

Should Monetary Policy Lean Against Credit Bubbles or Clean Up Afterwards?

By William R White¹

A. Introduction

The current sets of economic circumstances facing the official community are as difficult as any seen in the postwar period. Growth is slowing, and quite sharply in the advanced market economies. At the same time inflation is rising, particularly in the emerging market economies. In the major financial centers, many markets are dysfunctional and some are not operating at all. Many financial institutions have had to be closed down, nationalized or supported in some way by governments. The question posed in this paper is whether steps could be taken to avoid a repeat of these difficulties in the future. Evidently, this presupposes some understanding of what caused today's difficulties in the first place.

Liberalized financial systems seem to be inherently "procyclical".² That is, there are endogenous cycles in which some piece of good news leads to both an increased demand for and supply of credit. This affects positively both asset prices and spending, contributing to still more optimism and providing more collateral for still more loans. Eventually, all these trends overshoot levels justified by the improved fundamentals and rational exuberance becomes irrational exuberance. In the end the bubble bursts, and the process of speculation and leverage which powered it goes into reverse. Such processes have been seen repeatedly in history. The great recessions beginning in 1825, 1873 and 1929 all shared these characteristics, as did the more recent Japanese and South East Asia crises³. In each instance, the crisis emerged suddenly and unexpectedly and without any significant degree of accelerating inflation beforehand.

There is a great deal of evidence to support the view that we are witnessing something quite similar today. The prima facie case for believing this is that interest rates around the globe, both short and long, were held at unusually low levels for much of this decade. Indeed, real policy rates in most countries are still around zero. At the same time there was a massive increase in monetary and credit aggregates, accompanied by sharply declining lending standards. In both the advanced and emerging market countries, many borrowers obtained access to credit who would never have been able to do so in the past (think subprime mortgages) or did so on unusually easy terms (think cov lite). Speculation and leverage are thought to have expanded enormously.

These developments contributed to record high global growth over the last few years. Inflation, however, was held down by a variety of positive supply shocks, not least the process of globalization⁴. However, these financial developments also generated at least four major "imbalances" affecting both the financial and real sectors of the global economy.⁵ As to

¹ **This paper is based on remarks made at the Monetary Policy Round table which took place at the Bank of England on 30 September, 2008**

² For a fuller description see Borio and White (2004)

³ See Kindleberger and Aliber (2006)

⁴ White (2008) provides a fuller assessment of the relationship between globalization and domestic inflation.

⁵ Imbalances are defined here as significant and sustained deviations from longer run trends. Logically, any single such deviation might have a justification in changes in the underlying

the former, most asset prices (not least housing) rose to unprecedented levels. The exposure of financial firms to risks of various sorts also increased sharply. As to the latter, household saving rates in many countries (especially the English speaking ones) fell to zero or even below, while the ratio of investment to GDP in China rose to almost 50 per cent⁶. Again, such numbers are unprecedented in the post war world. Finally, a number of countries with highly advanced financial systems and associated low household saving rates ran very large trade deficits. These were largely financed by capital inflows from surplus countries that had accumulated reserves in the process of resisting exchange rate depreciation.

These favorable circumstances have now been replaced by the more difficult ones just described. In effect, the global economy is now at a tipping point. The positive supply shocks having run their course, the underlying inflationary pressures generated by easy monetary and financial conditions are now becoming more evident. At the same time, the associated imbalances have begun to unwind. Arguably⁷, it began with a “Minsky moment” in financial markets in August of 2007, and this process of financial deterioration has actually accelerated in recent weeks. Due to tighter credit conditions, but still more importantly to a natural process of mean reversion in spending patterns over time, real growth in the advanced industrial economies has also begun to slow sharply. This interactive process of deterioration between the real and financial sectors has yet to fully run its course. Nor have we yet seen the full impact on global currency markets, or on protectionist sentiment, of the current large trade imbalances. Recognizing the potential economic costs of all these developments, it raises the question of how such processes might be avoided, or the costs minimized, in the future?

B: The “lean versus clean” debate

Against this background, I seek in this paper to evaluate the arguments for and against the position taken by representatives of the Federal Reserve System in the United States; namely that it is impossible to “lean” against bubbles using tighter monetary policy, **but** that it is possible to “clean” up afterwards using easier monetary policy. The Fed has not only stated its position⁸ but has conformed to it in practice. Monetary policy has been tightened only in response to the prospective inflationary implications of asset price increases, not in response to accumulating imbalances. Conversely, when financial or other disturbances threatened growth prospects, monetary policy was eased significantly in 1987, in 1990-91, in 1998, in 2001-4 and most recently in 2007. In addition, in the context of the Asian crisis of 1997, monetary policy was not tightened even though all of the traditional

fundamentals. However, such an argument becomes less plausible when a wide variety of “imbalances” emerge simultaneously. This rather points in the direction of a joint underlying cause.

⁶ From a Wicksellian perspective, troubles arise whenever the financial rate (say, the policy rate) is less than the natural rate (proxied by the prospective growth rate of the economy). Estimates of each for the global economy show that such a discrepancy opened up in 1997, and it has been widening sharply ever since. See Knight (2008). In the English speaking countries, where the financial system focused on consumers, consumption rose as a result. In China, where this was not the case, and where investment decisions are still heavily influenced by the state, investment rose to very high levels. But, both “imbalances” had the common root of a big “gap” between the natural and financial rates of interest.

⁷ Arguably, because the panic at that time was preceded by well over a year of declining US house prices and rising default and delinquency rates which the market chose to ignore..

⁸ See for example, Kohn (2008), Bernanke (2002) and Mishkin (2007)

indicators said it should have been. This pattern of preemptive easing has been referred to by (then) Chairman Greenspan as a “risk management paradigm”. In sum, combining a refusal to “lean” with an eagerness to “clean” implies that the Fed’s policy has been highly asymmetrical over the credit cycle.

Whether this view is appropriate is being increasingly questioned by other central banks, albeit discretely. The Bank of Japan, for example, has announced that its policy settings will be determined by “two perspectives”. While the first perspective is very similar to the “gapology” methodology favoured by the Fed, the second perspective seems to be a promise to resist in the future the formation of the credit and associated debt excesses that plagued Japan in the 1980’s. Given how long Japan was stuck in the “bust” period, with all its accumulated economic costs, that promise is not surprising. The European Central Bank also has a second “pillar”. While historically rooted in the belief that there is a low frequency association between money growth and inflation, some people within the European System of Central Banks now seem more willing to suggest that the second pillar could foretell other kinds of problems as well⁹. While this evolution is by no means complete, it seems clear that the grounds for a serious debate have at least been laid.

Nor is this a new issue. Indeed, it was at the heart of the famous debate between Hayek and Keynes in the early 1930’s.¹⁰ Keynes won this debate, in part because Hayek offered no hope that policy might be used to ameliorate the situation during the Great Depression. In the process, Hayek’s message was lost that the magnitude of the problem in the downswing was due to the buildup of imbalances (specifically “malinvestments”) in the upswing of the credit cycle. It is this aspect of the debate that particularly needs to be reopened. At the same time, the scope for policies to resist the downturn also need to be reexamined in light of another Austrian insight. Policies that are effective only at the expense of creating even bigger future problems are not self evidently desirable¹¹. One is reminded of Milton Friedman who, on being told that money growth only led to inflation in the long run, responded “I have seen the long run, and it is now”. After many years, perhaps we too are seeing the long run results of past policies.

This possibility is also suggested by some of the insights from dynamic control theory, first applied to economics by W. Philips¹². If one thinks of the economy as a system rendered unstable by a “procyclical” financial sector, then an important aspect of a central bank’s job should be to provide a feedback mechanism to restore stability. However, designing feedback rules is not easy, with the problem of instrument instability being of particular importance. In such a case, stability of the system is achieved period by period, but only at the expense of the stabilizing instrument having to move ever more sharply in successive cycles. Evidently, such policies cannot be sustained forever¹³. The solution to this instrument instability problem was often to be found in lightening the control procedure, to allow deviations from equilibrium to be somewhat longer lasting. While hardly a rigorous

⁹ See Weber (2008).

¹⁰ Hicks (1967) noted how this debate “captured the imagination” of economists at the time, but had been almost forgotten by the late 1960’s. For a fuller account see Cochran and Glahe (1999)

¹¹ Contrast Keynes’ famous comment: “In the long run we are all dead”, with von Mises: “No very deep knowledge of economics is usually needed to grasp the immediate effects of a measure; but the task of economics is to foretell the remoter effects, and so to allow us to avoid such acts as attempts to remedy a present ill by sowing the seeds of a much greater ill for the future” .

¹² Philips ()

¹³ Cooper (2008, p137) makes reference to early work on “governors” for steam-driven machines which, if “overgoverned”, would physically shake themselves to pieces.

argument, the Fed's asymmetric policy reaction function, with its emphasis on preempting downturns, hardly implies a light control procedure.

Why the Fed believes it is not possible to use monetary policy to lean against the credit cycle

It is important to note that the Fed's arguments have focused almost exclusively on the difficulties of using monetary policy to lean against asset price increases, rather than the underlying credit cycle itself¹⁴. Rising asset prices are, of course, only one imbalance of many that can be generated by easy credit conditions. However, this narrow focus does have the advantage of allowing a number of plausible, sophisticated, arguments to be made against the **straw man** of "targeting" asset prices.

The first is that there are a number of asset prices that might be targeted. Advocates of this policy are then invited to choose which asset price should be the focus of the authorities' attentions, and to explain why. Since there is no obvious right answer to such a question, the whole approach is made to seem questionable. A second criticism is that, absent any clear criteria for determining the asset price consistent with "fundamental value", it is impossible to estimate deviations from such a price in order to lean against it. A third criticism is that, given expectations of further increases in any rising asset price, the interest rate increases required to "prick the bubble" would be so great as to cause material damage to other parts of the economy.

A more general argument against "leaning" against the credit cycle is that it might result in an undershoot of the desired level of inflation, whether that level is expressed as an explicit target or not. Two sorts of concerns can be noted. The first is that the economy might inadvertently be pushed into deflation, with all of the problems "presumably" associated with such a development. The second is that, by undershooting desired levels, the credibility of central bankers' commitment to price stability as a longer term goal might be brought into question.

The counterarguments to the Fed's position

The first and most important point is simple. Those who favor leaning against the credit cycle are not advocating "targeting" asset prices. Rather, they wish to take action to restrain the whole nexus of imbalances arising from excessively easy credit conditions. The focus should be on the underlying cause rather than one symptom of emerging problems. Thus, confronted with a combination of rapid increases in monetary and credit aggregates, increases in a wide range of asset prices, and deviations in spending patterns from traditional norms, the suggestion is that policy would tend to be tighter than otherwise.

From this broader perspective, there is no need to choose which asset price to target. It is a combination of developments that should evoke concern. Nor is there a need to calculate with accuracy the fundamental value of individual assets. Rather, it suffices to be able to say that some developments seem significantly out of line with what the fundamentals might seem to suggest. Finally, there is no need to "prick" the bubble and to do harm to the economy in the process. Rather, the intention is simply to tighten policy in a way to restrain

¹⁴ Weber (op. cit, p5) implicitly criticizes the Fed in this regard. He states "In my opinion, this view of monetary policy is too narrow".

the credit cycle on the upside, with a view to mitigating the magnitude of the subsequent downturn.

As for the more general concerns about undershooting the inflation target, deflation is not always and everywhere a dangerous development.¹⁵ The experience of the United States in the 1930's was certainly horrible but almost as surely unique¹⁶. There have been many other historical episodes of deflation, often associated with bursts of productivity increases, in which falling prices were in fact associated with continuing real growth and increases in living standards. This said, there can be little doubt that serious problems can arise from the interaction of falling prices, profits, and high levels of nominal debt.¹⁷ But the essential point of leaning against the upswing of the credit cycle is to mitigate the buildup of such debt in order to moderate the severity of the subsequent downturn. The price undershoot, per se, would not seem to be a problem if the economy is still growing strongly under the influence of the credit cycle itself. As for an undershoot undermining the credibility of the price stability objective, this would seem far less likely than the effects of an overshoot and should be easily explainable to the general public.

There are also other arguments supporting the views of those wishing to lean against the upswing of the credit cycle. It is possible that credible statements of official concern and determination to act would change private behavior in a more stabilizing direction. It is commonly believed that a similar change occurred in the way inflationary expectations were formed after central banks became more serious about controlling inflation. Finally, tightening policy more in the upswing would not only mitigate the size of the downswing, but would also provide more room for policy easing in response. In particular, with interest rates higher at the peak of the cycle, there would less chance of running into the serious constraint of the zero lower bound.

Why the Fed believes it is possible to clean up afterwards

The first argument is that this conclusion (that monetary easing stimulates demand) seems supported by the macroeconomic models now generally used by central banks. These include large scale structural models, not much changed since the 970's, and increasingly the use of Dynamic Stochastic General Equilibrium Models (DSGE)¹⁸. The second argument is that policy easing has consistently worked to stimulate demand in the past. As noted above, the Fed's response to financial turmoil since 1987 has always been to ease monetary policy, and in every instance to date the economy has subsequently resumed growth. Over the last few decades, recessions have been very mild and the variance of output growth has been very low¹⁹. Third, the Fed has consistently argued that previous experiences of costly deflations, the United States in the 1930's and Japan in the 1990's, were primarily the byproduct of policy error. In particular, the authorities failed to ease monetary policy aggressively enough²⁰.

The counterarguments to the Fed's position

¹⁵ See Borio and Filardo (2005).

¹⁶ AER ref

¹⁷ The classic statement of this problem is Fisher (1933)

¹⁸ For an overview see Tovar (2008)

¹⁹ This, together with inflation remaining both low and stable, led to the allocade "The Great Moderation".

²⁰ See Bernanke(2002) and also Ahearne et al (2002)

The first argument rests on the reliability of models of the macroeconomy. Evidently, models must not be confused with reality and, in fact, large structural models have had a very poor record in predicting the turning points of even standard cycles in the post war period. It is also the case that most such models have very rudimentary financial sectors, and their predictions might therefore be particularly suspect at times of financial crisis. As for more modern DSGE models, even their supporters admit that they are “work in progress”, and they possess even more rudimentary financial sectors than those seen in more structural models.

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As for the second argument, just because something has worked in the past need not **logically** imply that it is certain to work in the future.²² Indeed, the degree of monetary easing required to kick start the American economy seems to have been rising through successive downturns as the “headwinds” of debt have become stronger²³. The recognition that something seems to have changed in the transmission mechanism of monetary policy likely accounts for the spate of recent conferences on this particular topic.²⁴ Over the last year, for example, it is disquieting that the US policy rate has fallen at a record pace while mortgage rates have actually increased. A similar phenomenon was seen early in the last cycle of easing. Then, lower short rates initially failed to feed through to standard channels of the transmission mechanism until asset prices started to rise strongly in the middle of 2003.²⁵ In the United States, in spite of unprecedented monetary and fiscal stimulus, the recovery after 2002 was the weakest in post war history.

Looking further back in history, Keynes worried that the use of monetary policy would eventually be like “pushing on a string”. For this reason, he advocated the use of fiscal stimulus in depressed economic conditions. Hayek was similarly skeptical about the role of monetary policy. He noted that, if excessive money and credit was the source of the economic problem, it was not self evident that still more money and credit was part of the solution. Indeed, pre-War business cycle theorists worried that the end game of this monetary and credit expansion might be hyperinflation, as occurred in central Europe in the early 1920’s. In contrast, most central banks are now committed to the pursuit of price stability. However, the fact that long subdued inflationary pressures, generated by previous expansionary policies, have now erupted at the global level must be a significant constraint on the further use of such policies.

These empirical and theoretical considerations lead to the conclusion that successive recourse to monetary stimulus in downturns could lead to a position where faster economic growth would no longer be the result. Moreover, the likelihood of this happening would be

²¹ For a devastating critique of some of the theoretical and empirical underpinnings, see Rudd and Whelan (2003). At the conference for which this paper was prepared, CAE Goodhart made a similar point, but more succinctly. He said, “There is simply nothing in these models that is of the slightest interest to central bankers”.

²² On this theme, against a far bigger backdrop, see Talib (2007)

²³ Consider the path of the policy rate in the US in the early 1990’s, the first years of this decade, and most recently. Both the size of the reduction and its speed have increased.

²⁴ The recent joint conference of the CEPR and ESI (2008), that took place at the BIS in Basel, was but one of many. Its topic was “The evolving financial system and the transmission mechanism of monetary policy”.

²⁵ It is evident from casual inspection that almost all asset prices, most commodity prices, and implicit volatilities derived from option prices, all had an inflection point around the middle of 2003. It is perhaps more than correlation that global nominal policy rates hit their low point at that time, with rates of zero, one percent and two percent in Japan, the United States and the Euro zone respectively.

increased by asymmetric policies that led to rates being raised less in upswings than they were lowered in downswings. As a matter of arithmetic, this would imply hitting the zero lower bound for interest rates at some point.

As for the argument that the depressions in the US and Japan were primarily the product of too timid monetary easing, it cannot be denied that still greater easing might have made a material difference. However, this is a supposition rather than a statement of fact. What is a fact is that, in both cases, interest rates were eased very sharply at the beginning of each crisis, and in the latter case, significantly more than a Taylor rule would have implied.²⁶ A competing (or at least complementary) hypothesis would be that the difficulties seen in previous downturns were related to the excesses of the earlier upturns. In Japan, for example, it is a fact that investment levels collapsed after the crisis broke and that the corporate ratio of debt to value added fell continuously for over a decade²⁷. At present, four major sets of global economic and financial imbalances can be identified, of which only one has to do with the increased risk exposure (and inadequate capital) of financial institutions. Should the global economy now slow abruptly, with real interest rates already near zero in most regions, this would provide further evidence that underlying deflationary forces have their roots in the preceding “boom” period, not in policy error..

Considering the possibility that monetary policy might, eventually, not work effectively in the downturn, raises the issue of other remedies. Should these also be deemed unreliable in restoring growth, then the dangers associated with not leaning against the upswing of the credit cycle become still more evident. Fiscal stimulus is another way to increase demand, but the muted response of the US economy to the recent fiscal package is not encouraging. The level of government debt in many jurisdictions is already so high as to invoke concerns about “Ricardian equivalence”. Indeed, further fiscal stimulus might even encourage risk premia and interest rates to rise, which would further mute the overall stimulus provided to spending. In Europe, the fact that sovereign spreads have already begun to move up in countries with high debt levels (particularly in Central and Eastern Europe) is of increasing concern.

The ultimate remedy for the problem of over indebtedness is to recognize the facts, and to write off in an orderly way those debts that cannot be serviced. However, here too there are grounds for concern. Unlike previous sovereign debt crises, when Bill Rhodes could assemble the principal creditors in one room, there are now literally millions of households whose debts will not be serviced under the initially agreed conditions. Moreover, many of these debts are encumbered by second mortgages, or are parts of structured products implying that property and foreclosure rights are less clear. These complications will impede any process of negotiating debt reduction, implying that the ultimate losses will be much larger than otherwise. The new reality of credit transfer instruments is a further complication, since it implies that the interests of creditors are no longer aligned. Some creditors now profit more from a default than a negotiated settlement. Compared to this, the problem of recapitalizing banks seems almost trivial. Yet it is obvious from recent events that even this task can be complicated and susceptible to error. Moreover, however it is done, support for

²⁶ See BIS() Chapter 4

²⁷ An unresolved issue is whether Japan’s poor performance throughout the 1990’s was due to corporation’s not wishing to invest, because of earlier overinvestment, or because a weakened banking system was not prepared to lend them the money.

the financial system, will have costs for taxpayers (or at least exposures) which raise the fiscal concerns just noted above.

The possibility that monetary easing might prove ineffective in restoring growth after a credit “bust”, and that other remedies might be ineffective as well, strengthens the arguments for not getting into such a situation in the first place. Further support for this proposition is provided by recognizing other longer term problems associated with the maintenance of very low interest rates²⁸. First, as was seen in Japan, low rates can actually encourage forbearance and impede balance sheet restructuring. Second, this environment encourages mergers and acquisitions which may have little long term merit. Third, saving rates will be reduced, hurting long run growth potential. Fourth, again as seen in Japan, very low rates sustained for long periods can impede the functioning of the interbank market leaving the central bank as the market maker of last resort. And finally, there is always the difficult issue of the exit strategy from such a position. This implies a delicate balancing act in which tightening must be “measured” enough not to destabilize still fragile financial markets, but also fast enough not to allow inflationary expectations to come unstuck. The experience of the United States and Japan in recent years indicates that the exit problem is not inconsequential.

This last observation needs further consideration going forward. Even if a highly expansionary monetary policy were to prove incapable of directly stimulating demand, it could still prompt an increase in inflationary expectations and inflation instead. Market participants could come to recognize that, for policy makers in a debt constrained economy, inflation has the particular advantage of reducing the real burden of existing debts with fixed interest rates. The anticipation would be that this would, in turn, indirectly stimulate demand over time. As noted above, many pre-War business cycle theorists worried that the temptation to accept a higher rate of inflation would prove overwhelming if the only alternative seemed to be a deep economic slump. Moreover, having a country’s obligations (especially the public sector ones) denominated in its own currency, but largely in the hands of foreigners, would further heighten such temptation.²⁹ While presumably no policymaker would be expected to desire anything other than a modest increase in inflation, history teaches us that the inflationary process can all too easily get out of hand. In sum, past policy choices have led us to a point where a variety of risks now seem plausible.

C: The need for a new macrofinancial stability framework

Not surprisingly in current circumstances, the possibility that liberalized financial systems might be inherently “procyclical” is receiving increasing attention. Similarly, the possibility that accumulated imbalances might significantly reduce the effectiveness of stimulative monetary policy is being increasingly accepted. In particular, it cannot be denied that the period of financial market turmoil, which began well over a year ago, has been met with an extraordinary and creative response on the part of central banks. Nevertheless, the financial turmoil has continued unabated and the real side of the global economy looks increasingly vulnerable.

²⁸ See White (2006) for a fuller description.

²⁹ Of course this raises another problem. Should the foreign holders of debt come to fear an inflationary outcome, then they would likely seek to protect themselves by selling their assets. This might then raise interest rates while at the same time putting downward pressure on the currency. This could then both slow demand (if the effect on domestic demand of higher domestic rates was greater than the net effect of the currency depreciation) and raise inflation.

Moreover, looking forward there are grounds for belief that the problem of procyclicality could well get worse. Three major structural shifts within the financial sector have encouraged procyclicality; securitization, globalization and consolidation. After some pause associated with the current crisis, these secular trends seem likely to continue since they are fundamentally driven by improving technology. Such technological developments seem unlikely to be rolled back by government decree. In addition, there are grounds for belief that fair value accounting, in spite of the unwanted contribution it makes to the procyclicality of the system, will be increasingly adopted. For all its faults, it seems better than the available alternative accounting benchmarks. Finally, the great advantage of Basel 2 is that it allows relative risk weights to change to reflect changes in underlying fundamentals. But, at the same time, it also allows the absolute weights to change over time. Evidently, in and of itself, this too could exacerbate procyclicality. In sum, there are numerous grounds for belief that the problem of procyclicality, already severe, will worsen going forward.

The fundamental conclusion to be drawn from balancing all the arguments above is that we need a new macrofinancial framework to resist procyclicality³⁰. This can be done in a market friendly way. The intention must be to preserve the efficiencies generated by new financial developments, while at the same time mitigating inherent threats to safety and stability. Focussing on a the development of a new framework to reduce procycliclity, the fundamental problem, would also do much to redirect suggested policy changes away from heavy handed and punitive regulation designed primarily to stop the recurrence of yesterday's problems. While some such changes are surely needed³¹, care must be taken to address underlying causes of problems as well as their symptoms.

The central characteristics of such a new system would be three in number. First, both regulators and central bankers must pay more attention to systemic issues. It is the interactions between individual institutions, and between institutions and markets, that has the greatest potential to cause damage. Second, and subject to the first characteristic, regulators and central bankers must work more closely together to achieve shared objectives.³² Third, both regulatory (macroprudential) instruments and monetary policy should be used in a much more symmetrical way. Consistent with the balance of arguments made above, they should be tightened in good times, as well as eased in the bad. What is needed now is the beginning of a serious discussion of how this might best be done in practice. In this regard, how sovereign governments should interact in an increasingly integrated financial world is a crucial consideration.

³⁰ This suggestion is presented in more detail in White (2006) and in various BIS Annual Reports. See also Borio (2003) and Borio and Shim (2008)

³¹ See the report of the Financial Stability Forum (2008) to the G-8 for a long list of such suggestions.

³² This could imply that a third agency would be required to deal with problems of consumer protection and related micro issues. Alternatively, increasing attention is being paid to the "twin peaks" model already implemented in Australia. There, the regulatory agency focuses on the micro issues, and all the systemic responsibilities are given to the central bank. The latter of course has recourse to both macroprudential regulatory instruments and monetary policy in pursuit of its macrofinancial objectives.

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