

Regulating the financial system in a Minskyian perspective

Jan Kregel,
Levy Economics Institute of Bard College

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The “vision” of the economic system

Hyman Minsky argued that the basic role of the financial system was to support the capital development of the economy. By this he meant more than just the gross accumulation of the capital stock, but rather a broader interpretation of the advancement of the economy. He was clearly influenced by Schumpeter’s ideas as presented in the theory of economic development, although he never adopted the approach of Walrasian equilibrium. Instead he developed an explanation of more or less sustained capitalist expansion interrupted by periodic crises in which the production interdependencies and financing arrangements and conventions would break down, leaving in their place conditions for renewed expansion. In such a system equilibrium would not be maintained by market-based price adjustment, but a new configuration of productive and financial relations would replace the old.

He also took from Schumpeter the idea that it was the logic of capitalist expansion that would produce these disruptions. While any economic or political system would suffer from random, external shocks, it would be impossible to explain them or provide a means to counter them unless they could be foreseen, impossible by assumption of their nature. In general such shocks would only disturb existing relations which could be reestablished in recovery. In Minsky’s view, however, the endogenous disruptions would change the underlying motor forces of productive relations, with a transformed economy emerging to resume its expansionary path. This was not a theory of business cycles, but of Schumpeterian economic development, of continuous, evolutionary change, driven by the generation of financial instability by the very mechanisms used by the financial system to support the capital development of the economic system.

Indeed, Minsky was driven to the theoretical elaboration of such an approach by the belief that even if it were possible to use the fine-tuning policies of the post-war neoclassical synthesis to achieve an equilibrium in the real productive system, it would nevertheless be subject to periodic disruption because the very equilibrium of the real sector, if achieved, would produce conditions in the financial sector that would lead to instability. This approach not only rejected the efficacy of Keynesian “fine tuning” policies, something that was confirmed by the behaviour of the economy in the late

1960s, it also implied that an alternative policy would be required for the financial system.

This raises another characteristic of Minsky's approach. For Minsky it would have been impossible to consider the analysis of either the real or financial sector separate from the other. Indeed, they were not only intimately linked, but they could not exist without the other. It made no sense to analyse the "real" relations of production independently of the way in which those relations were financed. In Minsky's conception of capitalism there are two basic principles that differentiate it from other types of economic organisation and which produce its characteristic endogenous financial crisis.

The first principle is that in a system of private property all alienable assets must be owned. The second is that under modern capitalism the ownership and control of real productive assets is financed by the issue of debt. Thus the balance sheet of each productive enterprise is a combination of "real" assets and the "financial" liabilities issued to acquire them.

Second, in a modern capitalist system the financial system finances the issue of the financial liabilities of the productive sector by providing its own liabilities. By making these liabilities substitutes for the "currency and coin" issued by the government, the financial sector transforms a productive firm's illiquid liabilities into liquid means of payment that can be used to acquire goods and services from the rest of the private sector, in particular labour from the household sector. The balance sheets of the financial sector thus have financial assets that are the liabilities of the productive sector representing productive assets and liabilities that are held by the general public because they can be freely converted into final means of payment. Thus the balance sheet of the financial sector represents a combination of the financing of the capital development of the economy, as well as the means of payment and savings of the general public.

Minsky thus characterised the role of the financial system as having to serve two contradictory masters: "any capitalist banking and financing system" is "drawn between two masters" that it "needs to serve: one master requires assurance that the financing needed for the capital development of the economy will be forthcoming and the second master requires assurance that a safe and secure payments mechanism will be provided." (Minsky, "Issues in Bank Regulation and Supervision," October 14, 1994, p. 10-11).

Endogenous Instability and Financial Regulation

This approach raised a number of questions or conundrums for traditional theory. First it was not clear that equilibrium in the real sector of the economy was the most conducive condition for the capital development of the economy. Second, neither would it be true that financial sector stability in combination with real sector stability would guarantee system stability; rather it should provide the normal endogenous development of conditions that would create a major financial disruption. Indeed, the recent experience of the Great Moderation, which has been characterised as a period of real growth stability and financial stability, suggests that such a combination has not been able to counter the endogenous forces leading to system instability.

These observations raise the question of the objectives and efficacy of any reform of monetary policies or of regulatory and supervisory practices that seek to

ensure the stability of the financial system. This may be presented as the Minsky paradox: even if it is possible to produce a regulatory framework which provides financial stability in the presence of monetary and fiscal policies that provide real sector stability, the system will still be subject to major periodic disruptions of production and financial relations. For Minsky “It ... needs to be understood now that development financing involves taking risks ... The need is for a regulatory and supervising authority for the financial system that accepts that financing development opens the system to losses that have the potential for adversely affecting the safety and security of the economy’s payment facilities. To allow for this possibility the regulators need to try to insulate the payments system from the consequences of such losses. The problem therefore is to provide for protection of the payments system from the consequences of the losses which may ensue from development financing.”

What kind of regulation for endogenous instability?

The “paradox” suggests that appropriate and effective regulation can never ensure stability, the best that it can possibly do is to temper the creation of financial fragility and dampen the process by which fragility generates full scale instability on the scale of the Great Depression. We may characterise this as the difference between the 1966 credit crunch or the 1980s real estate crisis and the current financial collapse. More appropriate regulation and more effective supervision could never have prevented the generation of financial fragility, but it might have made its transformation into system instability more manageable and might have been able to restrict its impact on the production development of the real sector of the economy.

It is thus important to recognise the objectives and potential results of even the best thought out system of financial regulations. The first implication of this approach to regulation is that it means that simple solutions will be at best inappropriate and at worst detrimental to the dual objectives of the financial system. An example is the often proposed regulatory solution to ensure financial stability by separating financial institutions by function or by “master” in Minsky’s terms so that each serves only one of the two “masters”. Banks that provide means of payment services can be made perfectly safe and secure by requiring 100 per cent reserves of government currency and coin or other government liabilities. This is a proposal made in the 1930s by Chicago School economists such as Simons, and Austrian economists such as Hayek, as well as those such as Robert Litan and others, who argue in favour of what have come to be called “narrow” banks, restricted to investing depositors’s funds in risk-free government debt. Indeed, the National Banking Act was grounded in a similar provision.¹

The financing of the capital development of the economy would then take place via retained earnings of corporations or by means of investors’ conscriptions committed to financing specific private business activities. If organised and supervised by an investment trust it would have a 100 per cent ratio of capital to assets and thus not be considered a threat to the financial stability of the economic system.

¹ Which in the event did not provide the promised guarantee of stability, primarily because of the variability of the value of the securities. See Kregel, 1996)

In such a perfectly separated, dual system there would be no deposit-credit multiplier nor leverage, nor creation of liquidity. It would reflect the idea that the financial system should operate so as to create “neutral” money in which all investment decisions were the consequence of the savings decisions of individuals. An alternative formulation of this condition is the equality of the nominal rate of interest and the real rate of return on investment. In this approach there are no “monetary” disturbances to the operation of the market in producing equilibrium in the “real” economy. A financial system that was regulated via a 100 per cent reserve requirement and a 100 per cent ratio of capital to assets would then appear to resolve the conflicting objectives noted by Minsky. One kind of institution would provide the safe and secure means of payment, while another would provide for the financing of the real capital development of the economy.

But such a system could not insure the stability of the economy, nor would it assure stability of the capital financing institutions, since the real investments chosen could still fail to produce the anticipated rate of return, and overinvestment and financial bubbles could still exist, if there is herding behaviour by the investment advisers of the trusts that produced procyclical financing behaviour.

But more importantly such a system would create a different problem. Private savings would be allocated to real investments, to deposits in the narrow banks, and the transactions holdings of government issued coin and currency. This would mean that total private saving would be exceeded investment by the private sector’s holdings of deposits and currency, creating a tendency to deflation or recession. Price and/or output stability would then require a government deficit financed by the issue of either currency or government bonds if such were held as reserves for the narrow banks.

But even more importantly, for Minsky and Schumpeter such a system would not be considered a “capitalist” system; it would be akin to what Keynes defined as a “real” as opposed to a “monetary production” economy. In a monetary economy it is the role of the financial sector to ensure the financing of the acquisition and control of capital assets by increasing the liquidity of the liabilities of the business sector. Regulations that dampen instability must then seek to govern the creation of liquidity and leverage necessary to the financing of investment while preserving the stability and value of the means of payment issued by financial institutions.

The two masters are Siamese twins

In a well-developed capitalist system two different types of financial institutions provide an increase in liquidity for financial assets. The control of real assets by productive enterprises can be financed through the issue of the liabilities by a financial institution that can be used as means of payment in substitution for the coin and currency issued by the government. This is what is commonly known as “deposit creation” and has traditionally been provided by what in the US system are called “commercial” banks. Alternatively productive enterprises can issue securities through the services of financial institutions that provide liquidity by acting as primary and secondary market-makers offering to buy and sell the securities at announced bid-ask spreads and in given standard amounts.

Minsky describes the first activity as the basic activity of banks: the “acceptance function”. “The fundamental banking activity is accepting, that is, guaranteeing that some party is creditworthy. A bank, by accepting a debt instrument, agrees to make

specified payments if the debtor will not or cannot. ... A bank loan is equivalent to a bank's buying a note that it has accepted." (256) Thus, for Minsky the basic activity of a bank is not the safekeeping of depositors' coin and currency, nor is it the investment of depositors funds because of an informational advantage. Rather it is the creation of its own liabilities that are used to acquire the liabilities of productive enterprises that it has "accepted", that is, whose payment it has guaranteed. A narrow bank on this definition is not a bank, but simply a safehouse or piggy bank for coin and currency.

Why banks are unique liquidity creators

Minsky notes that a bank's "liabilities have to be viewed as embodying more of Keynes' liquidity premium than their assets" that is that the liabilities they accept and hold as assets in their loan books if they are to earn income from a positive net interest spread or "carry". This "credit enhancement" function allows banks to increase the liquidity of the liabilities they accept and thus increase liquidity of the whole system. Banks effectively turn the liabilities that stand behind fixed real capital assets into currency means of payment.

The successful operation of this basic function of banking thus depends on the liquidity of bank liabilities. This is achieved by ensuring that bank liabilities can always be used as means of payment that the borrower can use to acquire control over real goods and services and capital assets. This means that bank liabilities have to be considered as a perfect substitute for coin and currency.

It is to ensure this substitutability that banks also issue their liabilities in exchange for government coin and currency of the public. That is, they offer a transaction or payments service to clients. These deposit liabilities are a simple borrowing operation that provides no credit enhancement or liquidity creation. Bank balance sheets thus contain two different, yet identical, promises to pay the holder currency and coin; one is backed by a liability, the promise to pay of a productive business operation, the other is backed by an asset, the deposit of customers' coin and currency. The first function increases liquidity, the second does not. They are treated as equivalent because they are both liabilities of the bank and carried the bank pledge to exchange them on sight for coin or currency on an equal basis. Since both of these deposit liabilities are the basis of the payments system and serve as a store of existing value for individuals the essential function of the financial system in creating liquidity required for the financing of the capital development of the economy will be inevitably joined with the provision of the means of payment. The "two masters" must of necessity cohabit in a single institution. The conflict between the two masters cannot be solved by separating these two functions of the financial system.

The second type of liquidity generation is the activity of financial institutions in providing for the primary distribution and the secondary trading of the equity and fixed-income liabilities issued to finance the capital development of the economy. It is this function that Keynes highlights when he notes that "the liquidity of investment markets often facilitates, though it sometimes impedes, the course of new investment. For the fact that each individual investor flatters himself that his commitment is 'liquid' (though this cannot be true for all investors collectively) calms his nerves and makes him much more willing to run a risk. If individual purchases of investments were rendered illiquid, this might seriously impede new investment... So long as it is open to the individual to

employ his wealth in hoarding or lending money, the alternative of purchasing actual capital assets cannot be rendered sufficiently attractive ... except by organising markets wherein these assets can be easily realised for money.”

In a primary distribution that is sold as a “bought deal” the underwriting financial institution provides a guarantee of the price the issuer will receive for the liabilities, and thus the amount of funds to be raised by the issue. The underwriter will buy for its own balance sheet any securities that cannot be sold to the public at the guaranteed price. The underwriter thus guarantees that he will be able to exchange the issuer’s liability for coin and currency or a deposit account in a bank of the public, or of its own. Thus, if the issue is not fully sold the underwriter will have to get a bank to “accept” the unsold securities as collateral against the issue of a demand deposit that the underwriter transfers to the issuer, or use its own deposits. In either case, the transaction requires the participation and transfer of bank liabilities and the potential access to bank liquidity to ensure the guarantee.

The same thing is true for the operation of financial institutions in providing liquidity in the secondary market. For example, the broker-dealers who operate in providing liquidity to the secondary market as officially designated “specialists” quote bid-ask prices on stocks and hold inventories which fluctuate as they act as net buyer or seller in providing for an “orderly market”. These inventories of assets are financed via “call” loans, financed by banks “acceptance” of the specialist’s inventory as collateral. Thus, in general, the liquidity that is provided in the primary and secondary markets is directly or indirectly dependent on the liquidity generated by the “acceptance” function of deposit issuing banks.

In engaging in this financing activity of the real sector, the banks are always “short” government issued coin and currency (in the actual system, central bank reserves). To cover this potential short position, Minsky’ notes that “Banks make financing commitments because they can operate in financial markets to acquire funds as needed; to so operate they hold assets that are negotiable in markets and hold credit lines at other banks. The normal functioning of our enterprise system depends upon a large array of commitments to finance, which do not show up as actual funds lent or borrowed, and money markets that provide connections among financial institutions.”

Since this mechanism is not failsafe, governments have introduced an additional mechanism to ensure the liquidity of bank liabilities: a deposit insurance guarantee of insured bank deposits financed via an assessment on the size of a bank’s deposit liabilities that creates a trust fund to be used to provide coin and currency to the depositors of a bank that fails to meet its commitments. It has usually been the case that the depositors of a failed bank have their insured credits transferred to a solvent bank which absorbs the failing bank, rather than being directly reimbursed by the insurance fund for the insured value of their deposits. But, as Minsky notes, it is neither the existence or the size of the trust fund that provides the liquidity guarantee for the deposits; ultimately it is the willingness of the central bank to create reserves against this government agency guarantee. Thus, it is always the central bank in its role of lender of last resort that provides the ultimate source of liquidity for the banks that are regulated and insured, and it is these banks that provide the ultimate liquidity to the rest of the financial system which in normal times does not have access to the central bank.

The other “fictitious” liquidity creators: shadow “banks”

Minsky notes that “Our complex financial structure consists of a variety of institutions that lever on owners’ equity and normally make on the carry, that is, borrowing at a lower rate than their assets can earn.” That is, there are institutions that engage in the same type of activity as banks, but without the ability to borrow coin and currency from the general public and thus without the ability to offer their own, insured, liabilities as a substitute means of payment. Since they cannot provide payments services, their fundamental activity is borrowing and lending to each other, increasing “financial layering”. Thus the liquidity of any non-bank financial institution’s liability will be determined by the ability to finance it, that is, to borrow in order to hold it, and this will depend on access to the liquidity of a deposit-creating bank. In a consolidated view of the financial system every liability in the non-bank financial system, as well as the short-term liabilities of the non-bank non-financial system, are all ultimately dependent on the liquidity created by the banks. This means that a failure to meet a payment commitment by any institution in the financial system will have an impact on all the others in the system and ultimately depend on the behaviour of the liquidity provided by the banking system.

For Minsky a condition of “financial distress” would occur when an individual financial institution “cannot meet its obligations on its balance sheet liabilities.” This may evolve into a “financial crisis” when “a very significant subset of the economy is in financial distress” due to “a slight disturbance’ in money flows creates such widespread financial distress that financial crisis is threatened” the economy will exhibit “financial instability”. At each stage in the evolution toward financial instability financial intermediaries become more reliant on other financial institutions such as banks to refinance their liabilities. As Minsky notes, “A key to the generation of financial crisis is whether the holders of marketable securities who have large scale debts outstanding can refinance or must liquidate their positions when they need cash.” (1964, p. 266) “The worst thing that could happen to the solvency of any financial institution is a forced sale of its assets in order to acquire cash. Imagine what would happen to asset values, if there were a need to liquidate government bond positions by the government bond dealers or if the sales finance companies were suddenly to try to sell their portfolios of consumer installment paper on some market. In order to prevent this type of forced liquidation of assets, the financial intermediaries protect themselves by having alternative financing sources, i.e., by having “de facto” lenders of last resort. These de facto lenders of last resort ultimately must have access to the Federal Reserve System in times of potential crisis.”

It is for this reason that Minsky proposed more active use of the discount window, and recommended that financial institutions always be “in the bank”, i.e. borrowing from the window, because this provided direct information to the Central Bank about the assets the bank held as its cushion of safety. He also recommended that the window be open to all financial and non-financial institutions since their condition ultimately depended on the insured, regulated banks. It would thus be more efficient to provide the funding directly, rather than indirectly through the banks and the banks to their clients. Indeed, this is precisely what the Federal Reserve was forced to do in order to stem the collapse of liquidity in the recent crisis.

Regulators Discover Minsky

The recent BIS report (the Landau report) on global liquidity clearly reflects this view of liquidity in the financial system. It notes the basic difference between what it calls “official” liquidity provided by the central bank, and private liquidity, provided by private financial institutions who “provide market liquidity to securities markets, for instance through market-making activity, or provide funding liquidity through, for example, interbank lending. The conditions under which these intermediaries can fund their balance sheets, in turn, depend on the willingness of other private sector participants to provide funding or market liquidity.” It distinguishes between market liquidity, “the ability to trade an asset or financial instrument at short notice with little impact on its price” and funding liquidity, “the ability to raise cash either via the sale of an asset (sometimes called balance sheet liquidity) or by borrowing.” “This interdependence underlines the endogenous character of private liquidity. At the macroeconomic level, private liquidity is thus closely related to monetary liquidity or funding conditions, as reflected in various monetary and credit aggregates or measures of the cost of funding. The creation and destruction of private liquidity is closely related to leveraging and deleveraging by private institutions. Depending on their ability or willingness to take risks and provide maturity or currency transformation services, financial institutions can both dampen or amplify monetary stimuli provided by central banks or provide stimuli of their own. ...This gives rise to a pronounced state dependency of private global liquidity. In the extreme, general uncertainty about the viability of banks and other financial institutions can lead to a drying-up of private funding, and the private, endogenous component of global liquidity disappears altogether.”

The means of creation of “fictitious” liquidity

Thus the recent crisis can be described as the collapse of “fictitious” liquidity and the failure of the banking sector to provide liquidity to prevent the onset of a “debt deflation”, as Minsky described the ultimate attempt to access liquidity by “selling position to make position”, that is selling the assets to redeem the liabilities. However, there were three particular characteristics of the current crisis that deserve attention.

The first was the rapid expansion of number and variety of institutions that “lever on owners’ equity” and that introduced innovations to allow them to earn more than the simple carry or net interest spread. The second was the rapid increase in the use of this liquidity to fund the increase in financial layering in the financial sector. The third was the increase in the use of liquidity to lend against positions whose return was determined by an expected change in prices, rather than the production of income, but which had virtually no corresponding over-the-counter or organised markets to determine these prices. Indeed, the trading was in “risk” rather than return. (see Kregel, 2009)

This tendency toward the increase in fictitious liquidity emerged in the 1980s. The most emblematic of these alternative sources of liquidity was the money market mutual fund (MMMF) which issued shares with a fixed net present value of \$1 to finance the purchase of short-term commercial paper, thus providing the equivalent of a sight deposit in a regulated, insured commercial bank. It was clone for a bank, operating outside the regulatory regime governing banks. It provided the same transformation of illiquid business debt into a substitute for coin and currency and it could offer better returns and lower lending costs because of the lack of regulation. But, the liquidity is

“fictitious” since it depends on the ability of commercial firms to meet their payments on commercial paper, yet the fund shares were priced as if they were more liquid than insured bank deposits. The problem with the MMMF is that in difference from a commercial bank that can create deposits that are a substitute for coin and currency by granting a commercial loan an SIV cannot automatically fund commercial paper by lending to the firm. It has to sell a mutual fund share to the general public in exchange for a sight deposit on an insured bank, or for coin and currency. It thus does not engage in the acceptance function that Minsky considers the foundation of the system of financing capital development.

Largely in response to the introduction of capital requirements, in the late 1980s regulated, insured banks created “arms length” structured investment vehicles (SIVs) to reduce the assets held on balance sheets and to increase their return on equity. The SIV purchases structured assets or mortgages from the originating banks and finances them through the issue of short-term asset backed commercial paper and some medium-term equity notes. The SIV earns the interest spread between the short-term paper issued to fund the acquisition of the long-term structured assets, augmented by leverage created from overselling the commercial paper. Just as in the case of the MMMF, the SIV cannot create the funding of its assets, it must sell its paper to the public in exchange for a sight deposit or coin and currency. At their peak the ABCP issued by SIVs accounted for a third of the total asset-backed commercial paper market.

The shifting of assets from regulated, insured banks thus provided a benefit to banks by reducing their capital requirements and increasing their fee incomes above the net interest margins, it also created an increase in “fictitious” system liquidity since an SIV has no line of credit with the originating bank, as is the case with the issue of generic commercial paper, and no access to the central bank in the case of a runoff in its commercial paper as investors decline to roll over their investments (the equivalent of a deposit “drain” for a bank). An SIV can only sell its assets in the case of distress. The liquidity created by the SIVs was thus fictitious. After arguing that they were not formally committed to back the commercial paper issued by the SIVs that they have created, manage, and administer, they eventually admitted a de facto responsibility and took the assets back onto their balance sheets, thus confirming Minsky’s rule that liquidity in the system is always dependent on deposit banks. It is important to note that while the majority of assets in SIVs were collateralised mortgage assets, they were originally created to allow collateralisation of the banks’ credit card receivables, auto loans, student loans, and so forth, all of which will be subject to the same increasing fragility as the mortgage backed assets.

Another source of “fictitious” liquidity, and a popular method of moving assets off balance sheets to increase income was asset securitization. It involves the creation of an formally independent special purpose entity—like an investment trust—that issues liabilities, usually fixed interest, whose proceeds are used to acquire fixed income assets. The assets are purchased from the originating bank and are used as collateral for the liabilities issued to fund them. Various combinations of income from the assets can be structured to create different levels of risk associated with the different class or “tranche” of liability. The aim is to create through tranching a structure in which the assets produce a higher return than paid on the liabilities. But, as Minsky has noted that

should mean that the liabilities have a higher liquidity premium than the liabilities. The liquidity is thus created by ensuring that a high proportion of the liabilities have a credit rating that is higher than the assets that support them. This is achieved by “credit enhancement”, that is by “overcollateralization”, the value of the assets greater than the liabilities issued, or by the purchase of credit default swap protection, or by purchasing a guarantee from a monoline insurer that are sufficient to convince a nationally recognized statistical rating organization to provide the majority of the liabilities with investment grade rating, allowing pension funds, insurance companies, and trusts to purchase liabilities backed by assets that they would not be permitted to buy because their credit quality is too low. Here the liquidity is provided by placing assets into a structure that transforms them into more liquid liabilities. Unlike, the SIV, there is little maturity transformation in this process, rather income is generated by transforming illiquid, higher yielding assets into liquid low yielding assets. Again, this is “fictitious” liquidity since it depends on the performance of the underlying assets, or the conditions of the entities that provide the credit enhancement. Since both the issuers of CDS and the monoline insurers provisioned against the risk as represented by the investment grade rating of the liabilities, rather than the much higher risk of the underlying assets these guarantees were insufficient to ensure the liquidity of the liabilities.

It is telling that the SEC appears to have believed that the rating of securities by rating agencies represented and assessment of their liquidity” securities “that were rated investment grade by a credit rating agency of national repute, [are] typically were more liquid and less volatile in price than securities that were not so highly rated”.

Derivatives, whether of the plain vanilla variety or embodied in structured financing, also provide fictitious liquidity since they provide the possibility to create the equivalent of ownership exposure to an asset with only a minimum margin payment. Thus, instead of borrowing from a bank to invest in an asset, it is possible to take a long position by buying an over-the-counter or exchange traded derivative with only a small margin payment.

Another mechanism was the so-called Section 20 exemption that allowed banks to create “security affiliates” to deal in securities if income from these activities did not constitute their “principal” source of revenue. Thus a non-security “principal” source of income was required. Since banks could deal in government securities it took the form of running a matched book repurchase business which created little risk, and could be grossed up to produce any desired “principal” income to cover the income from securities trading. This not only allowed banks to engage in proprietary trading, but more importantly it created the “repo” market in which an investor without capital could purchase an asset and use it as repo collateral for a loan from the bank. The only financial commitment was to find the funds to cover the small or nonexistent “haircut” applied to the value of the asset in determining how much would be lent against it. Since such contracts were overnight or extremely short term they again transformed illiquid assets into liquidity.

Liquidity did not finance capital development

All of these innovative structures greatly increased the ability of the system to create and finance the holding and speculation in new types of exotic financial assets. For this reason they are often described as the “shadow” banking system, but they were not

banks, and they did not create “liquidity” in the same way as a regulated bank. This “fictitious” liquidity depended more on particular movements in the prices of the assets that were being acquired than on their ability to produce income. When these price anticipations were not realised, it was impossible to generate liquidity through the sale of underlying assets without creating declines in prices that produced insolvency. Indeed, most of these assets were long term, with no formal or informal markets or market makers. There were not only markets to sell them, there were no market makers or prices to value the assets. Their very existence and value depended on fictitious liquidity, and when it disappeared so did their value. Ultimately the liquidity required to support them depended on access to liquidity created by insured banks. If banks are not willing to provide it, then it must be provided by the central bank if an outright debt deflation is to be avoided. In the current crisis the fact that many bank holding companies were also involved in the creation of this fictitious shadow liquidity severely limited the ability for their banking subsidiaries to provide liquidity support since to do so would have required increasing borrowing from depositors rather than accepting the liabilities of another unit in the holding. A single institution cannot provide accommodation to itself since it will just be transferring losses from one unit to another and jeopardise its ability to attract customer “core” deposits.

Liquidity was not used to provide for the capital development of the economy

The basic difficulty caused by the recent explosion of fictitious liquidity is that it was used primarily to finance the acquisition of financial assets which did not represent real capital assets or the expected future income from real assets, but rather an anticipated appreciation in the price of the assets, an appreciation which was driven by the increase in fictitious liquidity. The stability of these positions was again dependent on a particular pattern of price change. When these anticipated price movements were not realised, many of the structures in which margins were linked to the value of the position generated an increased demand for accommodation for a position whose value is declining. Thus, the demand for liquidity increased with a decline in the value of the position and the amount of fictitious liquidity it could provide. The fact that there were no markets to provide evaluations of the worth of the positions made this aspect increasingly difficult as haircuts rose and margin calls were increased precisely at the time the structures required additional liquidity to remain viable.

In simple terms, the shadow system created liquidity to fund holdings of financial assets and to generate incomes from trading assets to exploit price differences, rather than to generate income and employment. As Minsky points out, a borrower’s balance sheet represents a flow dimension which is crucial to its stability, that is the balance between the financing costs of the liabilities relative to the income generated by the assets. For a business firm this is business income from output, employment and the sale of output. For a financial institutions financing the firm, its income is derivative of the income of the firm. However, most of the lending has been lending by financial institutions to other financing institutions to finance their holdings of financial assets. This is the “financial layering” within the system and represents the increased financial fragility that was generated by this creation of excess liquidity.

What is wrong with current regulatory proposals?

The basic error in current regulation proposals is that they do very little to limit the creation of “fictitious” liquidity or to redirect the creation of that liquidity to the financing of the capital development of the system. It seeks to limit the exposure of government to the consequences of another collapse of regulated, insured institutions, requiring them to hold higher levels of equity capital to be able to meet the losses created by a debt deflation caused by a reversal in anticipated prices. But capital is meant to be a reserve to ensure solvency of the institutions, and the insolvencies that have been avoided in the recent crisis were created by excessive liquidity creation. The ability to create liquidity depends on the financing institution engaging in the acceptance function. Only a regulated bank offering insured deposits can do this. Avoiding another crisis will depend on limiting the means of creation of liquidity noted above.

As suggested above, the only way to make banks truly safe is with a 100 percent reserve ratio and a 100 per cent capital ratio. No amount of capital can substitute for the creation of liquidity. This is particularly true for non-bank investment trust structures which are implicitly 100% capitalised. The easiest method would be to eliminate these structures. There is no reason why money market mutual funds should exist independently of banks. They should be closed or transformed into regulated, insured institutions. There is also no reason why securitisation should exist. Indeed, if these structures were regulated as other financial institutions, subject to transparency and reporting, they would in all probability not be viable (see Kregel, 2010). Repurchase agreements should be regulated so that they do not fund speculative financial institutions, such as proprietary trading desks or hedge funds. And derivatives could be fully margined. These measures would not guarantee stability of the system, as new mechanisms of fictitious liquidity would be quickly invented. Yet, they would return a degree of control to liquidity creation and thus stem the reflexive impact of liquidity creation on asset prices. This would also require financial institutions to see other forms of income, among them lending to support the capital development of the economy.

The conundrum of regulation

Much of the innovation that has occurred in the system is an attempt by regulated banks to increase their return to equity. And much of the deregulation in the financial system was introduced in order to allow commercial banks to augment their income and compete with less regulated investment banks. Indeed, some foresaw the disappearance of commercial banking (See Kregel, 1997). This has turned out to be correct, but not for the reasons envisaged.

For any financial institution its return on equity is determined by return on assets multiplied by the ratio of assets to bank equity, better known as leverage. The problem that was facing banks was the decline in the share of system assets that were being financed by bank liquidity and the decline in net margins on this business. Thus, deregulation provided for a way to increase leverage, but the creation of bank holding companies which could use this increased leverage to increase system liquidity and thus income produced greatly increased financial fragility and eventual collapse. The increase in capital ratios will not do anything to increase the returns to traditional liquidity creation by means of acceptance lending. Rather it will simply lead to an increase in leverage of an increase in the size of banks to creating monopoly on the prices of services.

Thus, the conundrum of regulation is to find a way to allow banks to concentrate on the financing of the capital development of the economy and at the same time to earn rates of return on capital that are competitive with other forms of investment. Reducing competitors and alternatives means of earning income is probably more effective than increasing the amount of capital required and thus the income that must be earned, a sure incentive to innovations in increasing leverage and fictitious liquidity.

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