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INTELLECTUAL TYRANNY OF THE STATUS QUO FOLLOW-UP

In Defense of the Real Bills Doctrine

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Comment on Richard Timberlake's article in the August 2005 issue.

For over seventy years, the question of what caused the Great Depression in the United States (1929–1933) has been one of the most debated economic issues. Since Friedman and Schwartz (1963), the cause has prominently been attributed to monetary mismanagement by the Fed, which let the money stock contract and thus failed to act as a lender of last resort. Recently, some authors have seen this contraction as a necessary consequence of the gold standard, which "fettered" the Fed's hands making it unable to respond to increased currency demands (Bernanke 1993, Eichengreen 1992 and 2002, Temin 1989 and 1994, Wheelock 1992). In the previous issue of *Econ Journal Watch*, Richard Timberlake takes issue with this view. In my judgment, Timberlake successfully argues against "golden fetters" and exonerates the gold standard. But there is a secondary aspect of Timberlakes's article. Timberlake blames the Great Contraction on the Fed's adherence to the so-called Real Bills Doctrine.

The Real Bills Doctrine (RBD) roughly holds that a central bank should limit its operations to the discounting of short term commercial paper. To Timberlake, it was the Fed's faithful adherence to this doctrine that led to the contraction of the money stock in 1929–1932. The RBD has for a long time been criticized by economists in the quantity-theory tradition, who think that the central bank should focus on stabilizing the quantity of money rather than on acquiring only a certain type of assets. They, therefore, favor active open-market policies such as the monetization

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of government debt to ensure a stable quantity of money. It has also been criticized by economists favoring free banking, who think that competition in money issue will put better constraints on money creation. The scholarly activity of these economists has given rise to a 'tyranny of the status quo' regarding the unsoundness of the real bills doctrine. Some have even been so bold as to brand it a fallacy (Mints 1945, 30; Friedman 1960, 43; Humphrey 1982, 12; Selgin 1982; Bordo and Schwartz 1995, 469; White 1995, 122; Laidler 1995, 258; Timberlake 1993, 259; 2005, 219). The most recent example of this is to be found in Timberlake's piece. In this comment I want to defend the RBD against what I believe to be unjust charges brought against it in the literature. Although the RBD is not a monetary panacea, it may in practice be a useful rule of thumb that can improve the workings of a central banking system on the gold standard. Its particular merit is that it prohibits the monetization of government debt. In defending the doctrine, I will not only comment on the piece by Timberlake, but also on others critical of the RBD, including Allan Meltzer (2003) and Thomas Humphrey (1982). The defense will show

- 1. That criticisms of the RBD have involved errors and ambiguities.
- 2. That the empirical case against the RBD is weak, if not non-existent.
- 3. That the substance of the Fed's error in the debated period was *not* that it followed the precepts of the RBD. On the contrary, Timberlake himself shows the error to have been the Fed's *straying* from the doctrine.

WHAT IS A REAL BILL?

Roughly, the RBD states that if the central bank issues money only against "real bills", then the money stock will automatically conform to the demand for payment media (Mints 1945, 9). Much confusion in the discussion is due to vagueness of concepts. What constitutes a "real" bill of exchange? According to Timberlake (2005, 205), the term "real bills doctrine" was coined by Mints, who derived the term from a passage of Adam Smith.

When a bank discounts to a merchant a real bill of exchange drawn by a real creditor upon a real debtor, and which, as soon as it becomes due, is really paid by that debtor, it only advances to him a part of the value which he would otherwise be obliged to keep by him unemployed and in ready money for answering occasional demands. The payment of the bill, when it becomes due, replaces to the bank the value of what it had advanced, together with the interest. The coffers of the bank, so far as its dealings are confined to such customers, resemble a water pond, from which, though a stream is continually running out, yet another is continually running in, fully equal to that which runs out; so that, without any further care or attention, the pond keeps always equally, or very near equally full. Little or no expence can ever be necessary for replenishing the coffers of such a bank. (Smith 1776, 304)

This lengthy and somewhat obscure passage opens the way for two senses in which the term "real bills" may be understood. In the first sense, a real bill is a bill that has arisen from an authentic transaction of goods. The primary function of an "authentic" bill is to transfer ownership of goods. The credit function is secondary and attached to the transaction. When banks began to discount bills, so called "loan" or "accommodation" bills emerged, which had the legal form of a bill, but without there being any goods transactions involved. For example, a merchant could write a bill on himself, promising to pay \$100 three months hence, and then discount the bill with a bank, receiving, say, \$98 from the bank in exchange for the bill. Real bills are opposed to this type of loan bills—the "real" is synonymous with authentic and genuine, and opposed to "pseudo."

In the second sense, "real bills" are taken to be bills that represent "real value." Real is here opposed to nominal. The discussions by Timberlake (2005), and Humphrey (1982) is very much concerned with this sense of the term.

I would argue that it is the first sense that was of concern for practical banking policy in former times. In Sweden, the distinction was between "commodity bills" (*varuväxlar*) and loan or accommodation bills. Commodity bills were bills that carried the words: "value received in commodities." The Bank of Sweden would only discount commodity bills (Thunholm 1960, 33). As late as in the 1960s, commercial handbooks

taught that commodity bills were self-liquidating, wherefore commodity bills carried the lowest discount rate with the banks (Thunholm 1960, 88).

Note that the real bills criterion in this sense is a purely formal, legal one—similar for example to the criterion of monetization of gold on fixed terms. Nothing says that a loan bill of a certain nominal amount could not represent "real value" or "real wealth." Timberlake's (2005, 206) discussion about the distinction between monetization on gold and on real bills I therefore believe to be somewhat off the mark.

The rationale of the RBD

The RBD gets its rationale from historic patterns of trade. In the 19th century trade volumes varied seasonally. In March and September-October the demand for bank notes regularly increased. In the case of Sweden, the note stock expanded about 15 percent in September each year. About 30 percent of this increase was due to the withdrawal of deposits, and 70 percent due to an expansion of (non-reserve) assets (Hortlund 2005a, 164). The variation in the demand for notes was thus not only (or even mostly) "form-seasonal," as Timberlake (1993, 254; 2005, 209) writes, but also "quantity-seasonal." Since banks regularly needed to expand their volume of assets to accommodate the note demand, the question naturally arises whether certain assets were more correlated than others with the needs for payment media. The RBD states that bills generated within the commercial exchange process should be more correlated with the needs of trade, and in this way it quite ingeniously links the volume of exchange media to the exchange process itself. In my own research, I find some limited empirical support for this. The Bank of Sweden subscribed to the RBD in the early twentieth century, and I find that real bills were more correlated with the seasonal patterns for exchange media than were other forms of credit (Hortlund 2005b).

The Real Bills Doctrine and the Productive Credit Doctrine

The RBD should be distinguished from a number of related but distinct doctrines. One of them is what one might call the Productive Credit Doctrine (PCD). The RBD, at least in its original nineteenth century European form, is concerned with whether the bill arose out of authentic commercial transactions. It does not much concern itself with the *purpose* to

which the debtor will put the money. Such purpose is more the concern of the PCD, which says that the central bank should extend credit only for "productive" commercial purposes (i.e., for buying capital goods or intermediate goods, but not for buying shares of company stock).

Although related, the RBD and the PCD are conceptually distinct. Consider the following two events. First, a merchant that discounts a commodity bill, and uses the proceeds to buy stocks. Second, a merchant that discounts a "loan bill," and uses the proceeds to buy intermediate goods. The first event is in accordance with the RBD, but not with the PCD. The second is in accordance with the PCD but not with the RBD. This distinction is important and potentially substantive. Yet Meltzer (2003) consistently equates the two doctrines (for example, the index entry for the RBD on page 791 reads: "real bills (productive credit) doctrine"). In Meltzer's account, and also in Timberlake's, the Fed's main concern in 1929-1932 seems to have been to avoid the granting of credit for the purpose of speculation, particularly in the stock market. In this regard its operators seem to have been guided by the PCD rather than by the RBD. That the PCD and not only the RBD played a role in the operations of the Fed is also seen from the Federal Reserve Act which defined "eligible paper" as "notes and drafts, and bills of exchange arising out of actual commercial transactions . . . issued or drawn for agricultural, industrial, or commercial purposes" (Timberlake (2005, 207).

This definition of "eligible paper" encompasses not only the real bills criterion, but also the productive credit criterion. Because of this definition it is easy to conflate the two doctrines. However, in my view, they are conceptually distinct.

Now, although we have defined the RBD and the PCD as two separate practices, one may legitimately question whether the adherence of the one versus the other makes much of a practical difference. An example. Suppose John writes a bill on himself, "I promise to pay bearer 6 months hence \$100." This is not a real bill and a bank's discounting it would be against the RBD. Nonetheless, if a bank discounts it, John gets cash in exchange for the note. He takes the cash and buys tools for it. This would then be considered "productive credit." Now, suppose instead that the banks do adhere to the RBD, so John and everyone else knows that they need a real bill to get credit from the bank. John then pays the tools by writing a bill, and the tool seller goes to the bank and discounts it. This would be a real bill, and the outcome would be the same as in the case where credit was granted according to the productive credit doctrine.

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Thus, in practice the substantive difference between real bills and productive credit may sometimes be only subtle. One may question whether it is not better to conflate the two, in the name of parsimony. However, I believe that under special circumstances the practical difference may be substantial. An analogy. In a frictionless world with no genuine uncertainty, one may create "synthetic" options out of dynamic portfolio strategies, thus substituting for "real" options. In the same way, productive credit may be considered a "synthetic" real bill that under normal circumstances work well. However, the productive credit rule is more forward looking than is the real bills rule. In times of genuine uncertainty, it may be more difficult to assess the purpose to which credit is to be used, and credit may be undersupplied. In uncertain times, therefore, bank policy according to the RB and to the PC criteria may yield different results.

The Banking Principle

Also, the RBD should not be equated with the "Banking Principle." In writings on historical monetary doctrines, the RBD is thought to be but one of the "banking (school) principles" (Schwartz 1995, 149; White 1995, 121). The banking principle in the singular, however, is mostly associated with the view that banks, given only the constraint of gold redeemability, may safely be left to issue money according to their own criteria, and that external (quantitative) restrictions on banks-even central banks-are unnecessary to stop them from overissuing (White 1995, 121). The underlying view is that redeemable bank-issued money is always and everywhere endogenous and demand-determined. There is a "law of reflux" at work, whereby unwanted money is always returned to the issuer-banks therefore do not have the power to over-issue money and can therefore never be the cause of inflation. The banking principle holds that money will always be demand-determined-even if it comes about through the central bank's monetization of government debt. The RBD, in contrast, holds that money will be demand-determined only if issued against real bills.

Similarly, the RBD should not be equated with the "needs-of-trade doctrine." This doctrine holds it desirable for the central bank (or other banks) to have discretion to accommodate fluctuations in the demand for payment media (Schwartz 1995, 149). This is in contrast with what might be called the "quantity-doctrine," which holds that any quantity of money is always adequate to perform its task. The critique of the RBD by quantity-

minded economists is often in reality a critique against the needs-of-trade doctrine. An important example is given next.

Dynamic instability

Thomas Humphrey (1982) reviews a number of alleged fallacies of the RBD brought forth in the literature. Some of the criticisms make sense, for example that the volume of real bills presented for discount depends not only on the level of economic activity, but also on the discount rate charged by the central bank. Here I criticize the most important alleged fallacy, namely what Humphrey calls dynamic instability. Humphrey explains at great length that the RBD is dynamically unstable, because it leaves the price level indeterminate. It does not appreciate that not only does the price level depend on the quantity of bills, but the demand for bills depends on the price level. If the price level rises, more bills will be demanded. But if these are supplied, the price level will rise, since the price level is a function of the quantity of money. More bills will then be demanded, and so on, in a never-ending spiral.

This argument, it seems to me, draws on the classical mechanicsinspired "quantity equation of exchange." Money is supposed to move mechanically according to a postulated "velocity;" given this velocity, "M" mechanically increases "P." However, people trade for a purpose. When there is a greater demand for exchange media, more of it can be supplied without causing prices to rise. Historically, March and September–October were times at which contracts were made and prices set. When the time came to execute the trades, more money was needed. More money supplied to meet seasonal needs would then keep the short-term interest from rising, but not affect prices.

Furthermore, the charge of dynamic instability proves too much since it is not only a critique against the RBD, but against any doctrine that claims that the quantity of money should be allowed to vary with the nominally fluctuating demand for it. The dynamic instability argument is valid against all theories supporting the needs-of-trade doctrine, for example against free banking theories (to the extent that those theories do not posit a nominal anchor like the gold standard). If applied consistently, the dynamic-instability argument would oppose any kind of an elastic currency, possibly even deny the value of fractional reserve banking. The logic points to a policy of a rigid, government-controlled money stock. This road was taken by Mints (1950), who argued for 100 percent reserves on all

bank-issued money. The dynamic-instability argument is therefore vulnerable, because history clearly shows that the nominal demand for money fluctuated, and that rigid, inelastic currencies can be destabilizing.¹ History also shows that gold-anchored banking systems exhibiting elasticity of money supply did not explode into hyperinflation.

THE EMPIRICAL CASE

The previous section showed that the theoretical case against the RBD is not as strong as some might think. But the empirical case against the doctrine is even weaker.

England in the early nineteenth century

The original case of inflation induced by RBD is England during the early half of the 19th century, particularly during the suspension era of the Napoleonic wars, 1797–1817. What has made this view credible is that in the bullionist controversy the Bank of England and the anti-bullionists defended their actions with real bills arguments (Laidler 1995, 258; Bordo and Schwartz 1995, 470). The relevant empirical question, however, is whether the inflation in this period was due to the Bank of England's excessive discounting of commercial bills, or whether it was due to its monetization of government debt. Wars are normally plagued with inflation when governments finance themselves through the printing presses. White (1995, 123) claims that the English inflations in the early nineteenth century did *not* occur because the Bank of England's open market purchases of government bonds.

Under the Banks normal policy of holding its commercial bill discount rate steadily above the market rate in noncrisis times, that appearance [that the volume of bills offered for discount was beyond the control of the bank]

¹ Selgin and White (1994) show how elastic the Canadian currency was compared to the rigid currency of the National Banking system.

was not so misleading. Any serious over-issues of the Bank in this period doubtless came from open-market purchases of government debt that the bank made under political pressure (these purchases may be viewed as the quid pro quo for its monopoly privilege). In theory, however, there was no obstacle to the Bank's over-issuing through aggressive discounting or open-market purchases of real bills. (White 1995, 123)

Germany 1922-1923

Allegedly, the most severe example of RBD-induced inflation is the German hyperinflation of the early 1920s. The German experience is cited by Bordo and Schwartz (1995, 471), Timberlake (2005, 206), and Humphrey (1982, 12), who consider this case as the prime example of the "dynamic instability" inherent in the RBD. The evidence put forth by Timberlake is that the Governor of the *Reichsbank* is said to have subscribed to an extreme version of the 'banking principle' (Timberlake 2005, 206). But, again, the banking principle is not the RBD. A central banker that clings to the banking principle holds that money will always be endogenous, and that the central bank could never be the cause of inflation, not even if it monetizes non-real bills such as government debt. The relevant empirical question is: did the German hyperinflation come about because the *Reichsbank* was overly and solely discounting commercial bills?

After WWI, the German government ran huge budget deficits, in large part as a result of the obligations of the Versailles Treaty. The deficits were financed by the discounting of German Treasury bills with the *Reichsbank*. As soon as this policy was discontinued, inflation stopped "all at once" (Welcker 1995, 229). Thus, instead of showing the dynamic instability of the RBD, the German experience must be considered a warning example of the inflationary potential inherent in monetizing government debt.

The United States 1929–1932

The real bone of contention is whether the Great Contraction was caused by the Fed's faithful adherence to the precepts of the RBD. Allegedly, the dynamic instability of the RBD now worked the other way. Insufficient quantities of real bills caused a decrease in the price level, which

caused the volume of real bills to shrink even further, and so on in a downward spiral. To convict the RBD, it has to be shown: a) that the Fed discounted all real bills (eligible paper) presented to it for discount; and b) that these quantities were insufficient to sustain a stable quantity of money. In my opinion, Timberlake has not attempted to substantiate this. In fact, Timberlake presents evidence indicating that in practice the Fed did *not* follow the RBD. The true real-bills central bank discounts *if and only if* real bills (eligible paper) is presented to it for discount. That is, the real-bills central bank acts according to these two rules:

- Rule 1: Do not discount non-real bills (ineligible paper) presented for discount.
- Rule 2: Dø discount all real bills (eligible paper) presented for discount.

A central bank that does not follow *both* of these rules cannot be said to follow the RBD. For the RBD adherent, the real bills criterion provides a rule that renders monetary policy more or less automatic. The volume of real bills corresponds by itself in a desired manner with the "needs of trade," wherefore no discretionary evaluation or prudence on the part of the central bank is needed. The central banker's only task is to check whether the instruments presented for discount is on the list of eligible paper or not. Did the Fed follow the rules?

1914–1920: Inflationary war-finance. The Fed was buying Treasury bonds. The Fed violated Rule 1.

1920–1929: Price stabilization the goal of policy. The Fed engaged in open market purchases of Treasury bonds. Again it violated Rule 1.

1929–1932: This is where the debate is. Was the Fed now taken over by RBD advocates such as Adolph Miller, who faithfully adhered to the RBD? To convict the RBD, it has to be shown that the Fed discounted all eligible paper presented to it, yet a deflationary spiral set in. Here Timberlake presents evidence indicating that the Fed actually acted contrariwise to the RBD. Quoting Clark Warburton, Timberlake provides a smoking gun that shows that the Fed violated Rule 2.

[In the early 1930s the Fed Banks] . . . virtually stopped discounting or otherwise acquiring "eligible" paper. . . . Nor was this virtual stoppage...due to any forces outside the Federal Reserve System. It was due to direct pressure

[from the Federal Reserve Board] so strong as to amount to a virtual prohibition of rediscounting for banks which were making loans for security speculation, and a hardboiled attitude towards banks in special need of rediscounts because of deposit withdrawals. . . . Federal Reserve authorities had discouraged discounting almost to the point of prohibition. (Warburton 1966, 339–40, quoted in Timberlake 2005, 216)

Assuming the accuracy of Warburton's account, we see clearly that the Fed did *not* operate according to the RBD. Nothing in the RBD says that the central bank should refuse to discount real bills in time of deposit withdrawals. On the contrary, this is the very time to do so, and for which the Federal Reserve System was set up. Anxious to make amends for past breaches of Rule 1, the Fed apparently erred in the other direction and grossly violated Rule 2. In so doing, its operators seem to have been inspired by the PCD rather than by the RBD.

ACQUITTED: THE REAL BILLS DOCTRINE

In sum, Timberlake successfully defends the gold standard against the view that it caused the Great Contraction. Timberlake is also successful when he puts the blame on errors in the monetary policies of the Fed. However, he is unsuccessful when he attributes the substance of those errors to the Fed's faithfully following the real bills doctrine. Timberlake's own account suggests the very opposite. From its inception, the Fed seems to have strayed from the real bills rules—at times by monetizing government debt, and at times by refusing to discount real bills. One may come away with the impression that if only the Fed's founding fathers, everything would have been fine.

In my view, the current presentation therefore calls for a revision of scholarly understanding of the real bills doctrine. Admittedly, the RBD is water-proof neither in theory nor in practice, and is therefore probably not a sufficient guide for monetary policy. The RBD perhaps should come into use in systems with limitations on the quantity of base money—natural limitations in gold regimes and quantity rules in fiat money regimes. In such

systems, however, one must seriously ask whether the RBD may not actually improve policy performance. Although not perfect, the RBD might be considered efficient, when compared with the performance of its rival doctrines. I propose the following questions to ponder:

1. The classical gold standard period of 1870 to 1914 is acknowledged as one of the more stable periods of monetary history. Was the RBD not an integral policy of most central banks in this period? If so, can it be said that the RBD contributed to the stability of the classical gold standard era?

2. Is there in history an unambiguous case in which the RBD caused a major inflation? Has there ever been a major inflation that did not involve the monetization of government debt?

3. On the role of the RBD in the Great Depression: Can it be shown quantitatively that the volume of eligible paper generated in the economy was insufficient to accommodate increased demands for currency in the early 1930s?

4. For free bankers: Given that a free banking system is not politically feasible, what is wrong with a rule that prohibits monetization of government debt? Could a central banking system with such a rule be considered second best (given a nominal anchor such as gold)?

5. The monetarists' critique of the RBD significantly contributed to the adoption of government debt as the main instrument of monetary policy in the 1930s. This opened the way for unprecedented monetary expansion and inflation in period 1940 to 1990. Somewhat ironically, therefore, the monetarists, the champions of the fight against inflation, could rightly be considered some of the architects of the postwar inflations. In view of the historical record, would monetarists be willing to revise their critique of the RBD? In practice, would RBD-style "quality-rules" that emphasize restriction to certain types of assets be more efficient than quantity rules, to limit inflation?

These questions, I think, show that the real bills doctrine is alive and kicking, and capable of generating important questions for future research.

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