clear on that point

<sup>63</sup> In 1692, Massachusetts accepted its money for taxes at 5% above its face value (Breckinridge 1903, p. 57).

and the *mandat* (French Revolution), whose values completely collapsed after the respective governments began accepting tax payments in these notes according to market value<sup>64</sup>.

It is also important that the tax burden be high enough to match the quantity of money. Otherwise, as Massachusetts learned in 1690, the money can depreciate significantly. In later money issues, Massachusetts enacted special future taxes whose only goal was to absorb the notes<sup>65</sup>, thus assuring taxpayers that they will need the money, at least for tax-paying purposes.

#### **4.4. Legal Tender for Taxes: History**

Some of the oldest intrinsically useless moneys were supported in that manner, such as Chinese paper money in 1193 and 17th century Spanish copper coins<sup>66</sup>. Democracies reaffirmed this commitment by enacting laws that reassured taxpayers that they could use the government's money for tax payments. For example, notes issued by the (nominally private) Bank of England were made receivable for taxes when their convertibility was suspended during the Napoleonic Wars<sup>67</sup>. In the U.S., such an explicit commitment to receiving some types of money for tax payments has a long tradition. All the colonies did it, as well as the Continental Congress. This status was given as a matter of course to almost every type of money issued by a federal government agency (Treasury and Mint) and a semi-federal bank (Bank of North America, first and second Banks of the United States, and the Federal Reserve System)<sup>68</sup>. Notes issued by states (in violation of the Constitution), counties, and cities were receivable for their issuers'

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<sup>64</sup> Calomiris (1988), p. 59, Nussbaum (1950), p. 50, respectively.

<sup>65</sup> Breckinridge (1903), p. 57.

<sup>66</sup> Tullock (1957), p. 399, Velde (1998), p. 11, respectively.

<sup>67</sup> Fetter (1950).

<sup>68</sup> Breckinridge (1903), Kemp (1956), Nussbaum (1957), Hurst (1973)..

taxes<sup>69</sup>. Many notes issued by private banks were receivable for taxes of the banks' charterers (state or federal). A peculiar episode from the Civil War demonstrates how valuable the receivability feature is: Due to a severe shortage of small change, Congress encouraged the monetary use of postage stamps by making them receivable for taxes; the result was an immediate run on the post offices, even though the tiny sticky stamps proved physically unfit for monetary use<sup>70</sup>.

As with the case of contractual debts, there was variation in history regarding which taxes legal tender laws referred to. Massachusetts accepted some notes for all taxes except import duties. Paradoxically this exception was meant to *improve* the notes' acceptability: The notes were convertible into specie, and that specie was to be obtained by accepting only specie for import duties<sup>71</sup>. This probably inspired a similar feature of the greenbacks: The gold obtained from import duties was to be used to pay interest on government bonds; the greenbacks, which were legal tender only for the principal of these bonds, were convertible into these bonds<sup>72</sup>. The greenbacks were also not legal tender for state taxes<sup>73</sup>.

#### **4.5. Usefulness of Legal Tender**

Among the few economists who mention the exact content of the American legal tender law, Friedman (1992, p. 10) claims that it contributes nothing to the money's general acceptance, while Tobin (1980, p. 87) thinks it is important.

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<sup>69</sup> Timberlake (1981), p. 860.

<sup>70</sup> The same law also prohibited the production of competing private small-denomination coins, but the public ignored this prohibition (Carothers 1930, p. 168, 172-3).

<sup>71</sup> Breckinridge (1903), p. 59, fn. 2.

<sup>72</sup> Mitchell (1903), p. 76, 79, Nussbaum (1957), p. 101.

<sup>73</sup> Nussbaum (1957), p. 117.

Friedman's view is correct in an economy in which the only payments are in spot transactions. In these cases everyone can evade the applicability of the legal tender law. However, in general, Tobin is correct. This is because of the two cases mentioned above – retroactive legal tender laws that apply to pre-existing contractual debts, and non-contractual obligations. These types of payments are absent from all the above-mentioned models. In the case of taxes, for example, the government must accept legal tender objects as payment. It has the right to reject anything else. If it does reject anything else, then it artificially creates a demand for the legal tender objects by taxpayers<sup>74</sup>. This demand makes these objects valuable and can result in their exclusive circulation as media of exchange. A model of this centuries-old insight is in Goldberg (2006a).

Generally, giving legal tender status to money creates demand for that money by debtors who can use it to pay their debts<sup>75</sup>. This demand makes the money valuable. However, if a potential creditor believes that all his future trading partners will reject the money that debtors give him, he may choose to denominate the debt in another currency not to become a creditor. If everyone thinks so, credit markets will collapse. Without debt there is no source of demand for paper money stemming from the legal tender law, and its value may be zero<sup>76</sup>. A more likely result is that all creditors will denominate the debt in another currency or in commodities, with the same

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<sup>74</sup> For example, the IRS rejected someone's used car as a tax payment. See United States (2003), p. 27, note 17.

<sup>75</sup> Galbraith (1975), p. 46.

<sup>76</sup> This happens in equilibrium in the overlapping-generations model of Freeman (1996), where contractual debts must be paid in intrinsically useless, inconvertible money. In that paper, which makes no explicit reference to "legal tender," debtors physically never have anything else to offer when they need to pay their debts.

sad result for the new money<sup>77</sup>. It is exactly because of this ease to escape the legal tender law that its enactment should invoke no political problems<sup>78</sup>.

While denominating your loan in foreign currency or goods will make legal tender laws irrelevant for that loan, the same is not true for taxes: Receiving your income in foreign currency or goods will not exempt you from income tax (payable in local legal tender)<sup>79</sup>.

Given this relative ineffectiveness of the debt aspect of legal tender laws, and given that it violates the freedom of contracts, it is clear why it created such objections. The irony is that both economists and legal scholars have tended to overemphasize the debt aspect of legal tender exactly because of the loud objections over that red herring, while neglecting the more powerful and less intrusive tax aspect.

## **5. Forced Acceptance**

It has been very common to force some private agents to accept a particular type of money in circumstances other than simple contractual debts.

### **5.1. The Government's Trading Partners**

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<sup>77</sup> Legal tender laws have no power over such contracts, and they have been generally legal. Contracts that were denominated in the local unit of account, but required payment in gold or were indexed to gold or the CPI, were prohibited or abrogated in many countries in the 20<sup>th</sup> century (Nussbaum 1950, Hurst 1973, Mann 1982).

<sup>78</sup> Hurst (1973, p. 184) believes that the main problem with legal tender status is that costless, forced money encourages inflationary issue, while the retroactive issue (to be discussed next) is minor. He does not contemplate the possibility that without retroactivity the money may be rejected completely.

<sup>79</sup> E.g., a Canadian gift shop at Niagara Falls that sells only for U.S. dollars is not exempt from Canadian taxes, which must be paid in Canadian dollars. Following Mises (1952, p. 74), Selgin (1994, p. 820) is concerned that the tax liability cannot be calculated if the new money does not already circulate, because then there is no market exchange rate with the old money. However, governments usually exchange old money for new money at some rate, which can be used for that calculation. Alternatively, the government can declare an exchange rate for tax purposes.

Some types of money, such as the national bank notes of 1863, could not be rejected as salaries of government employees and payments of other government debts. That is, they were legal tender only in debt contracts involving the government<sup>80</sup>. In general, such a law may be easy to avoid by choosing not to trade with the government, but this is not the case for draftees. Such a law does not induce *general* acceptability of the money in any obvious way, but an equilibrium in which it is not accepted by the general public is sure to be very short-lived: If legislators, who are government employees, cannot spend their salaries on goods and services, they will surely strengthen the money's legal status immediately. Such a law may be useful in getting the money quickly out of its issuer and into the public, with more powerful mechanisms taking over after that to promote general acceptability.

## **5.2. Banks**

Since the government charters banks it can also impose additional requirements on them. National banks in the U.S. were forced to accept each others' notes at par. Later, the Federal Reserve Act forced them, along with member banks of the Federal Reserve System and Federal Reserve Banks, to accept Federal Reserve notes. Similarly, Confederate banks were forced to accept Confederate notes on deposit and in debt payments from other Confederate banks, while no other private creditors were forced to do so<sup>81</sup>. The effect of such laws seems at least as good as the setoff rule of Section 4: Any debtor of any such bank knows that he can pay off his debts with these notes. This could create a demand for these notes. Currently, the banks must accept Federal Reserve notes for everything they sell, be it American Eagle gold coins or foreign currency. However, they do not have to sell these objects and they can change the price at will.

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<sup>80</sup> Hurst (1973), p. 40. Another example is the unconstitutional Missouri money of 1821 (Hurst 1973, p. 252, n. 24).

<sup>81</sup> Pecquet (1995), p. 137.

### 5.3. The General Public

Beginning with the first paper money (China, 1<sup>st</sup> Millenium) many regimes have imposed the acceptance of their money on everyone in all trade, including private spot transactions<sup>82</sup>. Anyone ruled by a despot risks his life if he dares rejecting the despot's money, even if such rejection is not formally outlawed. In England it was obvious that the status of the Crown's money required no special law<sup>83</sup>. Even some American colonies and the Continental Congress forced general acceptance of their paper moneys (usually at par with gold)<sup>84</sup>. Indirectly, such laws hurt not only the freedom of contract, but also property rights. A seller who wants to keep some of his products to himself may not be able to do so. If offered the appropriate money, he must sell.

### 6. Reserve Money

Imposing a reserve requirement on banks requires the legislature to be specific about which types of money are eligible to be used as reserves against deposits and/or notes. In the U.S. alone, the term *lawful money* was sometimes used to designate money eligible to be used as reserves<sup>85</sup>. The first intrinsically useless money to receive such status was the greenbacks. This seems to be a good source of money demand because usually, if a bank obtains such money, it can issue more notes or deposits, thus increasing its profit. Non-bank firms and individuals may then be willing to accept that money, knowing that banks will not refuse it<sup>86</sup>.

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<sup>82</sup> Nussbaum (1957), p. 15.

<sup>83</sup> Carothers (1930), p. 18-9.

<sup>84</sup> Nettels (1934), p. 264-5, Bolles (1879), p. 175. See Lotz and Rocheteau (2002) and Selgin (2003) for explicit models, but ignore their designation of such money as *legal tender*.

<sup>85</sup> It was also used as a synonym for *legal tender* and to denote any money issued legally. Kemp (1956) discusses the confusion this has created. In other countries, this term has had only the latter meaning.

<sup>86</sup> See Freeman (1987) for an overlapping generations model in which banks demand money for this reason.

## **7. Interest Payments**

Interest-bearing tradable Treasury notes circulated as money in the U.S. during the Antebellum period and the Civil War. These are usually thought of as bonds that were granted monetary features to allow their holders more flexibility. The ability to use them as either investment or for purchases was supposed to make them more desirable. The original purpose notwithstanding, these notes can equally be thought of as money that acquired an extra feature of interest payments to support its acceptability. Klein (1974) suggests such a way to support private inconvertible paper money, but for this measure alone to guarantee the money's circulation, the interest itself must not be paid in the same form of money: If the money is rejected by everyone, possessing more units of it (by interest payments) is of no value. The interest must be paid in a money whose value is supported independently. One option is to pay the interest in commodities: The greenbacks were initially convertible into bonds, whose interest was paid in gold (rather than in greenbacks, as all other debts). Another option is to pay in legal tender: Argentinean provinces that recently ran out of legal tender federal money paid salaries in bonds that promised payments (principal and interest) in the legal tender<sup>87</sup>.

## **8. Setoff**

Setoff is a very old, commonsense principle in Western legal systems. It says that if person A is both a debtor and a creditor of person B, and both amounts are in dollars, then he may be able to use \$X of his credit to offset \$X of his debt, but only if both sides agree. Based on this principle, a money-issuing bank must accept its own money in repayments of loans it gave<sup>88</sup>. Since banks

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<sup>87</sup> For more on proposals of interest-bearing currency, beginning with Jeremy Bentham, see Cowen and Kroszner (1994, ch. 4).

<sup>88</sup> Kemp (1956), p. 36.

are in the business of giving loans, people who owe money to the bank can be a stable source of demand for its money.

However, this may fail if it is the only legal method of supporting a *new* type of money. If people expect that this money will be rejected by everyone else, no one will take a loan in that money from the issuing bank, so the money will never leave the bank<sup>89</sup>. The recent system of *creditos* in Argentina initially relied exclusively on this mechanism, and it succeeded temporarily before collapsing in 2003.<sup>90</sup>

## **9. Indirect Measures**

### **9.1. Confidence-increasing Laws**

Some laws try to increase confidence in intrinsically useless money by trying to prevent the loss of its value through inflation. One direct measure is price controls<sup>91</sup>. Other measures recognize the need to limit the quantity of money. One aspect is anti-counterfeiting laws. Another aspect is limits on the lawful issuers. The latter involves an explicit ceiling on overall value of notes outstanding, reserve requirements, or a ceiling based on the issuer's capital or securities it deposits with the government<sup>92</sup>. Quantity limits can also be physiological: Every single note issued by the second Bank of the United States had to be signed by the bank's president<sup>93</sup>.

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<sup>89</sup> The colonial loan offices, which functioned as public banks, lent only legal tender notes (Brock 1975, p. 19).

<sup>90</sup> Colacelli and Blackburn (2005), p. 12. According to Mariana Colacelli, the acceptability of some of the *creditos* was strengthened by businesses that promised to accept them for their services and local governments that promised to receive them for taxes. On the other hand, the *creditos'* acceptability was undermined by the fact that the repayments of the loans were not enforced (Colacelli and Blackburn 2005, p. 6).

<sup>91</sup> Rockoff (1984) surveys and analyzes the history of price controls in the U.S.

<sup>92</sup> White (1995), Galbraith (1975), p. 90, and Hurst (1973), p. 52, discuss various problems of such requirements.

<sup>93</sup> Of course, a technical loophole was quickly found. See Hurst (1973), p. 162.

Some legislatures, affected by hyperinflation traumas, recognized the inflationary bias of democratic governments, and solved it in institutional ways. Germany created a central bank which was independent, committed to maintaining its notes' value, and prohibited from issuing money for the Treasury. The U.S. initially assigned control of note-issuing to private banks, and moved slowly to the public-yet-independent model, that keeps spreading around the world.<sup>94</sup> A related issue is indexation, which is generally allowed by the freedom of contracts. It directly increases confidence in money. However, it makes inflation politically feasible, and therefore it has been outlawed in some countries to prevent the government from trying to inflate its money.

Regarding private, convertible notes another method in Europe and Antebellum U.S. was to outlaw small denominations. The logic was that for people who consider accepting such notes, the cost of verifying that they were issued by a solvent bank is too high relative to the expected benefit. Without such monitoring, bad banks can issue too many notes. This, in turn, could lead to a general bank panic, which might result in the abandonment of notes of *all* denominations and of *all* banks. Another way to prevent free-riding is to keep the number of bank note *users* small; this requires legalizing only denominations that are too large for everyday transactions<sup>95</sup>.

## **9.2. Prohibition on Competing Forms of Trade**

Many governments, including democratic ones, have tried to help their intrinsically useless moneys indirectly by making other forms of trade illegal. Typically, this has included prohibition on issuing, using, or possessing private money, foreign money<sup>96</sup> or gold. Prohibitions are

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<sup>94</sup> Secretaries of the Treasury Hamilton (1790) and Chase (1860s) were explicit about the reason for this assignment to banks, chartered by both Congress and the states (Hurst, 1973, p. 154, 190).

<sup>95</sup> See White (1995) for references and criticism of both arguments.

<sup>96</sup> See Soller-Curtis and Waller (2000) for a model in which the government punishes users of foreign money.

sometime selective, being applied to some types of foreign money<sup>97</sup> or only to some entities<sup>98</sup>, including the government itself<sup>99</sup>. A prohibitive tax could be easier to enact than an explicit prohibition, a famous example being the federal tax that eliminated state bank notes in the U.S.<sup>100</sup>

Labor laws in many countries have outlawed any form of wage payment other than cash (or check). The original goal in Britain was to eliminate the *truck system*, in which employers paid wages in overvalued goods, presumably to circumvent standard nominal wages. Such laws are current in many countries, aiming to not only protect workers but also prevent tax evasion<sup>101</sup>. The latter excuse is used by former Soviet republics that recently outlawed barter in all transactions<sup>102</sup>.

Even a combination of all these measures does not amount to the cash-in-advance constraint popular in monetary models. The cash-in-advance constraint also includes a prohibition on credit and non-metallic commodity money. I have no knowledge of a government that prohibited these

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<sup>97</sup> A bill in the Confederate Congress prohibited only the use and possession of U.S. paper money (Confederate States of America 1863). Presumably, hurting the U.S. economy was a secondary goal.

<sup>98</sup> In 18<sup>th</sup> century Massachusetts the use of a land bank notes or Rhode Island notes was punished by a job loss if one was a government official, a soldier, a lawyer, or an innkeeper (Priest 2001, p. 1378; Weiss 1974, p. 590).

<sup>99</sup> E.g., In 1846 the U.S. government was allowed to receive payments in Treasury notes, in addition to gold and silver, but not in private bank notes (Hurst 1973, p. 123, n. 199).

<sup>100</sup> Ironically, the idea probably came from earlier state taxes that meant to fight branches of the federal first and second Banks of the United States. See Hurst (1973), p. 145-51, 263, n. 70.

<sup>101</sup> See Hilton (1960), especially p. 64, 109-110, 154, for the history of the truck system and the laws against it. International Labor Organization (2003), Ch. 2, provides an extensive survey of current labor laws worldwide regarding wage payments in goods, checks, promissory notes, vouchers, coupon, options, etc.

<sup>102</sup> Examples include Moldova, Turkmenistan, and Uzbekistan (U.N. Economic Commission for Europe 1998).

forms of payment in *general* trade. Cash-in-advance constraints with intrinsically useless moneys seem to have existed only in very limited, yet critical, economic transactions. In some traditional societies, critical payments such as a bride purchase, a secret society membership fee, and ransom payment must be made on the spot with a particular type of money. In some societies that money is intrinsically useless<sup>103</sup>. A modern equivalent, which probably exists somewhere, is a government that grants a driver's license only in return for cash.

## **10. Conclusion**

There is a strong, positive long-run correlation between the successful circulation of intrinsically useless moneys and the existence of their issuers. This fact makes it *a-priori* probable that the issuers' legal obligations or commitments with respect to their moneys have practical importance<sup>104</sup>. Thus, it is necessary for monetary economists and historians to understand exactly what these legal obligations or commitments are. Today, when all moneys are intrinsically useless, it is more important than ever to understand exactly what the current legal status of such moneys is, and what other long forgotten methods could be used to support such moneys.

This paper provides a survey of the foremost ways in which governments and private issuers have formally supported their intrinsically useless moneys. Unlike the existing literature, it does so without citing numerous court cases, using excessive legal jargon, counting grains of gold or silver, or debating the U.S. Constitution's monetary provisions. It is quite certain that there were other laws throughout human history that supported intrinsically useless moneys in different

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<sup>103</sup> See Goldberg (2003) for details.

<sup>104</sup> Deviations from this pattern can be explained by political instability, a dysfunctional government, money that is too costly to use (hyperinflation), or "too much" choice for the public (e.g., if we can use 1-dollar bills for all payments, why accept Susan B. Anthony dollar coins?). See Goldberg (2005b) for details and examples.

ways than those reviewed here. For example, a peculiar North Carolina law punished Assembly members who introduced motions that were derogatory to the local money<sup>105</sup>.

Some currencies were supported in informal ways. In the lack of legal authority, wartime patriotism was used in 1914 to encourage the English to use paper money, surrender their gold to the government and not withdraw gold from the Bank of England.<sup>106</sup> Religion was often used in traditional societies to promote currencies. For example, the Trobriand islanders believed that their seashell money qualified as offering to various supernatural forces<sup>107</sup>.

A recurrent theme in monetary history is a first obvious choice of convertibility to support paper money, with wars and financial crises leading to suspensions. Suspension was usually accompanied by granting the money a substitute legal status, such as legal tender. However, most moneys have had more than one of the legal statuses reviewed here<sup>108</sup>. There are three reasons for that. First, as in all legislation, lobbying and bargaining are more common than a serious, objective debate. The final result is then a practical compromise within the legislature that does not make sense theoretically. Second, many monetary reforms were conducted during a

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<sup>105</sup> Nettels (1934), p. 265.

<sup>106</sup> Galbraith (1975), p. 138-140, Nussbaum (1950), p. 48.

<sup>107</sup> Unlike most seashell moneys, these were not physically fit as jewelry (Goldberg 2005c). Other intrinsically useless currencies were said to have been created by the gods or to have magical properties (Goldberg 2003). Although the phrase “In God we Trust” was born on Civil War money, its goal was clearly to use money to support religion rather than the other way around.

<sup>108</sup> E.g., Bank of England notes were both full legal tender and convertible for almost a century. Federal Reserve notes were initially receivable for taxes and convertible but not legal tender for contractual debts. Greenbacks were legal tender for most debts and taxes, convertible into bonds, and convertible into gold after resumption of specie payments. All three qualified as bank reserves.

financial crisis or a war, leaving even less time for research and giving primacy to intuition and imitation. Third, many laws do not aim to serve the narrow purpose of promoting currency, but to solve other problems. Settling disputes between parties to a contract (or between taxpayers and the Treasury) requires the state to declare what is legal tender in contracts (or taxes). Some moneys were even issued just for providing a means of paying taxes. Similarly, the common requirement of backing notes with government bonds was often really aimed at creating a market for such bonds. Congress used the national bank notes for that purpose, and when bank notes were not created quickly enough to support the Union's war bonds, Congress further promoted the bond-backed national bank notes by taxing state bank notes out of existence<sup>109</sup>.

Because history does not always enable us to isolate one legal status from another, it is hard to attribute the success of a particular type of currency to a particular legal status<sup>110</sup>. Conjecturing about the future usefulness of such a legal status may rely on a theoretical model. Models can also determine which legal status is more efficient. Much work remains to be done in modeling the legal statuses reviewed herein.

It is time to answer three practical questions. 1. What exactly is the current legal status of American currency? 2. What can an economist conclude when he/she reads in scholarly work that some past money was *legal tender*? 3. What is, legally speaking, *fiat money*?

As for the first question, it could be summarized, and perhaps be included in textbooks, in the following way: All Federal Reserve notes and U.S. coins are legal tender for all dollar-denominated obligations, including debts and taxes. This means that contractual creditors, all tax authorities and all courts (federal, state and local) cannot reject a payment made in these objects.

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<sup>109</sup> For a general discussion of these aspects of monetary legislation, and many examples, see Hurst (1973).

<sup>110</sup> E.g., I know of no money whose only legal status was being forced as salaries on government employees.

Almost all banks (national banks and members of the Federal Reserve system) must accept all Federal Reserve notes in all transactions. Anyone else can reject these notes and coins in any other transaction. Nothing else is legal tender, and thus anything else can be rejected by anyone in any transaction. These notes and coins can be redeemed by their issuers only for similar notes and coins of different denominations.

As for the use of *legal tender* in the literature, unfortunately it can be relied on only if the author is a legal scholar. Almost everyone else gets it either inaccurately or flat wrong, and it is recommended to obtain the statute. The U.S. legal tender law, cited above, is unusual in being the most comprehensive legal tender law possible. It applies to all debts (existing and future), all taxes (federal, state and local), for every amount, and for every component of the debt (principal and interest). Most legal tender laws throughout history have been narrower than that, and examples are given throughout the text. A law of general forced acceptance in all transactions is more than a legal tender law. Referring to such law as a *legal tender law* is exactly like referring to a law that prohibits murder as “a law that prohibits bodily harm.” Although factually accurate, it misses the main point.

As for *fiat money*, everyone agrees that it is intrinsically useless and not convertible. But why is it called *fiat* money? The word *fiat* could potentially stand for any of the legal statuses reviewed here, but every dictionary that specifies what exactly the legal status of fiat money is, mentions only legal tender, meaning that it is forced only on creditors and tax collectors<sup>111</sup>. The situation in the economics profession today is peculiar: Many economists believe that modern, real-life money, being legal tender, must be accepted in *all* transactions; and, when they model money, they call it *fiat money*, to which they usually assign *no* explicit legal status. As explained

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<sup>111</sup> See also Mann (1982), p. 41.

above, the truth is somewhere in the middle. It is my hope that this paper will contribute to a better understanding of this important topic.

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