AVAILABILITY OF CREDIT
AND
SECURED TRANSACTIONS
IN A TIME OF CRISIS

Edited by
N. ORKUN AKSELI
Money, bank debt and business cycles: between economic development and financial crises

DAVID BHOLAT

Mistakes happen. These include errors in undertaking economic enterprise. In an advanced market economy, the space and time between the input of factors of production and the consumption of outputs is wide. Thus, commerce in the present unfolds over hazardous and high stakes horizons, reflecting the fact that future wants cannot be known with certainty. To some extent, the capriciousness of consumer demand is the by-product of advanced advertisement techniques which constantly create new needs. But more fundamentally, the dynamic nature of consumption reflects the non-linear development of the self as such – changes over the course of life in what individuals want and need – which we ourselves are not always able to anticipate until it is encountered or revised by ‘stimulus and suggestion’. Given the time inconsistency of even our self, any enterprise in an advanced market economy carries uncertainty that prospective profits have been miscalculated, such that expenditures end up exceeding revenue. The eternal economizing dilemma – what to produce and when, given scarce resources and budget constraints – is therefore rooted in the still more fundamental existential question ‘What is to be done? How ought we to live?’ we continually refine, but never resolve.

However, when market miscalculations are clustered in space and time, suspicion rightly arises that this correlation may have a common cause. When, in addition, these clusters are cyclical, their repeated experience elicits the need for theory to explain them. While cycles are common in...
nature, they are cause for despair in human history. This is so because cycles signify not simply repetition, but regression. The more times human history repeats itself mistakes assuming cyclical form the more intractable and ossified problems become. Hence cycles, full stop, are not explanations for economic crises, but rather, indicate a problem requiring further intellectual investigation.

Although each business cycle is unique and has diverse sources, we should suspect that the main culprit in amplifying economic errors is an institution whose scale and scope is as broad and as deep as the calculations themselves. In modern economies, the institution that best fits this description is money. Money functions as the unit of account according to which the price of goods and services are reckoned, the standard by which profits and losses are measured, and the medium of exchange which activates production and enables consumption. Intuitively then, a general theory of economic errors should make reference to money and, by extension, institutions such as the banking system whose debts help constitute it. Indeed, a financial crisis might be best defined as an episode which casts doubt on the monetary system, thus threatening the means of payment which the market economy presupposes in order to function at all.

Yet the simple proposition that money matters is more controversial than might be suspected. Neither New Keynesianism nor neo-Classical economics - the orthodox paradigms in economics from the mid-1980s up until the present attributed much significance to measures of money before the current crisis. As ex-Federal Reserve Governor Larry Meyer has pointed out, 'money plays no explicit role in today's consensus macro model, and it plays virtually no role in the conduct of monetary policy.'

A conversation I had with a finance academic at Oxford University in 2006 is indicative. When I voiced alarm that the Federal Reserve had ceased publication of the M3 monetary aggregate at a time when broad money was expanding relative to Gross Domestic Product (GDP), my concerns were dismissed by the countergeneration that monetary growth was a sign of economic prosperity akin to an expansion in the volume of commodities produced by the real economy.

Note that the contemporary neglect of the special economic significance of money is a stark alteration in theoretical fashions from the 1970s and 1980s, when Milton Friedman and Monetarism dominated the discipline. Monetarism's conceptual calling card was a sophisticated version of the quantity theory of money, in which changes in the money stock were interpreted as leading indicators of nominal income, price inflation and overall economic activity. But by the mid-1980s, Monetarism had lost currency, so to speak. Monetarists lacked clear consensus about which monetary aggregates to target because of the vulnerability of such aggregates to institutional innovations (in the 1980s, for instance, the spread of instantly cashable 'savings accounts'). Moreover, critics noted the poor correlation between monetary growth and short-term economic fluctuations because the velocity of money - the speed at which £1 circulates in the economy - muddles a one-to-one relation between the quantity of money and price. In addition, critics expressed concerns about reverse causality, since independent increases in aggregate demand and prices might stimulate bank lending and thus monetary growth.

Taken together, the cumulative consequence of these critiques was to shift macroeconomics away from analysis of the volume and velocity of monetary aggregates to interest rates and output gaps as the key intermediate operational targets for monetary policy.

Although the proximate factor for the relative neglect of money by many modern macroeconomists stems from the perceived failures of Monetarism in the early 1980s, economic incredulity towards the real economic significance of money goes back much further. In fact, such scepticism is found at the very origins of economics, when the field in its modern form appeared in opposition to the Mercantilist conflation of metallic money with wealth. Hence, Adam Smith pejoratively referred to money as 'dead stock,' in contrast to fixed capital investments, which

he viewed as the source of ‘real wealth’. In some respects, assumptions built into the models used by current economists embody their founding fathers’ attitude about the properly subordinate role money should play in the economy. Yet this normative commitment, when not understood as such, can blind analysts to the powerful role of wealth effects and monetary illusions in the real world. However much we may sympathize with Hume’s postulate that ‘money is not, properly speaking one of the subjects of commerce but only the instrument which men have agreed upon to facilitate the exchange of one commodity for another’, such a perspective is anachronistic in a world where money is itself the most heavily traded commodity via foreign exchange (forex) markets.13

The minor role for money in modern macroeconomics explains why the predominant focus of the field is on pathways from real economic instability to banking crises, rather than the reverse.14 Although details vary, the sequence in most models starts from the proposition that worsening economic conditions impair the net worth of borrowers and/or the worth of their collateral, causing banks to make fewer loans and/or lend at higher rates, which in turn causes contractions in demand and still worse economic conditions.15 Note, however, that the adverse shocks starting this sequence are presupposed rather than explained. Moreover, they are implicitly exogenous of the financial sector. While banks and other financial institutions are positioned in these models as amplifying business cycles, they are not identified as their primary cause.16

The premise of this chapter is that this perspective on the relationship between the real economy and money is inadequate for explaining recent events. For example, in spite of concerns about rising loan-to-value and loan-to-income ratios in the housing market, the number of mortgage arrears as a percentage of all loans, and their financial value, is smaller in the UK today than comparative figures during the 1990s recession. Thus, the recent economic crisis in the UK does not appear to have been caused by domestic insolvency shocks external to the banking sector. Rather, the crisis in the UK appears to have started with liquidity disturbances internal to the global banking system, which then spilled over into the real economy, with subsequent negative impacts on employment, output, and the credit rating of sovereign bonds. Recent events, therefore, call for recovery and renewal of an older economic tradition which treated money and banks as fundamental to the explanation of business cycles.17 Although crises, like consumers, are adaptive and dynamic, major global downturns are not stochastic ‘black swan’ shocks, but patterned events correlated with banking crises, with the sector featuring prominently in both the Great Depression and the ongoing Great Recession.18 While economic errors may not always and everywhere be a monetary phenomenon, the role of money and banks warrants more scrutiny than they have been given in recent years by macroeconomists.

The remit of this chapter is therefore to critically review other, older frameworks for understanding the relationship between the availability of bank credit, and economic development and crises. In the process of re-presenting these frameworks, the chapter also clarifies key conceptual terms presumed by this edited volume, such as ‘money’, ‘banking’, and ‘economic development’. Observe that I forsake any claim that this chapter’s explanation of these concepts corresponds to how other contributors use and understand these terms. Indeed, my premise is that because these terms are now so pervasive and plural, they have lost their precision. Given current economic conditions, a more systematic reflection on them seems in order.

The chapter unfolds as follows. It first considers what distinguishes banking from other financial institutions. The key point made is that banks gain their socio-structural significance in the UK economic system because their liabilities (namely, sight deposits) function as money.19 In elaborating this point, I return to the insights of Joseph Schumpeter, who

17 A good survey of this literature is offered by J. Toporowski, Theories of Financial Disturbances: An Examination of Critical Theories of Finance from Adam Smith to the Present Day (Cheltenham: Edward Elgar Press, 2005).
is among the most famous economists to have argued that the banking system's money-making capacity makes them more important than capital markets in generating economic growth. At the same time, this capacity renders banks structurally brittle, with leverage threatening their solvency, and the peculiar legal liability of sight deposits making them ripe for runs.

The precarious funding structure of banks poses risks not only for themselves, but also potentially to the economic system as a whole. The third section of this chapter then explores the possible systemic risk banks can pose, by returning to Friedrich Hayek's argument that the practice of maturity transformation, i.e. 'borrowing short and lending long', can induce investment incompatible with consumer preferences. Hayek's argument is particularly insightful because it encourages us to think about the effects of money not only on general price inflation, but also on the specific kinds of commodities produced by the real economy and the distributional consequences of asymmetric access to additional purchasing power enabled by banks' debt issuing.

Thus, Schumpeter and Hayek have been chosen for comparison not simply because they were coincidentally both Austrian, but more justifiably because they give different emphasis to the benefits and costs of banks in modern market economies. The chapter is preliminary. It does not seek to take sides. Instead it aims to critically assess both positions, and to do so in light of recent events. Finally, the chapter concludes by speculating on the future to which the present is leading. Although a short-term contraction in the quantity of available credit is the most obvious consequence of recent events, a qualitative expansion in the same period of objects posted to secure lending demonstrates the resilience of capitalism rather than its crisis.

I. Lending on leverage

The trouble much economics has with incorporating money into models is illustrated by the difficulty it has with offering an adequate explanation for its existence. Most models begin by positing a 'cash-in-advance constraint', portraying money as a useful media of exchange developed to solve coordination problems caused by the absence of a double coincidence of wants, which allegedly hampers barter economies. In other words, much economics takes a transaction cost approach to explaining money, seeking to ground its origins in the past on the basis of the present benefits it confers. However, the problem with this functionalist explanation is that it does not correspond to historical facts. As anthropologist Caroline Humphrey has pointed out, 'No example of a barter economy, pure and simple, has ever been described let alone the emergence from it of money.' Instead, most objects which later developed into mediums of exchange emerged outside of the market, as artefacts in religious ceremonies or recompense initially pertaining to legal proceedings.

The transaction cost approach for explaining the existence of banking is similarly unsatisfying. According to this approach, banks reduce search costs by substituting ad hoc arrangements with a permanent channel to connect savers and borrowers; lower bargaining costs because they make use of standardized agreements; and reduce enforcement costs by acquiring specialized expertise in monitoring loans, collecting information which allows them to distinguish good from bad borrowers with greater acuity than non-experts. Note that the transaction cost advantages ascribed to banks can be attributed to financial intermediaries more generally. Categorical commensuration has been catalyzed by institutional developments propitious to it, namely, the advent of the universal banking model in Britain. Since trading profits and financial advisory fees now constitute the primary source of operating income for the sector, the specific practice of banking — accepting deposits and making loans — might seem of secondary importance. Indeed, before the financial crisis, many academics emphasized capital markets at the expense of banking, because of the growing significance of securities over loans as direct sources of external finance for large firms. Indeed, one often detects a tacit teleology in the economic literature that banks are financial organizations specially suited to 'backward' countries, which give way to capital markets in more 'advanced' ones.
Yet it is salient to consider that bank assets as a percentage of GDP have risen in most developed countries over the last thirty years, refuting the view that the economic importance of banks has diminished over time. For example, British banks today hold assets of five-times GDP, compared to the nineteenth century, when they were equal to around 5 per cent. Nevertheless, arguments supporting the intuition that banks are special types of financial institutions need not rest on empirical evidence subject to circumstantial changes, such as whether bank representatives exercise control over directors in corporate boardrooms. Rather, as will be developed, an analytical position which accords primacy to banks can be defended on the structural fact that banks’ debt acts as money. Consequently, while equities and bonds intermediate an existing stock of money between borrowers and lenders, the banking system can make new money by issuing debt over and above existing savings. The dynamic, money-making function of the banking system is completely obscured by transaction cost approaches which analogize banks to other forms of finance and foster a reductionist view that bank debt, bonds and equity are simply substitutes for each other.

In order to appreciate this point, it is helpful to have a clear definition of money and banks. Money may be defined as a special form of credit which conventionally acts as a means of final payment. Viewed from the other side of the ledger, money could also be described as a special form of debt, a liability ‘not against any specific person but against the entire community, one that is unconditional as to where, when, against what, or whom it may be exercised’. One form of debt which has historically functioned as money in England is sovereign debt, such as tally sticks issued by the Treasury until 1826 as a record of tax liabilities owed to the government or, more recently, paper notes issued by the government’s bank, the Bank of England, which represented its bona fide debt to pay domestic bearers precious metal until 1914. But sovereign debt is not the only kind of debt which can circulate as a means of payments, i.e. as money. In theory, any debt might become money so long as a community accepts it as such.

In fact, the dominant form of money in the UK today is bank debt. By most estimates, private bank debts constitutes over 97 per cent of the monetary media, conventionally labelled M-4, while government-issued notes and coin account for less than 3 per cent. What has historically enabled bank debt to function as a cash substitute is a unique type of bank liability referred to as sight deposits. Sight deposits are liabilities legally payable to the account holder on demand, at par, without penalty. Banks are therefore special kinds of financial institutions by virtue of the fact that their liabilities act as money. So defined, ‘banks’ encompass other businesses in the UK such as building societies and credit unions, although, given the relative asset size of nominal banks, the term ‘bank’ in this chapter refers primarily to this sub-group.

The instantly exercisable option the public holds on sight deposits makes banks vulnerable to liquidity crises, since deposit debt greatly exceeds the physical cash it represents. For instance, at year end 2010, British banks held only around 0.1 per cent of their total assets in cash and coin. The British banking system is therefore more precisely termed a ‘fractional-reserve’ banking system, because banks hold only a fraction of cash and coin against deposit liabilities, in contrast to ‘full reserve’ banking systems, where banks act as depositories and fully back them with legal tender. Although banks employ intricate management techniques to deal with liquidity demands, their efficacy may be weakest when needed most, as liquidity crises are characterized by the fact that ordinarily

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marketable assets are no longer so. In sum, a fundamental structural challenge posed by the existing monetary system is that its dominant currency consists of the nominally fixed liabilities of banks backed by assets that fluctuate in value over time. The fact that most money today is private bank debt means that occasional proposals to ‘denationalize money’ overlook the reality that this has in part been achieved already. As Joseph Schumpeter once quipped, to claim that money today is ‘the creature of the state is as true and as false as to say that the institution of marriage is a creature of law’.

Indeed, Schumpeter remains a treasure trove of insights on the special role played by banks in developed market economies, an issue he discusses at length in his Theory of Economic Development. Schumpeter’s ambition in that book is to explain why productivity improvements in the modern world ‘recur’ at rates above rises in population so as to constitute a distinctive growth path he termed ‘economic development’ — an economy which not only increases its quantitative output, but also perpetually changes the qualitative composition of commodities. As is well known, Schumpeter cast entrepreneurs in the starring role, because their innovative techniques raise productivity, cut costs and lead to the more efficient and differentiated production of commodities. However, less known is the equal emphasis Schumpeter placed on banks in the process of economic development. The significance Schumpeter ascribed to banks can be gleaned from his comment that ‘capitalism’ is distinguished from other economic systems by ‘the additional phenomenon of credit creation — by the practice of financing enterprise by bank credit’. According to Schumpeter, the banker ‘makes possible the carrying out of new combinations, authorizes people, in the name of society as it were to form them’ because the banker is ‘not so much primarily a middleman in the commodity “purchasing power” as a producer of this commodity’, and for this reason the banker is the very ‘ephor of the exchange economy’.

The spirit of Schumpeter’s comments is best appreciated by recalling that when banks make loans and thus create deposits, the bank has increased the availability of credit to the loan recipient without diminishing the ‘purchasing power’ of other creditors (depositors), who are still able to use their bank deposits as a means of payment. Thus, when a bank extends credit through a loan (a bank asset), it can then open a deposit account for the loan recipient (a bank liability) which inverts the taken-for-granted temporal sequence that savings must precede investment. As Schumpeter appreciated, ‘Banks... no longer... “lend their deposits” or “other people’s money” but... “create deposits”... what the banker does with money cannot be done with any other commodity’.

On the basis of such considerations, Schumpeter argued for an elective affinity between banking and economic development. Since banks multiply the amount of money in circulation, they greatly increase the purchasing power available to budding entrepreneurs, who otherwise would need to finance themselves from a smaller pool of savings. While the immediate impact of bank lending may be price inflation, as entrepreneurs use new ‘purchasing power’ to bid up factors of production (land and labour), Schumpeter argued that the long-run effect of banks is deflationary. As factors of production are redeployed in more efficient enterprises through the mediation of banks, the quality and quantity of commodities increase, costs and prices fall, and loans are repaid.

The actual historical evidence with respect to the role played by banks in economic development is mixed. For example, economic growth during the British Industrial Revolution was primarily financed from firms’ retained earnings rather than bank lending. In the nineteenth century,

44 Schumpeter, History of Economic Analysis, p. 320.
45 Schumpeter, Theory of Economic Development, p. 245.
46 For an excellent overview of the debate, see M. Collins, Banks and Industrial Finance in Britain, 1800-1939 (Cambridge University Press, 1991).
most assets held by the largest British banks were short-dated, foreign bills of exchange, rather than long-term loans to domestic industry. Therefore, while Schumpeter’s view of banks as handmaidens of industrial enterprise possessed plausibility within the Continental European context in which he was writing, it appears over-generalized if taken as a necessary feature of banking as such. Indeed, the deflationary view of banks Schumpeter championed is compromised if the main borrowers of ‘purchasing power’ are buying and consuming existing assets rather than creating new ones. Under these conditions, a tension may develop between two incompatible incentives: a conflict between the public good in having stable monetary growth and price stability, on the one hand, and the profit incentive of private banks to increase the availability of credit, on the other. The recent spread of securitization arguably exacerbated this tension, enabling banks to increase their origination volume without full regard to credit risks, since loans could be sold off-balance sheet to other investors.

In theory, the same capital structure which makes debt important on both sides of bank balance sheets also acts as a limit to its over-issue. Banks are more ‘leveraged’ than other types of businesses, meaning they finance operations predominantly through debt rather than equity. A high debt-to-equity ratio means banks are particularly prone to insolvency. In 2006, for example, median bank leverage, defined as the ratio between assets and equity, was approximately twenty-five. This meant that only a 4 per cent financial loss could make most British banks insolvent. The recent implementation of mark-to-market accounting should have made leverage, a more central factor seems to have been the ‘shareholder value’ paradigm has been that return on equity (ROE) - the ratio of net income to common equity - has arguably become the most important financial preparation for ‘known unknowns’ more difficult.

But while the role of tax and accounting rules contributed to increasing leverage, a more central factor seems to have been the ‘shareholder value’ paradigm which recently dominated managerial conceptions of best practice. One outcome of the predominance of the ‘shareholder value’ paradigm has been that return on equity (ROE) - the ratio of net income to common equity - has arguably become the most important metric used by investors and management to appraise the performance of banks. Suffice it to recall that at the start of 2007, soon-to-be-doomed Northern Rock was both the most highly leveraged bank and highest jeopardized not only by the writing of bad loans, but also sudden and unexpected falls in the market price of trading book assets.

However, in spite of the spectre of insolvency, British banks vastly increased their leverage in the late twentieth century, with particular sharpness in the new millennium. In recent years, leverage in the banking sector was five-times the magnitude of what it was at the close of the nineteenth century. A recent, often-cited factor for the increasing leverage of British banks is that the UK tax code allows corporations to deduct interest paid on debt from bank profits, but does not confer equal treatment for dividends paid on stock. In this vein, it is sometimes noted that recent changes in accounting regimes make it more difficult for banks adequately to make provision against financial losses. Whereas in the past, banks could make general, undefined provisions, adoption of the International and Financial Reporting Standards (IFRS) in 2006 means banks are encouraged to make provisions only according to particular, well-defined asset classes, making financial preparation for ‘known unknowns’ more difficult.

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Bank leverage has also been subsidized by deposit insurance and other State guarantees. Although the exact value of these subsidies is not known, the Independent Commission on Banking believes they exceed £10 billion per year: Independent Commission on Banking, Final Report (2011), p. 130.

References

51 Although, as more acute analyses have revealed, the banking sector remained heavily exposed to securitized products through the holding of their own or other banks’ securities, as well as through credit guarantees to special purpose investment vehicles. G. Gorton, ‘The Subprime Panic’, National Bureau of Economic Research Working Paper 14398 (2008), pp. 28–9.
54 Capie, ‘British financial crises in the nineteenth and twentieth centuries’,
57 Bank leverage has also been subsidized by deposit insurance and other State guarantees. Although the exact value of these subsidies is not known, the Independent Commission on Banking believes they exceed £10 billion per year: Independent Commission on Banking, Final Report (2011), p. 130.
rated stock in Europe.\textsuperscript{58} Set against a legal background of limited liability, where equity holders are fully rewarded for risk but partially insulated from losses,\textsuperscript{59} leverage allowed banks to increase their ROE through larger net income earned on a thinning layer of equity.

However, the argument for making shareholders the primary beneficiaries of bank boards' fiduciary duties is debatable, given that only a fraction of bank funding comes from equity.\textsuperscript{60} Moreover, the downside to the 'shareholder value' paradigm manifested itself during the financial crisis, when some banks required additional share capital, but refrained from issuing it, for fear of diluting their equity holders' financial interests, which, in any case, aligned with their own, given that bank executives receive a sizable share of their compensation in the form of stock options.\textsuperscript{61} Rather than reduce leverage by issuing new equity or by reducing payments to their staff and shareholders, British banks appear to have instead deleveraged by contracting lending. Consequently, although the size of the sector's Central Bank reserves has increased exponentially since 2009, bank lending in the same period has been volatile and sometimes negative, meaning repayments are exceeding new loan flows.

A fundamental interpretive decision is whether to view this contraction in bank lending as an independent or dependent variable. Viewed as an independent variable, banks determine (cause) the credit supply according to profit targets, constrained by internal risk models, regulation, and, above all, the willingness of Central Banks and banks as a sector to lend to each other. Alternatively, viewed as a dependent variable, bank credit creation or lack thereof is an effect of the loan demand expressed by the non-bank public. In reality, both views contain truth, and the relative strength of either interpretation changes with context.

Whatever the case, the current crisis is misunderstood if conceived as a recession caused, first and foremost, by under-consumption and a credit crunch. Rather, the seeds for the bust were sown by an earlier, unsustainable boom in Britain caused by over-consumption and negative savings.

In recent years UK household debt, defined as household liabilities as a percentage of nominal disposable income, exceeded 150 per cent, a level of indebtedness which, figured as a proportion of GDP, exceeds rates in the United States and the European Union.\textsuperscript{62} Once the fabled land of Protestant parsimony, high levels of debt have become a common fact in Britain within a generation.\textsuperscript{63}

The larger volume of consumer credit and corresponding household debt in the years leading up to the crisis is sometimes explained as the result of a 'global savings glut'.\textsuperscript{64} According to this hypothesis, large amounts of savings in Asian economies were recycled through banks accessing global wholesale markets, which then lowered interest rates and increased financial investment in recipient countries such as Britain. Whatever the merits of this thesis, its implications for domestic policy are less clear assuming a commitment to capital liberalization, since current account imbalances reflect structural differences in labour regulation and productivity between Europe and East Asia. Instead, it is helpful to clarify how banking by its very nature might keep interest rates lower than in an economy without a banking system, even in the absence of international flows and factors.

II. Fractional-reserve-banking and financialization

In order to flesh out the potential relation between banking, lowered interest rates, and misdirected productions, it is helpful to return to the monetary theory of the business cycle proposed by Friedrich Hayek, who extended the insights of his mentor, Ludwig von Mises, and other predecessors working in the so-called Austrian School tradition of economics. For this reason, this section draws both from the writings of Hayek and subsequent Austrian School commentators in order to summarize what Mises called the circulation credit theory of the business cycle (CCT).

\textsuperscript{58} M. Onado, 'Northern Rock: Just the Tip of the Iceberg,' The Failure of Northern Rock: A Multi-Dimensional Case Study, F. Brunl and D. Llewellyn (eds.) (Vienna: SUERF-The European Money and Finance Forum, 2009), p. 104.
\textsuperscript{59} P. Ireland, 'Property and contract in contemporary corporate theory,' Legal Studies 23(3) 453–509 (2003).
\textsuperscript{60} J. Macey and M. O'Hara, 'The Corporate Governance of Banks,' Federal Reserve Bank of New York Economic Policy Review 9,1 91–107, 93 (April 2003).
\textsuperscript{61} K. French et al., The Squam Lake Report (Princeton University Press, 2010), p. 70.
Although CCT is more commonly known as Austrian Business Cycle Theory (ABC), it builds on a theoretical edifice first constructed by the Swedish economist Knut Wicksell. Wicksell invoked the concept of the natural rate of interest as a heuristic for describing the price of money (the interest rate) in an economy with an inelastic currency. In this imaginary economy, the theoretical or 'natural' rate of interest is determined principally by the supply of savings. In the real world, however, Wicksell observed that banks are able to extend credit in excess of savings, thereby lowering the market rate of interest below the 'natural' rate. According to Wicksell, such an artificially low interest rate will stimulate demand for bank loans, eventually inflating and distorting market prices. Writing at the turn of the twentieth century, Wicksell looked to the constraints of the gold standard to check such outcomes. According to Wicksell, this would occur because rising prices would increase the non-banking public's demand to convert their bank liabilities (deposits) into cash (gold). When this occurred, reserves would decrease and banks would be forced to raise interest rates to a level corresponding to the natural rate in order to stem outflows of gold.  

In the early twentieth century, Mises extended Wicksell's insights on the consequence of banks' lending lowering market interest rates below the rate that would otherwise prevail if investment was funded only from the savings of an inelastic currency. Hayek then refined the theoretical framework. The distinctive feature of Mises–Hayek business cycle theory is the claim that artificially lowered interest rates do not impact the price level uniformly, but do so through changes in the relative prices of commodities produced by different sectors. In effect, bank lending subsidizes investments which otherwise would not have taken place if the natural rate of interest prevailed. Like all subsidies, bank debt (loans) thus influences the specific pattern of economic development by increasing the purchasing power of the particular industries to which it is extended.  

In some respects, Hayek's version of ABC theory is a more formal statement of the common knowledge that banking involves maturity transformation. In other words, banks do not temporarily match assets and liabilities, but 'borrow short and lend long'. The conventional wisdom is that maturity transformation produces interest rates more favourable to fixed capital investments than otherwise would be the case if long-term funding was exclusively determined by savers, because of the general propensity of the non-bank public to hold higher cash balances than banks. However, the benefits of banking for economic growth come with the potential cost that the inter-temporal allocation of real resources via market prices may be distorted in the process.

In order to understand why this may happen, recall that the interest rate may be defined as the price of money. Like all prices in a market economy, the interest rate may be interpreted as communicating consumer preferences. For instance, when the supply of savings increases, this indicates the public is willing to sacrifice present for future consumption. An increase in savings increases the funds available for investment and lowers the interest rate. Assuming, as Hayek did, that the expected rate of profit exceeds the interest rate - an assumption not without critics and particularly dubious during a depression - demand for loans will increase, as the prospective net present value of investments improves when discounted by a lower interest rate. According to Hayek, since investment in the production of capital goods, that is, intermediate goods such as machines and tools used to produce other goods, are especially interest rate sensitive, an increase in the supply of savings will stimulate investment in this sector of the economy since outputs will come to fruition in the future which is when consumers will use their savings for economic development we shall have to put up with the resulting trade cycles. They are, in a sense, the price we pay for a speed of development exceeding that which people would voluntarily make possible through their savings, and which therefore has to be extorted from them.' Nevertheless, Hayek did draw the following policy conclusion. 'As soon as it is realised that, owing to the existence of banks the equilibrating forces of the economic system cannot bring about the automatic adjustment of all its branches to the actual situation, which is described by classical economics theory, it is justifiable even from a liberal point of view that the banks should be subjected to degrees of publicity as to the state of their business which is not necessary in the case of other undertakings: and this would by no means imply a violation of the principle of business secrecy ...' FA Hayek, Monetary Theory and the Trade Cycle, N. Kaldor and H. M. Croone (trans.) (New York: Sentry Press, 1933), pp. 189, 190, 239.

65 On Wicksell, see D. Laidler, Fabricating the Keynesian Revolution: Studies of the Inter-war Literature on Money, the Cycle, and Unemployment (Cambridge University Press, 1999), p. 28.
66 Some Austrians argue that the banking system has a distorting effect on interest rates only in a fiat money system with a Central Bank, but not under a free banking system based on a metallic standard. G. Selgin, Free Banking in Britain: Theory, Experience, and Debate, 1800–1845 (London: Institute of Economic Affairs, 1984); G. Selgin and L.H. White, 'In Defence of Fiduciary Media – or, We are Not Devo(Iutionists), We are Misesians!' Review of Austrian Economics 9.2 83–107 (1996).
67 While explaining the monetary sources of business cycles, Hayek did not offer any easy resolution for them. 'So long as we make use of bank credit as a means of furthering...
that does not follow from the premise.\textsuperscript{74} This determinism is at odds with the broader belief expressed by Hayek that entrepreneurial activity is dynamic and unpredictable. This presumably applies to banks \textit{qua} entrepreneurs. Therefore, what is needed is the elaboration of a position 'more faithful to Hayek than Hayek is to himself', to borrow a turn of phrase from German philosopher Schleiermacher. This involves relaxing Hayek's \textit{a priori} assumption as to in which sector bank credit flows by empirically examining the statistical data at a particular period in history.

In fact, doing so reveals that net lending to the financial, insurance, and real estate sector (FIRE) has greatly exceeded bank lending to non-financial private corporations in recent years, with particular sharpness after 1980. Between 1998 and 2008, for example, sterling loans from British banks to financial companies grew by over 200 per cent relative to GDP, compared to 50 and 60 per cent for the household and private non-financial sectors, respectively.\textsuperscript{75} Hayek's perspective on the distributional impact of differential bank lending is helpful for interpreting these facts. According to Hayek, those sectors which initially acquire new purchasing power gain a strategic advantage over other sectors because such funds allow them to outbid competitors for real resources.\textsuperscript{76} This increases the income of persons in the relatively privileged sector, next increasing the prices of commodities which they buy in increased quantity, which then increases the incomes of the sellers of these commodities, and so on.\textsuperscript{77} However, those persons who receive funds last as they are spent into circulation, or never receive them at all, are relatively disadvantaged, because prices will have adjusted upward in response to the increased availability of credit.\textsuperscript{78}

\footnotesize{\textsuperscript{70} In this way, consumer time preference is reflected in the productive structure of the economy.}

\footnotesize{\textsuperscript{71} The mispricing of money thus propagates a temporal mismatch between the structure of production and consumer preferences, turning boom into bust. In his mature writings, Hayek suggests that the tipping point occurs when banks reduce the rate of growth in new credit extended because of concerns with rising leverage of their counterparties and the threat this poses to the banks' own solvency if counterparties default. A contraction in bank lending causes the price level to fall, and the subsequent slow reallocation of resources from incomplete investment projects to other uses results in a period of declining economic output and unemployment; in other words, a recession or even depression. Despite many merits, a key problem with Hayek's monetary theory of the business cycle is its rigid determinism, specifically the claim that the capital goods sector is necessarily the primary site of over-expansion and malinvestment. The argument that 'the demand for money is 'in the last resort a demand for capital goods' is a conclusion that does not follow from the premise. This determinism is at odds with the broader belief expressed by Hayek that entrepreneurial activity is dynamic and unpredictable. This presumably applies to banks \textit{qua} entrepreneurs. Therefore, what is needed is the elaboration of a position 'more faithful to Hayek than Hayek is to himself', to borrow a turn of phrase from German philosopher Schleiermacher. This involves relaxing Hayek's \textit{a priori} assumption as to in which sector bank credit flows by empirically examining the statistical data at a particular period in history.

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\footnotesize{\textsuperscript{74} See L. von Mises, \textit{The Theory of Money and Credit} (Indianapolis, Ind.: Liberty Fund, 1981), p. 241.}

\footnotesize{\textsuperscript{75} Independent Commission on Banking, \textit{Final Report}, p. 50.}

\footnotesize{\textsuperscript{76} De Soto, \textit{Money, Bank Credit, and Economic Cycles}, p. 533.}

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Thus, in the years prior to the crisis, when the flow of UK bank lending to the financial sector exceeded lending to other sectors, these eventualities could be interpreted as the financial sector disproportionately benefiting from the additional purchasing power granted by banks. This fact might partly explain why, in spite of increasing competition within the FIRE sector, financial profits remained high, contrary to the expectations of neo-classical theory.\(^7\) Such evidence is also broadly consistent with the thesis of ‘financialization’ – the idea that the financial sector has accumulated claims and clout relative to other sectors of the economy over the last thirty years – suggesting a possible mechanism for why this may have occurred.\(^8\) Although more research needs to be conducted on this topic, the path-breaking scholarship of Friedrich Hayek and Joseph Schumpeter indicate the need to critically reconsider the relationship of money and banks to the business cycle.

III. Conclusion

The aim of this chapter has been to briefly arm readers with some initial intellectual equipment to understand why increasing the availability of bank credit is an ambiguous goal whose pursuit may foster either economic development or crisis.\(^9\) In particular, whether bank credit plays a progressive or destabilising role in the real economy is contingent on the form new money assumes, the sectors into which it is lent, and spare capacity in the economy. In recent years, when as much as two-thirds of balance sheets represented further lending to the financial sector, British banks may not have been giving credit where credit was due, so to speak.\(^10\) Although securing lending with collateral may theoretically have reduced credit risk for individual banks, it may also have contributed to systemic risk in the sector as a whole. Bank lending to the FIRE sector increased the price of financial assets, which were then used to secure further bank loans, with self-perpetuating circularity.\(^11\) When the crisis struck, collateral failed to do the work creditors wanted it to do. Creditors had recourse to assets whose market value was depressed and whose sale would have placed further downward pressure on prices and balance sheets.\(^12\) The availability of secured credit should therefore always be viewed cautiously and holistically as an equal and opposite accounting entry. Thus the irony that what had been praised in recent years as the ‘democratization of credit’ is now widely criticised as forced imposition to service debts.

Yet, rather than diminish demand for debt finance, recent events have actually encouraged an expansion in the objects used to collateralize them. This striking enlargement in the scale and substance of secured transactions has occurred across markets. At the highest levels of haute finance, the crisis witnessed government lending upon a suite of securities beyond those conventionally classified as Central Bank eligible, and through relatively novel channels such as long-term reverse repos.\(^13\) At the same time, on the high street, pawnbrokers are proliferating because of the slowdown in consumer credit offered by banks, accepting as pledges cars, fine wine, ‘anything really that has got a high value’, states one pawnbroker manager.\(^14\) While the constellation of these trends is particular to the present, they are logical conclusions of financial culture, by which I mean that worldview which fabricates the existence of a uniform monetary substance existing behind sensuously diverse things, rendering them commensurate and capable of being leveraged.\(^15\)

In sum, our present evinces a complicated interplay of continuity and change, at a crossroads between economic development and financial crisis.\(^16\) The immediate result of recent events has been the unleashing

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\(^9\) See McCormack, Chapter 2 this volume.


\(^13\) A sale and repurchase agreement (repo) is a financial transaction involving the sale of securities with commitment to repurchase the same or similar securities at a later date. A reverse repo is this financial transaction viewed from the perspective of the cash lender who takes temporary possession of the security.


DAVID BHOLAT

of widespread, if inchoate, dissatisfaction with capitalism that places its specific configuration in flux. But the longer term legacy of our historical moment may well be the strengthening of financial culture, as evidenced by the further expansion in objects imagined as assets adequate to secure lending during the crisis.

Secured transactions law reform, UNCITRAL and the export of foreign legal models

GERARD MCCORMACK*

I. Introduction

UNCITRAL, the United Nations Commission on International Trade Law, has produced a Legislative Guide on secured transactions, or secured credit law, as it is variously called. The Guide follows the broad contours of Article 9 of the United States Uniform Commercial Code, though it is not an exact copy. It aims to harmonize and modernize the law of secured credit across the globe. In UNCITRAL's view, the Legislative Guide will aid the growth of individual businesses and also general economic prosperity. Harmonization and 'modernization' are assumed to equal 'liberal' security regimes and the facilitation of secured credit. In this chapter,

* The author would like to thank Terry Halliday and Peter Vincent-Jones for their input on earlier drafts of this chapter, but, of course, the the usual disclaimer applies.


2 UNCITRAL describes its mission as follows: 'The core legal body of the United Nations system in the field of international trade law. A legal body with universal membership specializing in commercial law reform worldwide for over 40 years. UNCITRAL's business is the modernization and harmonization of rules on international business' (www.uncitral.org/). This may represent mission creep from the UN resolution establishing UNCITRAL - Resolution 2205 (XXI) - which spoke of 'progressive harmonization and unification'. The focus now on 'modernization and harmonization' sees UNCITRAL in a more proactive light actively striving for the reform of global commercial law; see S. Block-Lieb and T. Halliday, 'Harmonization and Modernization in UNCITRAL's Legislative Guide on Insolvency Law' 42 Texas International Law Journal 473 (2007).