PROFESSOR RICHARD A. WERNER, D.Phil. (Oxon)

CHAIR IN INTERNATIONAL BANKING
DIRECTOR, CENTER FOR BANKING, FINANCE
AND SUSTAINABLE DEVELOPMENT



Werner, School of Management, University of Southampton SO17 1BJ

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Tel. +44 (0)23 8059 2549 Fax +44 (0)23 8059 3844 e-mail werner@soton.ac.uk

Comment: Strengthening the Resilience of the Banking Sector

My comments take the form of first citing the relevant passage of the Consultative Document and then presenting my commentary. The passages from the report are shown in bold script and inverted commas to separate them from the comments. As they are already numbered, no further references or page numbers are cited. I will focus only on the aspects of the report, where commentary is most urgently required. Lack of comment on other passages does not imply consent.

The nature of banks and their role in the economy

This is fundamental to an understanding of banking crises, bank regulation and the necessary response to the recent financial crisis, including strengthening the resilience of the banking sector.

"3. A strong and resilient banking system is the foundation for sustainable economic growth, as banks are at the centre of the credit intermediation process between savers and investors. Moreover, banks provide critical services to consumers, small and medium-sized enterprises, large corporate firms and governments who rely on them to conduct their daily business, both at a domestic and international level."

The document describes banks as mere financial intermediaries. However, it is a fact that banks are not just mere intermediaries, channeling savings from A to B. This, indeed, is not even their most important function. By far the most important function and that which has most consequences for the economy and all its participants is their

function as the creators of the money supply. In most countries about 98% of the money supply is not created by the central bank, but by the commercial banks. This is done through the process of credit creation: when banks give credit (what is commonly referred to as 'bank lending'), they do not intermediate existing savings and channel them to the borrower. Instead, they create new purchasing power that did not exist before. This is done through simultaneous double-entry book-keeping, crediting the borrower's account with a deposit that had not actually taken place (thus recording an entry on the liability side of the bank balance sheet), while recording the loan as a new asset to the bank (hence lengthening their balance sheet). This activity has many important implications for the economy, influencing it in many ways that may not have been intended by an individual credit creating bank ('feedback', 'externalities'). Since the banks pursue their business with the aim to maximize their own profits, their collective decisions about how much money to create in this process of credit creation and, even more importantly, who to allocate it to for which purpose are of profound consequence for the economy, including for banks themselves. If credit is created and allocated for consumptive purposes, we must expect pressure towards consumer price inflation; if for financial transactions, we must expect pressure towards asset inflation; or for productive purposes, we may expect a degree of non-inflationary growth. These facts have long been documented (see, for instance, Werner, 1997, 2005), although most textbooks in macroeconomics or banking fail to mention them. They are, however, not a matter of dispute, since they are also acknowledged by a number of central banks (Federal Reserve, ECB, Bundesbank), and they are recognized by the BIS:

"...the fractional reserve system... permits the banking system to create money." (Federal Reserve Bank of Kansas City, 2001, p. 57.);

"The actual process of money creation takes place primarily in banks." (Federal Reserve Bank of Chicago, 1961, p. 3);

"At the beginning of the 20th century almost the totality of retail payments were made in central bank money. Over time, this monopoly came to be shared with commercial banks, when deposits and their transfer via checks and giros became widely accepted. Banknotes and commercial bank money became fully interchangeable payment media that customers could use according to their needs. While transaction costs in commercial bank money were shrinking, cashless payment instruments became increasingly used, at the expense of banknotes." (ECB, 2000);

"Contemporary monetary systems are based on the mutually reinforcing roles of central bank money and commercial bank monies. What makes a currency unique in character and distinct from other currencies is that its different forms (central bank money and commercial bank monies) are used interchangeably by the public in making payments, not least because they are convertible at par." (BIS, 2003).

"Geldschöpfung der Geschäftsbanken

Die Geschäftsbanken können auch selbst Geld schaffen, das sogenannte Giralgeld. Der Geldschöpfungsprozess durch die Geschäftsbanken lässt sich durch die damit verbundenen Buchungen erklären: Wenn eine Geschäftsbank einem Kunden einen Kredit gewährt, dann bucht sie in ihrer Bilanz auf der Aktivseite eine Kreditforderung gegenüber dem Kunden ein – beispielsweise 100.000 Euro. Gleichzeitig schreibt die Bank dem Kunden auf dessen Girokonto, das auf der Passivseite der Bankbilanz geführt wird, 100.000 Euro gut. Diese Gutschrift erhöht die Einlagen des Kunden auf seinem Girokonto – es entsteht Giralgeld, das die Geldmenge erhöht." (Bundesbank, 2009)

However, this fact and its systemic and macroeconomic consequences remains neglected by macroeconomic models and theories on the one hand, and microeconomic analyses of individual banks, bank risk or portfolio management. For an integration of bank credit creation with macroeconomic principles, see Werner (1997, 2005).

"4. One of the main reasons the economic and financial crisis became so severe was that the banking sectors of many countries had built up excessive on- and off-balance sheet leverage. This was accompanied by a gradual erosion of the level and quality of the capital base. At the same time, many banks were holding insufficient liquidity buffers. The banking system therefore was not able to absorb the resulting systemic trading and credit losses nor could it cope with the reintermediation of large off-balance sheet exposures that had built up in the shadow banking system. The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions. During the most severe episode of the crisis, the market lost confidence in the solvency and liquidity of many banking institutions. The weaknesses in the banking sector were transmitted to the rest of the financial system and the real economy, resulting in a massive contraction of liquidity and credit availability. Ultimately the public sector had to step in with

unprecedented injections of liquidity, capital support and guarantees, exposing the taxpayer to large losses."

The above description of the crisis is misleading, because the most important factor in the creation and propagation of the crisis is not mentioned: the function of banks as the creators and allocators of the money supply. A corrected version would read as follows: "One of the main reasons the economic and financial crisis became so severe was that the banking sectors of many countries had created significant amounts of credit for transactions that are not part of GDP (i.e. mainly financial and real asset transactions), both on and off the balance sheets of banks. Credit extension for such transactions, if expanding in aggregate, is unsustainable, because these transactions do not yield sufficient intrinsic income streams to service and repay the debt created. However, as banks collectively increase credit for such asset transactions, due to the banks' function as money supply creators, additionally created money supply is injected into the asset markets concerned. Ceteris paribus, this pushes up asset prices and suggests capital gains that may make this process temporarily appear to be sustainable. However, asset prices are a function of bank credit extended for asset transactions. As soon as banks reduce their asset transaction credit creation, asset prices fall and loans become non-performing. This results in banks becoming more risk-averse, hence reducing credit further. Thus banking activity is always pro-cyclical: banks create the credit that enables the majority of economic transactions.

Since each bank is neither asked to nor able to consider the macroeconomic outcome of collective bank action, ultimately, the government or central bank have the responsibility to monitor aggregate credit creation and its allocation in terms of type of economic activity (productive: credit for the investment in the production of new goods and services; unproductive: credit for asset transactions; credit for consumption). Unproductive credit creation always results in inflation (of the asset inflation or consumer price inflation type, depending on banks' direction of credit). Once a banking crisis has happened, the government or central bank has to step in with injections of liquidity, capital support and guarantees. This, however, does not need to expose the taxpayer to potential losses, as tax money should not be used for such purposes. Instead, the public sector should make use of its prerogative to create money newly. The advantage is that no tax burden or national debt, no interest burden or meaningful

new obligation by the public sector is created in this way. The principle of moral hazard indicates that tax money should in any case not be used to bail out banks: tax payers are not responsible for the crisis and they did not enjoy the substantial speculative profits over several years that those who are responsible enjoyed. Nor will the use of newly created public money be inflationary: it is merely used to shore up the banking sector balance sheets, which itself does not inject any money into the non-banking sectors of the economy – and hence cannot result in inflation.

"7. Building on the agreements reached at the 6 September 2009 meeting4 of the Basel Committee's governing body5, the key elements of the proposals the Committee is issuing for consultation are the following:

[not cited here for brevity; please see BIS consultation document] ...

Taken together, these measures will promote a better balance between financial innovation, economic efficiency, and sustainable growth over the long run."

The proposed measures miss the mark, mainly because of the above indicated lack of recognition that banks are the creators of the money supply. Thus it is recommended to revise the proposals entirely, recognize that the role of banks as creators of the money supply must be considered, and base any policy and regulatory proposals only on a recognition of these facts. Otherwise, the claim and aspiration that "these measures will promote a better balance between financial innovation, economic efficiency, and sustainable growth over the long run" will remain sadly unfulfilled.

While many of the proposed regulatory changes will not do significant harm in themselves, the belief that with their implementation the problems are being addressed may be harmful.

The current proposals focus on higher and stricter capital adequacy (including broadening their scope to include counterparty risk etc.), the introduction of a maximum leverage ratio, counter-cyclical capital buffers, and more complex 'monitoring metrics'. By raising the number of variables and the complexity of monitoring, further regulatory risks and unintended consequences are a possibility. This is not desirable, especially when a much simpler regulatory reform is possible, which would achieve the goal set out by the Committee, namely to achieve sustainable

growth over the long run without inefficiency and deadweight losses due to the financial sector. These will be outlined below.

"8. The Committee also is reviewing the need for additional capital, liquidity or other supervisory measures to reduce the externalities created by systemically important institutions."

The proposals made in this comment could be featured under the above heading: it is necessary to introduce 'other supervisory measures' to reduce the externalities created by systemically important institutions. The latter must be defined to be the entire banking sector, due to the public privilege delegated to it to create the money supply.

Further, it should form the central pillar of banking regulation and financial sector and macroeconomic stability policies. In brief, banking crises can be avoided and boom-bust cycles ended by one simple regulatory measure (meanwhile all other regulatory requirements could be drastically simplified and many abolished): governments and central banks should impose and enforce a ban (or strict ceiling) on the creation of credit for transactions that are not part of GDP (these are largely the asset transactions that create the larger boom-bust cycles that tend to end in banking crises). Such measures are feasible, since bank loan officers routinely inquire and probe the use that loan applicants wish to make of loans and monitor their actual use upon extension of the credit. Central banks and banking regulators can impose severe penalties for contraventions. Meanwhile, expenses on other regulatory efforts can be cut, since by this simple measure credit-driven economic cycles can be mitigated and boom-bust cycles and banking crises avoided altogether (see Werner, 2005).

The feasibility of such direction of credit is well documented. The most influential examples are the credit direction schemes practiced by the Bank of Japan from 1942 to 1991 (see Werner, 2002, 2005), the People's Bank of China, the Korean and Taiwanese central banks. As the contributors to the World Bank (1993) study on the East Asian Economic Miracle pointed out, such direction of credit was at the heart of the East Asian economic success story. Of course, credit direction schemes can be misused by the regulators (such as in the run-up to the Asian crisis or the Japanese banking crisis). This calls for transparent and democratic mechanisms to determine and monitor their use. But it does not diminish the impressive record on the effectiveness of this tool.

Often, commentators criticize the direction of credit as an unwarranted intervention in the operation of otherwise efficient markets. In a world of efficient markets this may be true. But in such a world there are no banking crises, boom-bust cycles or, indeed, recessions. In a world of efficient markets, there is perfect information and hence also no need for a financial sector (as seen in many macroeconomic models, which do not feature banks). On our planet, however, we observe that not all players have access to all information in a symmetric way. Furthermore, such criticism of credit direction policies again neglects to reflect the fact that banks are the creators and allocators of the money supply: in other words, the quantity of credit is already being decided upon and is being directed by decision-makers in our current system. It is individual banks that currently make such decisions. However, they are not being asked by authorities to take the macroeconomic, system consequences of their actions into consideration. Banking crises drive home the point that banks' profit-maximising behaviour does not necessarily add up to an overall improvement in the economy and social welfare: each bank neither has the knowledge nor the incentive to take the collective banking activities in terms of creation and allocation of credit into account. Thus these 'externalities' and feedback loops, via the impact of banks on the macroeconomy, must be taken into consideration by a regulator that considers the entire economy. These credit quantity and allocation decisions are more efficiently dealt with by top-down 'guidance' or controls by an authority that is able to monitor the banking system and can reflect government economic policy.

This regulator can achieve the aim of maximizing sustainable non-inflationary growth by restricting banks' creation of credit that is used for unproductive, and in particular, asset transaction purposes.

"33. The Committee welcomes comments on the degree of cyclicality experienced by banks over the economic cycle, which portfolios have been most affected, and views on the best approaches to address any excess cyclicality, including whether such adjustments should be achieved through the Pillar 1 or Pillar 2 process. The Committee also welcomes input on the trade-offs associated with different proposals to dampen the cyclicality of the regulatory capital requirement."

The degree of cyclicality experienced by banks over the economic cycle is a function of the quantity of credit created by banks for unproductive purposes, with the latter defined as credit for either non-GDP transactions (resulting in asset inflation and asset boom-bust cycles) and credit for consumptive purposes (adding to demand, while not contributing to an expansion in the amount of goods and services). Given these relationships, the portfolios that 'have been most affected' will be among bank assets the bank credit created for unproductive purposes. As to 'views on the best approaches to address any cyclicality', see the above comments: the direction of credit, in the form of a ban or strict and low ceiling on bank credit for unproductive and in particular non-GDP transactions (asset transactions) is in my view the best approach to address and eliminate excess cyclicality. Concerning trade-offs: the advantage of such a regulatory measure is that all other regulatory measures and restrictions on banks, including concerning capital, liquidity ratios etc. would then not have to be tightened and could, in principle, even be relaxed.

"41. As witnessed during the financial crisis, losses incurred in the banking sector during a downturn preceded by a period of excess credit growth can be extremely large. These can destabilise the banking sector, which in turn can bring about or exacerbate a downturn in the real economy. This in turn can further destabilise the banking sector. These inter-linkages highlight the particular importance of the banking sector building up its capital defences in periods when credit has grown to excessive levels. As capital is more expensive than other forms of funding, the building up of these defences should have the additional benefit of helping to moderate credit growth.

The first three sentences follow immediately from a description and understanding of bank credit creation, as outlined above. However, the claim does not follow that these "inter-linkages highlight the particular importance of the banking sector building up its capital defenses in periods when credit has grown to excessive levels". Instead, authorities should directly address the root problem, which they can do by limiting unproductive credit. Unproductive credit is by definition not sustainable, and hence from a macroeconomic perspective, harmful. It is thus also 'excessive'. It would appear more sensible to prevent any excessive credit from occurring – since it will have negative consequences – than trying to follow up the creation of excessive credit with

remedial policy action. It is not clear that the above suggested proposal to increase capital requirements will even achieve the goal of slowing credit growth, since it is an indirect policy tool. It seems simpler and will be more effective to restrict credit, and thus prevent 'excessive credit growth' in the first place. This will be achieved by a ban (or severe restriction) on unproductive and in particular non-GDP (asset transaction) credit.

"47. The policy options to ensure banks were subject to regulatory requirements that reflected the risks they posed to the financial system and the real economy were underdeveloped prior to the crisis. The Committee is therefore developing practical approaches to assist supervisors in measuring the importance of banks to the stability of the financial system and the real economy and reviewing policy options to reduce the probability and impact of failure of systemically important banks."

The above can be achieved by restricting the creation of bank credit for transactions that are not part of GDP. This is a simple and practical measure: all transactions can be classified in this way (national income accountants can be called in to advise the regulator, if needed). Compliance can be enforced in the same way as with other bank regulatory requirements.

"3. Introducing a global liquidity standard

50. Strong capital requirements are a necessary condition for banking sector stability but by themselves are not sufficient. A strong liquidity base reinforced through robust supervisory standards is of equal importance. To date, however, there are no internationally harmonised standards in this area."

The need for expensive and time-consuming international harmonization is less urgent than currently recognized: the source of banking crises is domestic, and takes the form of excessive credit creation, defined as productive credit creation (in particular credit created for non-GDP, i.e. asset, transactions). According to BIS rules, banks are not allowed to create credit in a currency other their own. Hence the problem and the solution are domestic.

"52. The difficulties experienced by some banks were due to lapses in basic principles of liquidity risk management."

"56. The Committee welcomes comments on the composition of the stock of liquid assets under the liquidity coverage ratio and the calibration of the stress tests. In particular, it welcomes views on the definition of liquid assets, which is intended to be sufficiently conservative to create strong incentives for banks to maintain prudent funding liquidity profiles, while minimising the negative impact on the financial system or broader economy. The Committee will review the effect of various options for the design of the liquidity buffer and the severity of the stress tests as part of its quantitative impact assessment work."

While individual instances of problems with risk management existed, the main cause of the crisis is systemic. Furthermore, the fundamental problem of risk management approaches is that they do not take the systemic nature of bank activity into consideration, in particular their creation and allocation of the money supply and the diverging consequences of differing collective credit allocation by banks (whether productive or unproductive). As Alan Greenspan indicated in his testimony to Congress in October 2008, the 'modern risk management, ...the entire intellectual edifice, ...has collapsed'. This is because it does not recognize the macroeconomic implications of bank credit creation and differing consequences of credit allocated to differing use.

Thus attempts to improve on liquidity risk management, as well as other risk management, are likely to fail if they do not recognize the credit and money supply creating nature of current banking arrangements.

"II. Strengthening the global capital framework

1. Raising the quality, consistency and transparency of the capital base"

As explained above, such efforts are secondary, if not entirely unnecessary, if the root cause of banking crises is addressed through the restriction of credit created by banks for non-GDP transactions. Without the latter, any amended capital adequacy regime will also fail to achieve the goals described in this report, namely sustainable long-term growth without crises and financial instability.

The same applies to following sections, such as:

"56. Banks must have a comprehensive stress testing program for counterparty credit risk."

Counterparty risk will appear smaller during the build-up of boom periods fuelled by excessive credit (defined as credit for non-GDP transactions, i.e. asset transactions), because during such periods, all counter-parties' balance sheets improve due to the reflation of asset values. Thus such stress testing or measures to improve monitoring of such risks will be unsuccessful: when bank credit creation falls, asset prices fall and credit risk of all counterparties deteriorates simultaneously. Models will be taken by surprise, as they fail to incorporate the systemic/macroeconomic impact of bank credit on other variables.

"(d) Excessive credit growth

260. As witnessed during the financial crisis, losses incurred in the banking sector during a downturn preceded by a period of excess credit growth can be extremely large. These can destabilise the banking sector, which in turn can bring about or exacerbate a downturn in the real economy, which can further destabilise the banking sector. These inter-linkages highlight the particular importance of the banking sector building up its capital defences in periods when credit has grown to excessive levels. As capital is more expensive than other forms of funding, the building up of these defences should have the additional benefit of helping to moderate credit growth.

261. The Basel Committee is in the process of reviewing a regime which would adjust the capital buffer range, established through the capital conservation proposal outlined in the previous section, when there are signs that credit has grown to excessive levels. This will ensure that the banking sector builds up its ability to absorb the increased losses which could result and does so in an efficient manner.

262. The proposal is currently at an earlier stage of development and further work is needed to fully specify the details of how it would operate. The Committee will review a fully fleshed out approach at its July 2010 meeting. However, to promote discussion on this proposed approach, the Committee is putting forward its key elements:

A macro-economic variable or group of variables would be identified and used to assess the extent to which in any given jurisdiction there was a significant risk that credit had grown to excessive levels. These would need to take into account

the variations in the stages of development of financial sectors across jurisdictions. As an example, one variable which is being considered is the difference between the aggregate credit-to-GDP ratio and its long term trend.

□ For each jurisdiction, when the variable breached certain pre-defined thresholds this would give rise to a benchmark buffer requirement. This could then be used by national jurisdictions to expand the size of the capital conservation buffer.

Banks with purely domestic lending would be subject to the full expanded buffer. Internationally active banks would be required to look at the geographic location of their credit exposures and calculate their buffer as a weighted average of the buffers which are being applied in jurisdictions to which they have exposures.

□The proposal under development could not be implemented as a strict rules-based regime. Such an approach would require a high degree of confidence that the variables used would always, under all circumstances, perform as intended and would not send out false signals. This level of confidence will not be possible.

Consequently, a benchmarking approach is being considered where the buffer generated is simply the starting point. The option will exist for authorities to increase or decrease the buffer as appropriate, taking into account the broader range of information which supervisors and central banks will be able to consider in the context of the circumstances which prevail at the time.

Outside of periods identified as having a significant risk that credit had grown to excessive levels, the capital conservation range will remain at its target level above the minimum requirement."

It does not follow, as claimed above, that these "inter-linkages" cited in the first two sentences "highlight the particular importance of the banking sector building up its capital defences in periods when credit has grown to excessive levels." Instead, they highlight the particular importance of the banking sector not being allowed to engage in excessive and harmful credit creation. This refers to credit creation for asset transactions. While these tend to be highly profitable, and are thus often connected to high bonus payments to bankers, they may have serious medium- to long-term negative consequences for the economy. Furthermore, bankers can keep their proceeds from such macroeconomically harmful activity, while the ultimate costs are borne by others, such as governments or the tax payer. In this situation, imposing higher, even counter-cyclical capital adequacy requirements are not likely to work. This is

particularly true since in aggregate, available capital for investment in bank equity is also a function of total money supply – which in turn is created by the banking system. As Wicksell (1907) put it "The banks in their lending business are not only not limited by their own capital; they are not, at least not immediately limited by any capital whatever; by concentrating in their hands almost all payments, they themselves create the money required..." (p. 214f).

Instead, what is required is a ban (or severe restriction) on bank credit creation for non-GDP transactions (which causes asset inflation and ultimately financial instability if rising significantly in aggregate).

Monitoring the credit-to-GDP ratio is clearly useful: when credit creation for non-GDP transactions rises, the credit-to-GDP ratio would tend to rise. However, the monitoring approach has the difficulty that there is no well-defined level at which regulators would know they should step in: this ratio could rise gradually, so that it would not appear to raise concerns.

Instead, banning non-GDP credit creation entirely would mean that the credit-to-GDP ratio would not rise at all. Hence we would know for sure that systemically harmful excessive credit creation will not take place – and the cycle of recurring booms and busts with banking crises would be broken.

It is also claimed in the highlighted section of the document that a rules-based regime "would require a high degree of confidence that the variables used would always, under all circumstances, perform as intended and would not send out false signals. This level of confidence will not be possible." However, the rule proposed here would fulfill this criterion: there would be a high degree of confidence that banning credit creation for non-GDP transactions (or severely restricting them) would perform always, under all circumstances, as intended, and not send out false signals: speculators, including hedge funds, would still be allowed to speculate (without the need for a transactions/Tobin tax or the like), but they would be required to obtain any leverage from the capital markets, not from banks (who would not be able to make the public privilege of creating the money supply available to speculators). It would consistently send the right signals, and, more importantly, there would not be the excess credit creation that fuels boom-bust cycles and causes financial instability.

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