The Real Meaning of the Real Bills Doctrine (revised Nov., 2018)

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Abstract

The real bills doctrine asserts that money should be issued in exchange for short-term real bills of adequate value. Critics of this doctrine have thought of it as a means to make the money supply move in step with the production of goods*, a task at which it supposedly fails. In this essay I explain that the real bills doctrine is actually a means to make the money supply move in step with the* money-issuer's assets*. When viewed this way, I find that the real bills doctrine is an effective means to prevent inflation. More importantly, the real bills doctrine is a means to make the quantity of money grow and shrink with the needs of business, thus preventing money shortages and the resulting recessions.*

Introduction

The real bills doctrine dates at least from 1705, when John Law stated his version of it in *Money and Trade Considered*. James Steuart discussed it further in 1767. Adam Smith restated it in 1776. It was thought to have been buried by David Ricardo during the Bullionist debates of 1810, only to rise again in the Currency School/Banking School debates of 1845. It was incorporated into the Federal Reserve Act in 1913. It has been blamed for the European hyperinflations of the 1920's and for the great Depression of the 1930's. Since being attacked by Lloyd Mints in 1945, it has been regarded as discredited by mainstream economists, but nevertheless re-appeared as the Fiscal Theory of the Price Level in 1982. Writing in 1992, Mark Blaug (p. 54) declared it "high on the list of longest-lived economic fallacies of all times".

In this essay I hope to show that the real bills doctrine is not a fallacy, and that the reason for its longevity is that it is a correct theory that has been wrongly rejected by economists. Like any theory that has existed for centuries, the real bills doctrine has been stated and misstated in many different ways, so the first order of business is to try to state the real bills doctrine with reasonable accuracy and clarity. This requires a brief survey of various statements of the real bills doctrine that have been made, both by its advocates and its opponents.

The Real Bills Doctrine as Stated by Two of its Advocates…

> …so long as a bank issues its notes only in the discount of *good* bills, at not more than 60 days' date, it cannot go wrong in issuing as many as the public will receive from it (Fullarton, 1845, p. 198).

> Bank notes, based on the security of such commercial assets, are an elastic as well as a safe form of credit operations; because salable goods, in the process of getting from producer to consumer, are the final recourse over and beyond all securities — since collateral is, after all, only a title to salable property or goods. (Laughlin, 1903, p. 89)

...And by Two of its Opponents

> If banks restrict their loans to self-liquidating commercial paper, that is, to discounting short-term notes based on goods in process, the means of payment in an economy will necessarily expand in pace with the volume of goods produced. (Blaug, 1992, p. 202)

> Briefly, those who have defended this position have held that, if only "real" bills are discounted, the expansion of bank money will be in proportion to any extension in trade that may take place, or to the "needs of trade," and that, when trade contracts, bank loans will be correspondingly paid off. (Mints, 1945, p. 9.)

With these various versions of the real bills doctrine in mind, I offer my own best attempt at a coherent statement of the real bills doctrine:

Money should be issued in exchange for short-term real bills of adequate value.

In this statement, *money* is usually understood to mean bank notes, but real bills principles apply just as well to checking account money or credit card money. The *issuer* of the money is usually understood to be a bank, but real bills principles would also apply to money issued by a government or private individual. Finally, the phrase *should be issued* is deliberately used to emphasize that money provides vital liquidity to the economy at large, as well as being a source of profit to the issuing bank. So as long as the public wants bank notes badly enough to hand over assets of equal or greater value to the issuing bank, the bank should issue those notes.

Three items in my statement of the real bills doctrine merit special attention:
1) short term
2) real bills
3) of adequate value

Adequate Value

Item (3) is the most important of the three. A bank that issues $100 of its notes must receive assets worth at least $100 in exchange. A bank that gets assets worth only $99 will see its net worth drop by $1, and a bank that makes a habit of such trades risks insolvency, along with a resulting depreciation of its notes. Economists who are sympathetic to the Free Banking school of thought will notice that the

bank's best interest is served by obeying the *adequate value* rule. The real bills doctrine can therefore claim to be a guiding principle of Free Banking.

The *adequate value* requirement is so obvious that a banker who needs reminding of it has no business being a banker. Accordingly, adequacy of value is rarely mentioned in statements of the real bills doctrine. It is, however, implicit in the statements of both Fullarton and Laughlin. Fullarton, for example, says notes should be issued *only in the discount of good bills*. That those bills should be of adequate value would be understood by an alert reader, but it is not made explicit in the statement. Laughlin, in contrast, speaks explicitly of salable goods serving as collateral for bank notes.

A reasonable inference to draw from the statements of Fullarton and Laughlin is that the *adequate value* requirement automatically makes *the issuing bank's assets* move in step with its money issue, thus preserving the money's value. Every issue of $100 of notes is matched by at least $100 of good bills received by the bank as new assets. If the bank fails to get or maintain assets of adequate value, then the bank's issuance of money will outrun its assets and the bank's money will lose value.

A very different inference would be drawn from Blaug's and Mints' statements of the real bills doctrine: "the means of payment in an economy will necessarily expand in pace with the volume of goods produced." This is the key difference between the Laughlin/Fullarton statements and those of Blaug/Mints: The Laughlin/Fullarton statements imply that bank notes will hold their value if their quantity moves in step with the *issuing bank's assets* (exactly like stocks, bonds, or any other financial securities), while the Blaug/Mints statements imply that bank notes will hold their value if their quantity moves in step with the *volume of goods produced* in the economy at large (unlike any other financial securities).

Misunderstandings of this distinction have been a prolific source of confusion. For example, Henry Thornton (1802, p. 86.) pointed out that the same goods might be sold and resold six times in six months. Each purchaser might buy those goods by issuing a bill at six months credit, and note-issuing banks might have issued bank notes in the process of discounting each of those bills. In this way, $600 of new bank notes might have been issued, based upon only $100 worth of goods. Thornton considered this a satisfactory proof that the real bills doctrine allows note issue to outpace the *volume of goods produced*, and thus to cause inflation. He failed to see that banks would not discount a bill without getting adequate collateral. The $600 of bank notes would only be issued if the bills were adequately backed by at least $600 worth of collateral posted by the issuers of the bills. In this way the real bills doctrine assures that the quantity of bank notes moves in step with the *issuing bank's assets*. The real bills doctrine therefore does prevent inflation.

Similar errors were committed by David Ricardo (1810) and by Lloyd Mints (1945) (Sproul, 1999). Both men demonstrated that even if banks faithfully followed the dictates of the real bills doctrine, their note issue could outpace the volume of goods

produced. Both men failed to see that the real bills doctrine *would* preserve the value of money by preventing note issue from outpacing the *issuing banks' assets*.

Short Term

Item (1), the requirement that bank notes should be issued in exchange for *short-term* assets, is one of the few parts of the real bills doctrine that is not controversial. Its obvious purpose is to protect the issuing bank from mismatching the maturities of its assets and its liabilities. Bank notes are traditionally payable on demand, though they are often protected by suspension clauses that allow the issuing bank, during bank panics, to delay payment by, say, 60 days. If that bank holds assets that are also payable within 60 days, then the bank will never face a liquidity crisis (assuming its assets are of adequate value).

Real Bills

Item (2), that banks should issue notes in exchange for *real bills*, presents a puzzle. Why should a banker care whether he gets a farmer's IOU (a "real bill") or a gambler's IOU (a "fictitious bill"), assuming both bills are equal in all other respects? If we think of the doctrine as stated above by Blaug/Mints, then the apparent purpose of the *real bills* requirement is to make the quantity of notes move in step with the volume of goods produced, thus avoiding inflation. But if we think of the real bills doctrine as a rule to make note issue move in step with the issuing bank's assets, then inflation avoidance is already accomplished by the *adequate value* requirement, and the *real bills* requirement seems to serve no purpose.

Before we conclude that banks should not care if bills are *real* or not, we would do well to remember that the real bills doctrine was developed by practicing bankers over centuries of experience, and if parts of that doctrine served no purpose, then bankers would have abandoned them quickly enough.

Testimony from the Directors of the Bank of England makes it clear that their preference for discounting *real* bills centered around providing an elastic currency, that is, matching the quantity of money to the needs of business.

> "What is the criterion which enables the Bank to keep the issue of bank-notes within the limit which the occasion of the public requires, and to guard against excess in the circulation of the country?"- This question occurs virtually more than once, and the answer is this; 1st. The paper would revert to us, if there were a redundancy in circulation; 2dly. By discounting only solid paper, given, as far as we can judge, for real transactions. (Bosanquet, 1810, p. 51)

When business is brisk, firms will be issuing many real bills, and the receivers of those bills will also be in need of bank-issued money to conduct business

conveniently. Bill holders will naturally bring their real bills to bankers in the hope that the bankers will issue their notes in exchange for those bills. Bankers who discount only real bills will thus issue money only when it is wanted for actual business purposes. The new money presents no risk of inflation because the bank's assets automatically rise in step with its issuance of money. When business slows and less money is needed, unwanted bank notes will reflux to the banks, possibly as loan repayments or for the purchase of securities held by the banks. Notice that unwanted reflux of money would subject bankers to the relatively minor inconvenience of having excess bank notes pile up in vaults, whereas failure to provide market liquidity when it is wanted can be, and often has been, the cause of a recession.

Money Shortages and Money Surpluses

Shortages of money, and the resulting recessions, have been noted by nearly all observers of monetary history. The problem was especially easy to see during the American Colonial period, which provided a convenient laboratory for the study of money:

> There is such a general scarcity of cash that nothing we have will command it," New Jersey resident James Parker explained in November (1765)… country stores were "all shutt up," the proprietors "either broke or obliged to decline that Business from a Real Inability to carry on…"and the distress of the people was very great from an amazing scarcity of money". (Ernst, 1973, p. 247-248)

> The (Maryland) House of Delegates in 1702 declared that to raise money by taxing the people "is utterly impracticable here for there's several hundred families, nay the greatest part of the whole province, have not five shillings by them or any means to raise it because there is very little amongst us." And in 1706 an official statement avowed that the province "is wholly destitute of any manner of coin for which we labor under the greatest difficulty. (Nettels, 1934, p. 206.)

When the quantity of money is too small for people to conduct their business conveniently, a recession will result. By extension, a recession that was caused by a money shortage will be relieved by an expansion of the money supply.

> In the year 1722-3, the Governor and Assembly… thought themselves obliged to take into their serious Consideration the distressed Circumstances and Sufferings of the People, through the extreme Want of some Kind of Currency…These Bills being emitted, their Effect very sensibly appeared, in giving new Life to Business, and raising the Country in some measure, from its languishing state. (Pennsylvania Assembly to the Board of Trade, 1726. Cited in Brock, 1941, p. 76)

But once the money supply is big enough to accommodate the needs of business, further issues of money will not have any stimulative effect on production, and the excess money will either pile up in vaults or reflux to its issuers. Quantity theorists normally assert that if such a monetary expansion were carried too far, then inflation would result. The real bills view denies this, on the grounds that as long as each new dollar is issued in exchange for a dollar's worth of assets, then the money-issuer's assets will move in step with the quantity of money and no inflation will result.

A bank that issues its notes in exchange for *real bills* can be confident that the quantity of its bank notes will be neither too large nor too small. But it is clear that the ill effects of too little money (i.e., a recession) are far stronger than the ill effects of too much money (i.e., unwanted reflux). This raises a question: Why should banks take any steps at all to limit the quantity of money they issue? Why not follow Fullarton's advice and issue as many notes as the public will receive from it? Why issue new money only in exchange for *real bills*? Why not issue new money in exchange for assets of *any* kind, as long as they are of adequate value?

The answer is that the printing and handling costs of bank notes can sometimes be significant to the issuing bank, and those costs could easily matter more to the bank than the social risks of issuing too little money. Old-time note-issuing bankers often complained of the expense of issuing bank notes on Monday, only to have them reflux to the bank on Tuesday. It is therefore understandable that note-issuing banks would develop a rule that would place an upper limit on their own note-issue, and experience taught those bankers that this upper limit was best maintained by banks' restricting their discounting to *real bills*.

If some new form of money had negligible handling costs, then bankers might happily issue huge amounts of money, and never run the risk of issuing too little money. Bankers could then issue their money in exchange for *any* valuable assets, not just real bills. This was not practicable for old-time note-issuing bankers, and so they found it best to issue money only in exchange for real bills. Modern banks, especially central banks, are much closer to the ideal of being able to issue moneys with negligible handling costs. This means that instead of insisting on short-term *real bills* of adequate value, banks might be open to issuing money in exchange for *any* short-term assets of adequate value. This revised version of the real bills doctrine would give banks the freedom to risk the negligible cost of issuing *too much* money, in order to be sure that they would never run the colossal risk of issuing *too little* money.

An Example

Figure 1 shows an example of the real bills view of a note-issuing bank.

Figure 1

	Assets	Liabilities
1)	100 ounces of silver deposited	$100 of bank notes issued
2)	$200 of 60-day real bills acquired	$200 of bank notes issued

In line (1), the bank (which may be a central bank or a private bank) receives 100 ounces of silver on deposit, issuing $100 of bank notes in exchange. Each dollar note is initially convertible at the bank into 1 ounce of silver. In order to be in strict compliance with the real bills doctrine, the $100 of notes should have been issued in exchange for short-term real bills of adequate value. The silver qualifies as a short-term asset and it is of adequate value, but it is not a *real bill*. Historically, bankers found that notes issued for real bills tended to stay in circulation, whereas notes issued for metal tended to reflux prematurely, (Tooke, 1844, p. 56.) but in this case we will suppose that the bank is in need of silver reserves in order to meet the occasional demands of its customers, so the real bills doctrine can be relaxed somewhat. It might also be the case that the market was cash-starved before the notes were issued, so the notes would stay in circulation whether or not the new bank notes were issued in exchange for real bills.

In line (2) the bank issues another $200 in exchange for $200 worth of 60-day real bills, thus following the real bills doctrine to the letter. The real bills view is that even though the bank tripled the money supply, it also tripled the assets backing that money, so the value of the dollar is unaffected. If this monetary expansion did cause the dollar to lose value, then arbitragers would buy dollars in the open market for (say) 0.99 ounces, then present those dollars to the bank and receive 1.00 ounces. Note that if the bank were to be liquidated, it could sell its $200 of real bills in exchange for $200 of its own bank notes (which it would retire), and then use its 100 ounces of silver to buy back the remaining $100 of its bank notes. At no point would the dollar drop below 1 ounce in value.

Seeing that a large increase in the money supply has no effect on the value of the dollar, quantity theorists would normally conclude that prices are sticky (Ball & Mankiw, 1994). The real bills view is that it is not that prices are sticky, it is that an adequately-backed increase in the money supply has no tendency to raise prices. Quantity theorists would go on to claim that the combination of more money and unchanged prices leads to a temporary stimulus to trade and production. The real bills view, in contrast, asserts that *if* that new money were issued in a cash-starved economy, then trade and production would be stimulated by the improvement in liquidity.

Quantity theorists often claim that metallic convertibility provides an automatic check against inflation, but that this check on inflation is lost when bank notes are inconvertible (Ashton & Sayers, 1953, p. 25). In refutation of this, the real bills doctrine argues that the value of money is determined in the same way as stocks, bonds, options, and other

financial securities: not by metallic convertibility, but by asset backing. For example, suppose the quantity of money the public wants to hold routinely fluctuates between $100 and $300. The bank could accommodate these fluctuations entirely by buying and selling its bonds, never paying out or taking in silver. This means that a bank could suspend silver convertibility for an indefinite period without ever causing the value of the dollar to deviate from $1=1 ounce, as long as the bank holds 1 ounce worth of assets for every dollar issued.

Figure 2

	Assets	Liabilities
1)	100 ounces of silver deposited	$100 of bank notes issued
2)	$200 of 60-day real bills acquired	$200 of bank notes issued
3)	**-30 ounces of silver (stolen)**	**-30 ounces net worth**

Figure 2 duplicates figure 1, but then considers what would happen if the bank were robbed of 30 ounces of silver (line 3). The 30-ounce loss constitutes 10% of the bank's assets, so one might expect it to cause a 10% fall in the value of the bank's dollar notes, but the loss of value is exaggerated by a feedback effect: The bank's $200 of real bills is denominated in dollars, so a loss in the value of the dollar would cause the bank's bills to lose value, which results in less backing for the bank's dollars, a further fall in the value of the dollar, and so on.

Define E as the value of the dollar (ounces/$). Setting Assets=Liabilities yields

$$70+200E=300E$$

or $E=0.70$ ounces/$

The result of this inflationary feedback is that the bank's 10% loss of assets caused a 30% drop in the value of the dollar. It is clear that if the bank held less silver (a *real* asset) and more bills (a n*ominal* asset, since it is denominated in dollars), then a loss of assets would cause more inflation. Unfortunately, central banks typically hold mostly nominal assets. The Mexican central bank, for example, holds mostly Mexican government bonds, which are denominated in the same pesos that the bank itself issues. The above analysis implies that the Mexican central bank could stabilize the peso by selling its peso-denominated bonds for dollar-denominated bonds.

Figure 3

Assets	Liabilities
1) 100 ounces of silver deposited	$100 of bank notes issued
2) $200 of 60-day real bills acquired	$200 of bank notes issued
3) -30 ounces of silver (stolen)	-30 ounces net worth
4) +bonds worth 90 ounces	**+$128.57 bank notes issued**

Figure 3 duplicates Figure 2, and shows the bank restoring the real cash balances that the public lost because of the theft in line 3.

Immediately after the theft, the public is left holding $300 of bank notes that are worth 0.70 ounces each, so *real cash balances* held by the public total to 210 ounces (=300 x 0.70). Presumably, desired real cash balances were 300 ounces, so the money shortage of 90 ounces must be corrected by issuing an additional $128.57 (=90/.70) of new bank notes and using them to conduct an open market purchase of bonds worth 90 ounces. Note that in this example the change in the value of the dollar *precedes* the change in the quantity of money. This is consistent with the observations of real-bills sympathizers from Thomas Tooke (1844, p. 172) to Thomas Sargent (1982, p. 89).

Returning to line 4, suppose we allow politics to intrude on our imaginary bank. The 90-ounce money shortage will cause a recession, and those who feel the money shortage most directly will demand that more money be issued. These demands for more money will be opposed by "tight money" partisans:

> "The inflationist or expansionist doctrine is presented in several varieties. But its essential content remains always the same.
>
> The oldest and most naïve version is that of the allegedly insufficient supply of money. Business is bad, says the grocer, because my customers or prospective customers do not have enough money to expand their purchases. So far he is right. But when he adds that what is needed to render his business more prosperous is to increase the quantity of money in circulation, he is mistaken. What he really has in mind is an increase of the amount of money in the pockets of his customers and prospective customers while the amount of money in the hands of other people remains unchanged." (Ludwig Von Mises. "The Theory Of Money And Credit." P. 752)

Partisans of both tight money and easy money fail to see that newly-issued money will normally be backed by new assets, and will not cause inflation. This misunderstanding leaves both sides accusing the other of low motives. This perennial debate between tight-money/easy-money views dates back at least three centuries.

> The retirement of a large proportion of the circulating medium through annual taxation, regularly produced a

> stringency from which the legislature sought relief through postponement of the retirements. If the bills were not called in according to the terms of the acts of issue, public faith in them would lessen, if called in there would be a disturbance of the currency. On these points there was a permanent disagreement between the governor and the representatives, discussions concerning which reveal themselves in 1715 and traces of which are frequently found after that date. (Davis, 1900, p. 21.)

As economic controversies go, the tight-money/easy-money debate is surprisingly one-sided, in favor of the easy-money view. As long as the easy-money faction asks only that new money be issued with *adequate backing*, then issuing that money will serve to correct any money shortage, and will stimulate trade, with no risk of inflation. The only drawback of an easy money policy is a possible unwanted reflux of currency, but even this is limited by the fact that banks will only issue new money to customers who want that money badly enough to offer assets of equal or greater value. From a real bills view, monetary policy should always be easy, and never tight.

Tight-money factions, in contrast, have been driven by misunderstanding. On hearing demands for "more money", tight money partisans answer that issuing 10% more money will only serve to raise prices by 10%. They fail to see that the additional money will be backed by additional assets, and will not cause inflation. Furthermore, they fail to see that the additional money can relieve an "allegedly insufficient supply of money", and can revive a cash-starved economy.

But the real bills view does not leave easy money partisans completely unscathed. J.M. Keynes' famous advice to stimulate the economy by burying bank notes in dis-used coal mines, for example, runs afoul of the real bills doctrine, since the issuing banks would receive no new assets for the bank notes. Thus a 10% increase in the money supply would leave each unit of money with (at least) 10% less backing, and would cause 10% inflation without providing additional real liquidity to the public. If Keynes had instead recommended that new money be issued (in a presumably cash-starved economy) with adequate backing, then a 10% increase in the money supply would have caused no inflation, but would have increased real cash balances, and stimulated the economy by providing needed liquidity.

Conclusion

When properly stated, the real bills doctrine allows a better understanding of money than does the quantity theory. The fundamental difference between the two theories is that the quantity theory asserts that the value of money will be maintained as long as the quantity of money does not outrun the *production of goods*, while the real bills doctrine asserts that the value of money will be maintained as long as the quantity of money does not outrun the *assets of its issuer*. Critics of the real bills doctrine (notably Thornton, Ricardo, and Mints) failed to understand this difference, with the result that their criticisms were invalid.

In contrast to the quantity theory, the real bills doctrine implies (1) that central banks should not hold assets denominated in their own currencies, (2) that prices are not sticky, and in fact changes in the price level can often precede changes in the money supply, and (3) that convertibility is irrelevant to the value of money.

The real bills doctrine overturns the usual view of the monetary "tightrope" between tight money and easy money policies. The real bills view of monetary policy could be summarized, without much exaggeration, as "never tight, always easy". Never tight, because any refusal to issue a dollar to a customer who offers a dollar's worth of assets in exchange, would restrict that customer's liquidity, stifle trade, and contribute to a recession. Furthermore, that refusal would not tend to raise the value of the dollar, since any reduction in the quantity of dollars would normally be matched by an equal reduction in the assets of the issuing bank.

The rationale for "always easy" is that as long as the issuing bank's assets move in step with the quantity of money, no amount of money issue will cause inflation. Meanwhile, the fact that some customer is willing to offer the bank a dollar's worth of assets for a newly-issued dollar, implies that that dollar is wanted in the circulation, and issuing that dollar would relieve a money shortage and stimulate trade.

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