How do banks create money, and why can other firms not do the same?

An explanation for the coexistence of lending and deposit-taking

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This paper presents the first empirical evidence in the history of banking on the question of whether banks can create money out of nothing. The banking crisis has revived interest in this issue, but it had remained unsettled.

Three hypotheses are recognised in the literature. According to the financial intermediation theory of banking, banks are merely intermediaries like other non-bank financial institutions, collecting deposits that are then lent out.

According to the fractional reserve theory of banking, individual banks are mere financial intermediaries that cannot create money, but collectively they end up creating money through systemic interaction.

A third theory maintains that each individual bank has the power to create money 'out of nothing' and does so when it extends credit (the credit creation theory of banking).

The question which of the theories is correct has far-reaching implications for research and policy. Surprisingly, despite the longstanding controversy, until now no empirical study has tested the theories. This is the contribution of the present paper.

An empirical test is conducted, whereby money is borrowed from a cooperating bank, while its internal records are being monitored, to establish whether in the process of making the loan available to the borrower, the bank transfers these funds from other accounts within or outside the bank, or whether they are newly created.

This study establishes for the first time empirically that banks individually create money out of nothing. The money supply is created as 'fairy dust' produced by the banks individually, "out of thin air".

They are exempted from the Client Money Rules and thus, unlike other firms, do not have to segregate client money. This enables banks to classify their accounts payable liabilities arising from bank loan contracts as a different type of liability called 'customer deposits'.

"The choice of a measure of value, of a monetary system, of currency and credit legislation - all are in the hands of society, and natural conditions … are relatively unimportant. Here, then, the decision-makers in society have the opportunity to directly demonstrate and test their economic wisdom - or folly. History shows that the latter has often prevailed."

Wicksell (1922, p. 3)

In this paper (www.sciencedirect.com/science/article/pii/S1057521914001434?via%3Dihub) a number of fundamental questions concerning banks have been answered. This includes the old questions of why banks combine what are effectively very different operations, namely deposit taking and granting of loans, under one roof, what are the "defining characteristics of a bank", and "why securities markets and non-bank firms cannot do the same" (Kashyap et al., 2002).

It also includes new questions predicated on the recognition that banks create credit and money, namely what exactly it is that enables banks to create credit and money out of nothing, and whether or why other financial firms and intermediaries, or ordinary corporations, cannot do the same. This includes the question of whether non-bank financial institutions, including so-called ‘shadow banks’, can engage in money creation as well; the question whether “everyone can issue money” (Minsky, 1986); and the questions of how bank regulation should, and how monetary reform could, be structured.

To answer these questions, the accounting details of banks' credit and money creation were examined in a comparison of corporate accounting for lending.

Breaking the act of lending into two steps, it was possible to isolate just what makes bank accounting different from the accounting of non-financial firms and non-bank financial institutions, and precisely how banks manage to c reate money newly.

The act of signing the loan contract and purchasing it as a promissory note of the borrower without yet making the borrowed funds available to the borrower (Step 1) has the same accounting implications for banks, non-banks and non-financial corporations alike.

In all cases, the balance sheets lengthen, as an asset (the loan contract) is acquired and a liability to make money available to the borrower is incurred (accounts payable).

In Step 2, the lender makes the funds available to the borrower. The fact that in Step 2 the bank is alone among firms in showing the same total impact on assets and liabilities as everyone else at Step 1, when the money had not yet been made available to the borrower, demonstrates that the bank did not actually make any money available to the borrower.

This means that the bank still has an open ‘accounts payable’ liability, as it has not in fact discharged its original liability.

What banks do is to simply reclassify their accounts payable items arising from the act of lending as ‘customer deposits’, and the general public, when receiving payment in the form of a transfer of bank deposits, believes that a form of money had been paid into the bank.

As a result, the public readily accepts such ‘bank deposits’ and their ‘transfers’ to defray payments. They are also the main component of the official ‘money supply’ as announced by central banks (M1, M2, M3, M4), which is created almost entirely through this act of re-classifying banks' accounts payable as fictitious ‘customer deposits’.

No wonder an expert in bank accounting has warned me, upon presentation of my analysis, that I must never use the concept of ‘accounts payable’ in the context of bank accounting! In my view, the only reason why one would not wish to use it as presented in this paper is because through this device the truth is revealed for all to see.

The ‘lending’ bank records a new ‘customer deposit’ and informs the ‘borrower’ that funds have been ‘deposited’ in the borrower's account. Since neither the borrower nor the bank actually made a deposit at the bank - nor, in connection with this transaction, anyone else for that matter, it remains necessary to analyse the legal aspects of bank operations.

In particular, the legality of the act of reclassifying bank liabilities (accounts payable) as fictitious ‘customer deposits’ requires further, separate analysis.

This is all the more so, since no law, statute or bank regulation actually grants banks the right (usually considered a sovereign prerogative) to create and allocate the money supply.

Further, the regulation that allows only banks to conduct such creative accounting (namely the exemption from the Client Money Rules) is potentially being abused through the act of ‘renaming’ the bank's own accounts payable liabilities as ‘customer deposits’ when no deposits had been made, since this is also not explicitly referred to in the banks' exemption from the Client Money Rules, or in any other statutes, laws or regulations, for that matter. This raises the broader problem that much of the terminology in banking appears to mislead the public.

An innocent bank customer could be forgiven for believing that money ‘deposited’ with a bank was still the property of the depositor and hence safe in the case of a bankruptcy of the institution, while money deposited with a stock broker with the intention to speculate in the markets was at risk of being lost should the stock broker go bust.

That the legal reality is precisely the opposite - money deposited with stock brokers is unencumbered by the broker's bankruptcy since it remains the property of the depositor, held in safe custody as segregated Client Money, while money deposited with a bank, exempt from the Client Money Rules, is no longer the property of the depositor and thus in principle goes under together with the bank is testament to the misleading character of banking terminology. In this paper it was found that banks combine what are effectively very different operations, namely deposit-taking and granting of loans under one roof, because in this way they can invent new money in the form of fictitious ‘customer deposits’ when purporting to engage in the act of ‘lending’.

It was found that the defining characteristic of banks is that they are exempt from the Client Money Rules, which prevent other firms from creating money in the same way. It was found that, in practise, only banks can issue money in this way. It was also found that bank regulation needs to be reconsidered, as focusing on capital adequacy, already proven ineffective by the many banking crises since its introduction in the 1980s, is likely to remain unable to prevent credit booms and subsequent banking crises.

Finally, a simple way was found to implement monetary reform, should the sovereign - the people - decide to introduce a more transparent way of creating and allocating the money supply: one only needs to revoke the one-sided exemption from the Client Money Rules granted to banks (and combine this with Client Money custody services offered to all banks by HM Treasury).

Having said this, since the privilege to create money is a public prerogative, it can be justified if it is used for the benefit of the public.

How can this be achieved?

I have come to be convinced that probably the best method to implement monetary reform realistically - since possible without waiting for grand top-down reforms and since in this way breaking power up into small, manageable units - is to establish many small, local, not-for-profit community banks, as the success of the German economy has demonstrated over the past 170 years.