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Banks do not create money out of thin air

Pontus Rendahl, Lukas B. Freund / 14 Dec 2019

In recent years, some have claimed that banks create money 'ex nihilo'. This column explains that banks do not create money out of thin air. From an economic viewpoint, commercial banks create private money by transforming an illiquid asset (the borrower's future ability to repay) into a liquid one (bank deposits); they would quickly be insolvent otherwise. In addition to bank solvency representing a constraint on private money creation, banks require access to liquid reserves in order to be able to engage in money creation.

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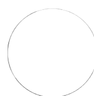

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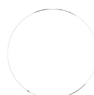

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In contemporary societies, the great majority of money is created by commercial banks rather than the central bank. Whenever a bank makes a loan, it simultaneously creates a matching deposit on the liability side of its balance sheet.1 This happens when, say, a new mortgage contract is concluded, but also seamlessly in everyday life. If, for instance, you pay for your morning commute coffee using your Barclays (or Deutsche Bank or Bank of America) credit card, you have just been handed a Barclays-IOU (or a Deutsche Bank-IOU or a Bank of America-IOU, but you get the flavour). We could also call this IOU a Barclays-pound. Conveniently, that Barclays-pound is denominated in GBP and is treated by your coffee vendor as trading with a one-to-one pegged exchange rate to British pound sterling. Practically speaking, you can make transactions using the Barclays-pound just as well as you could using a cash note printed on behalf of the Bank of England. Although this understanding of the money creation process is hardly new (e.g. Tobin 1963), over the past couple of years, it has been thrown

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economy by central banks such as the Bank of England (2014) and Deutsche Bundesbank (2017), as well as by campaigning by such groups as Positive Money.

Unfortunately, the fact that the money we use is mostly issued by private banks and that its creation operationally involves not much more than a few keystrokes has led to a widely circulating but erroneous belief that banks create money out of nothing. To mention but three examples, Richard Werner (2014) writes in a peer-reviewed article: “The money supply is created as ‘fairy dust’ produced by the banks individually, ‘out of thin air’”. Zoe Williams (2017) in *The Guardian* suggests that “[all] money comes from a magic tree, in the sense that money is spirited from thin air”. And David Graeber (2019) opines in the *New York Review of Books*: “There are plenty of magic money trees in Britain, as there are in any developed economy. They are called ‘banks’. Since modern money is simply credit, banks can and do create money literally out of nothing, simply by making loans”. This misconception may stem from the seemingly magical simultaneous appearance of entries on both the liability and the asset side of a bank’s balance sheet when it creates a new loan. But this is simply a reflection of double-entry bookkeeping. Economically, money creation by private banks is far from magic, nor is it out of thin air.

There are several ways in which banks’ ability to create money through lending is constrained, meaning that the idea of limitless money creation conjured up by the image of a ‘magic money tree’ is flawed. The aforementioned central bank explainers cover the operational details with much greater expertise than we could claim for ourselves.2 Instead, we want to draw attention to a fundamental economic point that is underlying these constraints. When banks create money, they do so not out of *thin air*, they create money out of *assets* – and assets are far from nothing.

A simple parable helps clarify how banks create money and what the role of asset-backing is in that process. Suppose a PhD student new to the British town of Cambridge – let’s call him Lukas – would like to celebrate a day’s worth of work with a pint at a local pub and pay for the drink by issuing an IOU. Unfortunately, the pub refuses to accept the Lukas-IOU. After all, the pub doesn’t know Lukas very well, and it can therefore not trust that he will have the ability to repay the IOU at a later point in time. Moreover, a third party, say a brewery, would not accept the Lukas-IOU as payment for their restocking of the pub’s beer inventory either – the Lukas-IOU is both risky as an asset to hold, and worthless for third-party transactions. Fortunately for Lukas, his supervisor – let's call him Pontus – happens to have a lot of trust in Lukas, and is willing to accept the Lukas-IOU in exchange for a Pontus-IOU in return. Here is the crux – the local pub does indeed trust Pontus, and so do third parties (“oh, it’s a Pontus-IOU – that’s as good as the pound note in my wallet!”). Lukas can then get his well-deserved drink by paying with the Pontus-IOU. And the brewery can restock their inventory by paying with the same means.

Seemingly like magic, Pontus has just created money out of thin air! But only seemingly. Why would the local pub trust Pontus and treat his IOU as good as money? There are a few reasons. First, they trust his ability to screen Lukas’ repayment capacity, so he has a healthy ‘asset’ backing up his own IOU. Second, he also happens to have liquid reserves on his savings account. Thus, if the pub asked to have the IOU cleared well before Lukas is able to settle his accounts with Pontus, he can always honour his promises by using those reserves. Has money appeared magically out of thin air? No. Pontus has created an IOU that is treated like money by third parties out of Lukas’ repayment capacity, which is equal to a stream of repayments in the future. A stream of repayments is the same as a stream of dividends, so the money Pontus created was out of an asset. If, on the other hand, Pontus were to be so reckless to issue IOUs without the backing of solid assets, or if he didn’t have access to liquid reserves with which to immediately settle any transactions, the air would suddenly get very thick, and the pub and other third parties would soon find out, and his IOUs would lose their value altogether.

When banks create money, the process is very similar to that told in the parable. In the above example, when you paid for your coffee using a Barclays credit card, you gave them an asset – your future repayments – and they handed you a Barclays-IOU in return. These Barclays-pounds are accepted in society as a means of payment (i.e. money), as Barclays is trusted to hold healthy assets as well as British pound reserves issued by the Bank of England.3 That privately issued money is asset-backed represents a fundamental precondition for it to be traded at par with central bank issued money, which comes in the form of currency (which individuals and businesses can use to settle transactions) or reserves (which commercial banks use for the same purpose). In addition to bank solvency representing a constraint on private money creation, banks additionally require access to these public monies in order to be able to engage in liquidity transformation – or money creation.

Lastly, suppose that, for some reason, Barclays’ customers suspected that it held unhealthy assets – that is, there was doubt regarding the repayment capacity of Barclays’ debtors – or that it did not have sufficient reserves to settle transactions on their behalf. This would undermine the pegged exchange rate between Barclays-pounds and British pounds on which the banks edifice stands. Eventually, this would lead to a run on the bank, and it would quickly find itself illiquid, or even insolvent. This is indeed what happened to several banks during the Global Crisis, including Countrywide Financial in the US and Northern Rock in the UK. If banks were indeed able to create money out of nothing, why would we need to bail them out?

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Williams, Z (2019), "How the actual magic money tree works", *The Guardian.*

Endnotes

[1] The understanding that private banks create money through lending – a view variously referred to as 'endogenous money' or 'loans first' – contrasts with the 'reserves first' theory according to which central banks choose the quantity of reserves available to private banks. These reserves are then 'multiplied up' in a stable ratio of broad money to base money as banks respond to a greater (smaller) supply of reserves by expanding (contracting) lending. But this is beside the point of the column, which aims to clear up the misunderstanding that banks can create money out of nothing.

[2] A summary may be convenient for some readers. For one thing, the lending activity of any individual bank, and hence money creation, is limited by its holdings of central bank reserves, since when the borrower uses the newly obtained funds to make a payment to a seller with an account at a different bank, the borrower's bank will frequently have to use reserves to settle this transaction. Second, households and businesses are not only one party in the process of money creation, but through activities such as loan repayment they also contribute to money destruction. Thus, if an individual took out a new loan but did so for the purpose of mortgage refinancing, the net money creation would be (approximately) zero. And third, a whole host of factors affect and limit the incentives for borrowers to take out loans and for banks to create money, including the various parties' risk perception and appetite, and the stance of monetary policy. For example, the federal funds rate in the US or the Bank Rate in the UK, the primary instruments of the Federal Reserve and the Bank of England, respectively, influence the costs banks face in acquiring reserves as well as the demand for credit coming from households and businesses.

[3] Alongside access to public money in the form of central bank reserves, the commercial bank may also be able to guarantee liquidity through alternatives such as its own equity or assets of high liquidity, for instance high-quality government bonds (which are treated akin to money by institutional investors such as pension funds).

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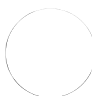

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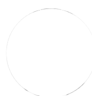

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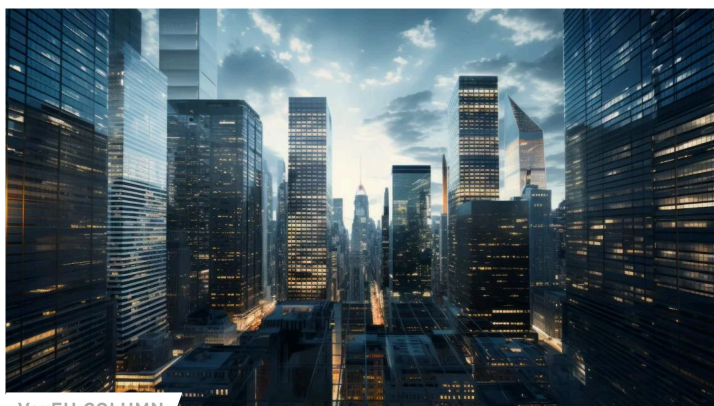

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