WHERE DOES MONEY COME FROM?

A GUIDE TO THE UK MONETARY AND BANKING SYSTEM

JOSH RYAN-COLLINS, TONY GREENHAM, RICHARD WERNER AND ANDREW JACKSON

FOREWORD BY CHARLES A. E. GOODHART

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Foreword

Far from money being 'the root of all evil', our economic system cannot cope without it. Hence the shock-horror when the Lehman failure raised the spectre of an implosion of our banking system. It is far nearer the truth to claim that 'Evil is the root of all money', a witty phrase coined by Nobu Kiyotaki and John Moore. If we all always paid our bills in full with absolute certainty, then everyone could buy anything on his/her own credit, by issuing an IOU on him/herself.

Since that happy state of affairs is impossible, (though assumed in most standard macro-models – to their detriment), we use as money the short-term ('sight') claim on the most reliable (powerful) debtor. Initially, of course, this powerful debtor was the State; note how the value of State money collapses when the sovereign power is overthrown. Coins are rarely full-bodied, and even then need guaranteeing by the stamp of the ruler seigniorage.

But there were severe disadvantages in relying solely on the government to provide sufficient money for everyone to use; perhaps most importantly, people could not generally borrow from the government. So, over time, we turned to a set of financial intermediaries, the banks, to provide us both with an essential source of credit and a reliable, and generally safe and acceptable, monetary asset.

Such deposit money was reliable and safe, because all depositors reckoned that they could always exchange their sight deposits with banks on demand into legal tender. This depended on the banks themselves having full access to legal tender, and again over time, central banks came to have monopoly control over such base money. So, the early analysis of the supply of money focussed on the relationship between the supply of base money created by the central bank and the provision by commercial banks of both bank credit and bank deposits, the bank multiplier analysis.

But, in practice, the central bank has always sought to control the level of interest rates, rather than the monetary base. Hence, as Richard Werner and his co-authors Josh Ryan-Collins, Tony Greenham and Andrew Jackson document so clearly in this book, the supply of money is actually determined primarily by the demand of borrowers to take out bank loans. Moreover, when such demand is low, because the economy is weak and hence interest rates are also driven

down to zero, the relationship between available bank reserves (deposits at the central bank) and commercial bank lending/deposits can break down entirely. Flooding banks with additional liquidity, as central banks have done recently via Quantitative Easing (QE), has not led to much commensurate increase in bank lending or broad money.

All this is set out in nice detail in this book, which will provide the reader with a clear path through the complex thickets of misunderstandings of this important issue. In addition the authors provide many further insights into current practices of money and banking. At a time when we face up to massive challenges in financial reform and regulation, it is essential to have a proper, good understanding of how the monetary system works, in order to reach better alternatives. This book is an excellent guide, and will be suitable for a wide range of audiences, including not only those new to the field but also to policy-makers and academics.

Charles A. E. Goodhart
Professor Emeritus of Banking and Finance,
London School of Economics

19th September 2011

Overview

There is widespread misunderstanding of how new money is created. This book examines the workings of the UK monetary system and concludes that the most useful description is that new money is created by commercial banks when they extend or create credit, either through making loans or buying existing assets. In creating credit, banks simultaneously create deposits in our bank accounts, which, to all intents and purposes, is money.

Many people would be surprised to learn that even among bankers, economists, and policymakers, there is no common understanding of how new money is created. This is a problem for two main reasons. First, in the absence of this understanding, attempts at banking reform are more likely to fail. Second, the creation of new money and the allocation of purchasing power are a vital economic function and highly profitable. This is therefore a matter of significant public interest and not an obscure technocratic debate. Greater clarity and transparency about this could improve both the democratic legitimacy of the banking system and our economic prospects.

Defining money is surprisingly difficult. We cut through the tangled historical and theoretical debate to identify that anything widely accepted as payment, particularly by the government as payment of tax, is, to all intents and purpose, money. This includes bank credit because although an IOU from a friend is not acceptable at the tax office or in the local shop, an IOU from a bank most definitely is.

We identify that the UK's national currency exists in three main forms, the second two of which exist in electronic form:

1. Cash – banknotes and coins.
2. Central bank reserves – reserves held by commercial banks at the Bank of England.
3. Commercial bank money – bank deposits created either when commercial banks lend money, thereby crediting credit borrowers' deposit accounts, make payments on behalf of customers using their overdraft facilities, or when they purchase assets from the private sector and make payments on their own account (such as salary or bonus payments).

Only the Bank of England or the government can create the first two forms of money, which is referred to in this book as 'central bank money'. Since central bank reserves do not actually circulate in the economy, we can further narrow down the money supply that is actually circulating as consisting of cash and commercial bank money.

Physical cash accounts for less than 3 per cent of the total stock of money in the economy. Commercial bank money – credit and coexistent deposits – makes up the remaining 97 per cent of the money supply.

There are several conflicting ways of describing what banks do. The simplest version is that banks take in money from savers, and lend this money out to borrowers. This is not at all how the process works. Banks do not need to wait for a customer to deposit money before they can make a new loan to someone else. In fact, it is exactly the opposite; the making of a loan creates a new deposit in the customer's account.

More sophisticated versions bring in the concept of 'fractional reserve banking'. This description recognises that banks can lend out many times more than the amount of cash and reserves they hold at the Bank of England. This is a more accurate picture, but is still incomplete and misleading. It implies a strong link between the amount of money that banks create and the amount that they hold at the central bank. It is also commonly assumed by this approach that the central bank has significant control over the amount of reserves banks hold with it.

We find that the most accurate description is that banks create new money whenever they extend credit, buy existing assets or make payments on their own account, which mostly involves expanding their assets, and that their ability to do this is only very weakly linked to the amount of reserves they hold at the central bank. At the time of the financial crisis, for example, banks held just £1.25 in reserves for every £100 issued as credit. Banks operate within an electronic clearing system that nets out multilateral payments at the end of each day, requiring them to hold only a tiny proportion of central bank money to meet their payment requirements.

The power of commercial banks to create new money has many important implications for economic prosperity and financial stability. We highlight four that are relevant to the reforms of the banking system under discussion at the time of writing:

1. Although useful in other ways, capital adequacy requirements have not and do not constrain money creation, and therefore do not necessarily serve to

restrict the expansion of banks' balance sheets in aggregate. In other words, they are mainly ineffective in preventing credit booms and their associated asset price bubbles.

2. Credit is rationed by banks, and the primary determinant of how much they lend is not interest rates, but confidence that the loan will be repaid and confidence in the liquidity and solvency of other banks and the system as a whole.

3. Banks decide where to allocate credit in the economy. The incentives that they face often lead them to favour lending against collateral, or assets, rather than lending for investment in production. As a result, new money is often more likely to be channelled into property and financial speculation than to small businesses and manufacturing, with profound economic consequences for society.

4. Fiscal policy does not in itself result in an expansion of the money supply. Indeed, the government has in practice no direct involvement in the money creation and allocation process. This is little known, but has an important impact on the effectiveness of fiscal policy and the role of the government in the economy.

The basic analysis of this book is neither radical nor new. In fact, central banks around the world support the same description of where new money comes from. And yet many naturally resist the notion that private banks can really create money by simply making an entry in a ledger. Economist J. K. Galbraith suggested why this might be:

> *The process by which banks create money is so simple that the mind is repelled. When something so important is involved, a deeper mystery seems only decent.*[1]

This book aims to firmly establish a common understanding that commercial banks create new money. There is no deeper mystery, and we must not allow our mind to be repelled. Only then can we properly address the much more significant question: Of all the possible alternative ways in which we ***could*** create new money and allocate purchasing power, is this really the best?

About the authors

Josh Ryan-Collins is a Senior Researcher at **nef** (the new economics foundation) where he is leading a programme of research on the history and practice of monetary systems. He is studying for a PhD in finance and banking at the University of Southampton.

Tony Greenham is Head of Finance and Business at **nef**. He is a former investment banker, a Chartered Accountant and is a regular writer and media commentator on banking reform.

Professor Richard Werner is Director of the Centre for Banking, Finance and Sustainable Development at the University of Southampton and author of two best-selling books on banking and economics. He is credited with popularising the term 'quantitative easing' in 1994 whilst Chief Economist at Jardine Fleming Securities (Asia), following a spell as visiting research fellow at the Japanese Central Bank.

Andrew Jackson worked on the research for this book after graduating from the University of Sussex with an MSc in Development Economics.

'It is amazing that more than a century after Hartley Withers's The Meaning of Money *and 80 years after Keynes's* Treatise on Money, *the fundamentals of how banks create money still need to be explained. Yet there plainly is such a need, and this book meets that need, with clear exposition and expert marshalling of the relevant facts. Warmly recommended to the simply curious, the socially concerned, students and those who believe themselves experts, alike. Everyone can learn from it.'*

Victoria Chick, Emeritus Professor of Economics, University College London

What is money? How is it created? How does it enter into circulation? These are simple and vital questions it might seem, but the answers remain contested and often muddled.

Where does money come from? is a comprehensive guide to the modern UK monetary and banking system. It reviews theoretical and historical debates on the nature of money and explains how we arrived today with a system where the vast majority of new money is created by commercial banks.

Banks create new deposits through making loans, buying existing assets or by providing overdraft facilities which customers themselves turn in to deposits when they draw on them. These deposits are accepted by everyone, including the state, in payment for taxes. They are added to the money supply. Most money nowadays is created this way.

Based on detailed research and consultation with experts, the book includes in-depth explanations of the role of the central bank, regulators, the government and the European Union in influencing the creation and allocation of money.

It concludes that the current monetary system is inherently unstable, depending as it does primarily on the confidence of private banks themselves, while the central bank or government have chosen to exert little control over either the quantity of new money created or whether it is used for productive or speculative purposes.

Written throughout in non-technical language, the book will be of value to the general public, policy-makers, finance and banking professionals, academics and students.

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new economics foundation
3 Jonathan Street
London SE11 5NH

+44 (0)20 7820 6300
info@neweconomics.org

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