THE PRESSING NEED FOR MORE COMPLETE CENTRAL BANK POLICY REGIMES

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The title of this panel session is "Policy Responses." Policy responses have to be seen in terms of policy regimes and, although this can be no more than a sketch, I want to leave both the central bankers in the room and later readers with a conviction that there is work to be done to fill out the policy regimes for which central banks have delegated or *de facto* responsibility[1].

I will set the scene by highlighting three things that the crisis has revealed about central banking, and two things that we still don't know. I will then relate them to three themes that have been explicit or suggested by the earlier sessions of today's conference. That will set the scene for what I want to say today about policy regimes.

[1] I am grateful to conference participants' comments and questions during the panel session, and to David Archer, Claudio Borio and Steve Cecchetti for comments on a preliminary draft of this written version.

Three things revealed about central banking by the crisis

One thing everyone --- I mean the public and the legislators to whom central banks are responsible --- has learned is that the monetary authorities entered the crisis without any well-articulated toolkit for crisis management. But also that, at more or less every stage of the crisis, they proved terrifically adept at innovating on the hoof and learning from each other.

The second thing we have learned is that, despite the complete implosion of the banking system, central banks had the monetary tools to avoid the world slipping into a repeat of the Great Depression. That is a pretty enormous achievement. It hasn't been enough to prevent recovery being painfully slow, but may go some way to explain why, on the whole, central banks have been granted more powers in the aftermath of the crisis rather than, as in the 1930s, having existing powers stripped away or their independence otherwise set aside.

Indeed, the third thing that has been revealed is about power. Through their balance-sheet operations and announcements, central banks proved capable of manifesting more power than anyone had conceived them as having. And since the crisis, they have accumulated more formal power. So, to be concrete, central banks have intervened in just about every single capital market imaginable, steering credit to particular sectors and, therefore, up to a point, away from other sectors. And amongst the main central banks, the Federal Reserve, the ECB and the Bank of England have all been given greater regulatory powers, statutory powers.

Two things that we do not know and cannot yet know

If those are three things we have learned, there are also two big things that we definitely don't know.

We have absolutely no idea whatsoever what any 'new normal', as people call it, will look like. We don't yet know where any of the key macro-economic variables are going to settle once steady state is re-achieved. By that, I mean the 'trend' rate of growth and the equilibrium real rate of interest, and their underlying drivers. We also have little or no idea what the transition to that steady-state path is going to look like --- whether it's going to be smooth, a bit bumpy, or an absolute disaster.

In fact, more than that, we don't even know whether the steady-state 'trends' apparent *before* the crisis were in fact an artifact of easy credit conditions and accumulating debt; whether they could have been sustainable but things have been altered fundamentally by the crisis, such as, for example, by different attitudes to risk that it may have induced; or whether the apparent 'trends' were sustainable and will, after a protracted period of recovery, be sustained. In some ways, we never knew those things, but it is now clear that a lot is going to be learned over the coming 5-10 years.

That first set of unknowns creates the conditions for my second unknown: the uncertainty that inevitably surrounds the sustainability of central banks' current centre-stage role in economic and financial policy and debates.

The brute truth is that no one can know whether if things turn out badly, all the power and prestige central banks have accrued are going to wither away --- or be taken away, as they were in the 1930s

How should central bankers respond to the environment I am describing? The outcome will, of course, turn partly on luck and demeanour: just as the Gods played their part in twisting the Great Moderation into the Great Financial Crisis and the Great Recession, so they can be counted upon in the future to meet hubris in the eye. For now, central bankers need to emphasize and explain the uncertainties --- I guess that's what they are doing, which is no more than honesty sprinkled with common sense.

More important even than appeasing the Gods and being open with the public, central banks and their legislative overseers need to get on and identify the minimal regimes that are needed to ground central banks' powers and what can be expected, demanded of them. That means specifying the social purpose of their newly rediscovered powers, and laying down where they should not tread. Without that, expectations of central banks are liable to be random, hostage to their latest achievement, inadvertent remarks here and there, and most of all to events.

Three challenges highlighted by the conference relevant to central banking remits

Today's papers and discussions prompt me to highlight just three of the challenges that are relevant to this business of mandates and missions. There is a fourth too, but I shall save it to the end.

(a) The technology of money: central bank e-money?

A good deal was said during the day about the implications of the new technology. But something that didn't come up is whether central banks should contemplate issuing e-money --- a 21st century innovation to match bank notes.

Gary Gorton eloquently described how at the beginning of the 19th century, most of the stuff that people thought was *money* was issued by central banks. It was guaranteed by the state. During the 19th century, and into the 20th century, however, private money --- essentially, bank deposits --- came to be used alongside state money. Eventually the state, led by F D Roosevelt's Administration in the US, concluded that it needed to provide state backing for private money --- deposit insurance --- in order to underpin the stability of the economy's monetary system, so as to maintain the supply of bank lending and payments services.

Should central banks (and their legislative overseers) so choose, they could, again, by law substitute state-issued money for many of the other monetary instruments currently employed --- returning things to an older model. The new technology surely makes that feasible if society were to desire it. It is a question that the authorities are going to have to face over the next few years, before the moment is lost.

A couple of us floated this, as something to think through, in the Bank of England in 2003/04. Ken Rogoff has been positively advocating it as a means to creating the capability of setting negative nominal interest rates. In a world destined to be plagued by cyber crime, it would substitute the state's security capabilities for those of private firms. Just as everyone uses banknotes, it would, essentially, mean everybody 'banking' with central banks rather than just banks banking with them. It would not necessarily preclude the choice of banking with private banks too, but it would plainly be a big change.

But, whatever its merits or demerits, it would not address one of the issues Gary raised (both today and in previous work). Of itself, it would not alter the prospect of private non-bank institutions issuing *quasi*-money --- shadow banking. In the latest crisis, it turned out that, through their investment managers, enough people and firms were using non-bank liabilities as *de facto* money-like safe assets, that the state, particularly in the US, felt compelled to come to the rescue of that too.

Central banks issuing their own e-money would not change the drivers of private money creation, even if only central bank money could be used to settle debts, as new markets for exchanging money and near-money liabilities would develop.

The question of who can issue money cannot easily be separated from the question of whether and how to regulate near-money issuers.

(b) Regulatory arbitrage and the futility of traditional regulatory regimes

The second set of issues highlighted by today's discussions is, indeed, the imperative of identifying what on earth to do about regulatory arbitrage. It is completely endemic in finance. Finance is a shape-shifter. This has a number of implications for central banks.

It means that as banks are re-regulated, much of the economic substance of banking is going to move elsewhere, and much of that activity, although not all, is going to be under the jurisdiction of securities regulators.

So society must ask itself whether it is satisfied with the ability of the mission, mandate, culture and capability of securities regulators to meet that challenge. However uncomfortable, central banks cannot step aside from that debate, because, as the lenders of last resort, they will unavoidably be at the scene of the disaster if securities regulation cannot play its part in maintaining systemic stability.

There is a deeper issue, as well. Does anyone still believe that rules-based regulation can work to preserve stability? If regulatory arbitrage is endemic, as I assert it is, then as regulators write detailed rule books, with some rules hundreds of pages long, finding a route through the (inevitable) holes in those rule books becomes legitimate (not just in a narrow legal sense, but in terms of society's values). And, yet, just saying, "Well, we're going to go back to a world of discretion" would be tremendously problematic because society chose to rely on rule books in the first place for a good reason. It did so because citizens, legislators don't want regulators --- and that includes central banks --- to have arbitrary powers. And they're right!

So, this looks like an absolutely appalling dilemma. Use rule books: arbitrary powers are avoided, but the regime for preserving stability is doomed to failure. Abandon rule books and retreat to principles, and we've endowed central bankers and other regulators with the powers of Plato's Guardians, which is what we want to avoid (in the interests of political equality and freedom).

The broad question this poses for central banks, and for their legislative overseers, is how their responsibilities and powers (and those of other authorities) for preserving stability should be framed. An outline of an answer, not developed here, would be to ensure that there was a clear primary objective (system resilience); that there was a clear standard for such resilience: *and*, crucially, that any detailed rules had to be construed, under law, in line with higher-level *statutory* principles. In other words, we need to dissolve the tension between legally binding rules and non-statutory principles.

(c) Market illiquidity , and central banks as potential Market Makers of Last Resort

Let me now make a few comments about market liquidity and the current debate about the unintended consequences of re-regulation.

It is being said that the combination of the leverage ratio, the Liquidity Coverage Ratio and, perhaps, the US's Volcker Rule is sucking liquidity out of financial markets, and that this is going to make the transition back to monetary normality much bumpier than it would otherwise have been. Big picture, I don't see how this could have been avoided if finance was to be put on a decently firm footing. Nor is it a matter of measures designed to repair banking having adverse spillovers on capital markets that were sound and so not in need of repair themselves. When things settle down, the public will be better served by moving on from a world in which the apparently high liquidity of markets in supposedly normal times was in fact illusory, relying on fragile dealers and market-makers. As Philip Hildebrand said this morning, pre-crisis risk-asset ratios were about one percent. Given an average risk weight of around 50 percent, that is equivalent to leverage of roughly 200 times. These were, in effect, infinitely elastic dealer balance sheets, which made markets in almost everything look tremendously liquid *provided* everything was going well. But the moment a small bump came --- and the U.S. sub-prime problems *should* have been a small bump --- the liquidity completely dried up, sending asset prices crashing, and the economy likewise. The new policy dispensation is, in effect, trading a bit of liquidity in good times for more resilient liquidity in bad times. Stronger intermediaries should be better placed to stay in the market in bumpy conditions[2]. But there is more to it than that.

Had the upswing of the market-liquidity cycle preceding the 2007 crisis been short, the harm would not have been as great. But the illusory good times in fixed-income markets persisted for so very long that there was massive underinvestment, intellectually and technically, in market microstructure: the dependence on dealers for instant and cheap liquidity became inscribed into

[2] Ref cecchetti

the structure of finance under the prevailing rules of the game. Everyone just relied on dealers being there all the time with infinitely elastic balance sheets, but most if not all of them were, in fact, far too fragile to stay the course.

In today's changed environment, with different rules of the game, there should be strong incentives for people to invest in devising and building market infrastructure more suitable for the heterogeneity of fixed-income markets, just as frequent corporate issuers now have incentives to think about the longer-term benefits of more systematic and so more robust debt-management strategies.

All that will take quite a long time, perhaps five-to-10 years. It *is* a long time, but the mutations in the financial system that so weakened our economies and brought us to, and over, the brink of crisis were possibly two decades or more in their gestation. The incentives created by policy regimes, good and bad, can take a long while to work through.

In the meantime, markets might occasionally be very bumpy, and it would be reckless to assert that none of those bumps could do economic harm. The question that poses for central bankers, and for their legislative overseers, is whether, when the bumps come, they are going to act as market makers of last resort, or not?

Some central banks have said, "Yes, we will", and some have said nothing about this.

We do know, however, just from thinking about it, that this isn't quite the same as being a *lender* of last resort, even though the broad social purpose may be shared. Acting as LOLR, central banks lend against collateral and they can, therefore, control their risks through their valuations of the instruments they take, through the haircuts (or excess collateral) they require, and by insisting on periodic (mostly daily) re-collateralization.

By contrast, MMLR, acting initially as a *buyer* of last resort, entails outright risk: it is a one-shot game where assets are bought at a price and the value may subsequently fall (for fundamental reasons). So, how should any such operations be designed: what should be their objective and constraints? That needs thought before the event.

The importance of regimes

For me, those observations around three of the challenges aired during today's deliberations lead to the clear conclusion that central banks need well-defined regimes covering *all* of their activities --- regimes that are as clearly articulated as possible, draw on public debate, and fit together as a coherent whole. I will elaborate with just three examples, starting briefly with MMLR, saying rather more about LOLR, and then trying to put the debate about ‘credit easing’ in a broader context .

MMLR

If any central bank maintains that they will *not* act as a MMLR, that needs to be a credible commitment. If it is judged that it is not possible to make such a policy credible, then central banks need to articulate in advance what principles any MMLR operations are going to follow, including how they would control and cover the risk.

Any such regime would need political buy-in --- not least because any losses (or, symmetrically, profits) would affect the transfers of seigniorage to the fiscal authority. That means that material losses go to the people, via public spending or taxation. MMLR operations unavoidably blur the boundary with fiscal policy. That will be a running theme in what follows.

LOLR

Unlike MMLR, where there is need for debate on whether or not it is warranted, the need for a LOLR regime is unavoidable: alongside monetary policy, liquidity re-insurance to (solvent) monetary institutions is one of the two inalienable functions of central banking. As such, it needs to be framed by a regime. The people need to know, and need more than a hand in deciding, what they are getting.

There is an active debate underway in the United States right now about whether further constraints, going beyond those introduced by Dodd Frank, should be placed on the Fed's LOLR capability, given a sense, misplaced or not, that the Fed went too far during 2007/08. Senators Warren and Vitter having tabled a bipartisan Bill to that end. Now, what strikes me about this debate is that not much, if anything at all, is said about the *purpose* or the objective of LOLR operations. And one can't really find anything in legislation that makes this clear. I suppose one could point towards the words in the 1913 Act about maintaining 'an elastic currency', but it's a hundred years since then and, at the least, the regime needs re-explaining to today's public. I don't see why *today's* legislators should have a clear conception of what maintaining an elastic currency means, but they are the ones who have been elected and must adjudicate the public interest. And if the *objective* is not clarified, ideally shared, and at least accepted, I don't see how competing views about appropriate *constraints* can make much sense.

This is by no means a point exclusive to the Fed. Without clarity around the social purpose served by the lender of last resort, and the mandate that entails, there is likely to be an adverse reaction from parts of the community whenever a central bank appears to be at or beyond the boundary of its legitimate powers. That adverse reaction may be completely sensible or it may be completely confused, and I don't think central banks can afford to live like this.

So, to cash that out just a bit, I think there are three components to a lender-of-last-resort regime, as indeed to any policy regime. One is a purpose and/or objective. The second is the specification of boundaries for normal circumstances: what is banned. And the third component is what happens when those boundaries to the published regime are reached during a crisis and relaxing them could help promote the public good. For example, should the central bank be able to go further provided it has authorization from the elected representatives of the people; and if so, where are the absolute 'no go' areas?

I will illustrate how the question of purposes affects the question of constraints (or boundaries) with one example. *Say* the purpose was to sustain the operation of the monetary system, including therefore the operation of the part of the private-sector financial system whose liabilities are used as money by households, businesses and, on their behalf, investment managers. Say, further, that those money-like liabilities are not issued only by *de jure* commercial banks, but by other private-sector firms, funds, vehicles. Should the central bank provide liquidity re-insurance to those shadow banks? If so and it makes that clear *ex ante*, should they be regulated as or like banks? If, alternatively, the central bank should *not* in any circumstances make LOLR facilities available to shadow banks, should they be outlawed or taxed in order to reduce systemic risk? Those questions can be answered in a range of reasonable ways, but I suggest that they need to be answered *together*.

Whatever the population of firms that can access the LOLR, there is one boundary condition that I would say is both absolute and necessary for this being within central banking at all. This is that the central bank should not (knowingly or casually) lend to an institution or institutions which are irretrievably, fundamentally insolvent. To do so would be to leave longer-term unsecured creditors worse off when the firm eventually goes into a bankruptcy procedure. Taking good collateral cannot remedy that. Contrary to what sometimes seems to be suggested, it simply protects the central bank and the taxpayer, and does not of itself prevent some people being worse off as a direct consequence of the authorities' actions.

But if this must be a binding constraint, how should solvency be assessed, especially given that a LOLR operation can potentially put the economy (and asset prices) on to a higher path than if the crisis were left to burn itself out. An institution that would have been fundamentally insolvent absent the action may not be so given the action --- sometimes but not always, depending on just how bad its initial condition and just how well any LOLR operation works. This is, therefore, about forecasting the expected effects of the operation and the risks around that.

When I have said that on other occasions over the past year or so, one response has been that this way of thinking is unrealistic, because such forecasts can't be made. I reject that. Indeed, central banks have effectively been doing what I describe in the course of producing the macro-economic forecasts that inform their monetary policy decisions. Since the crisis, all such macro forecasts have had to take into account the impact of central bank liquidity operations (and their monetary-policy settings) on the supply of credit, since the slump was partly driven by a collapse in credit. That has required them to take a view on the effect of their various measures on banks and on asset markets. If central banks can put in place an ordered apparatus for producing macro forecasts, I don't see why they cannot, over time, invest in equivalent apparatus to inform their LOLR operations. I am not saying that this would be easy, especially given the suddenness with which liquidity crises can sometimes erupt (although they are not always sudden as the agonizing period from summer 2007 to autumn 2008 reminds us). But nor was it easy to develop broadly credible and comprehensible operating regimes for monetary policy. I am saying that a similar kind of investment *ought* to be made in the infrastructure for LOLR policy choices. And, I would add, I think that that would be in the interests of central banks themselves, as well as in the wider interests of the public they serve.

Society or, rather, its elected representatives need to decide, or bless, what probability threshold for fundamental solvency has to be satisfied *ex ante* in order for it to be okay for central banks to lend. *Ex post* the forecasts on which lending decisions are based are going to be wrong sometimes. But that is true of the monetary-policy forecasts. The point is to provide a framework for discipline, explanation and accountability. The forecasts need to be reasonable given the available information, central banks' understanding of how the world works, and uncertainty about the future.

Credit easing

Some of the considerations bearing on LOLR and any MMLR regimes apply to 'credit easing', by which I mean buying instruments other than central government bonds in order to stimulate the flow of private sector credit.

The underlying question is: what balance sheet operations are okay for a central bank? Is it okay, for example, for central banks to buy private sector paper?

My own minimal conditions would include that the central bank should be as parsimonious as possible. So, if they can do whatever is needed to meet their mandate with their interest rate instruments, or they can do so by buying effectively risk-free government paper in the market (QE), that's what they should do and they shouldn't get into private sector paper (or specific types of government-guaranteed paper).

If they do get into buying private sector paper, there should be an explicit endorsement, and effectively an indemnity, from the government, so that it is understood that they are in the fiscal space. Further, I think it important to avoid buying paper issued by only one sector of the economy, so that the allocation of credit to particular sectors is not being preferred on the say so of unelected technocrats. And if those constraints are to be relaxed in especially dire circumstances, the conditions (substantive or procedural) should be laid down in advance.

Now, those are just my thoughts, and there are, of course, other sets of reasonable constraints. But any regime should recognize two things.

First, whatever set of constraints is chosen, it should be credible --- a true statement of policy rather than a wish.

Second, the regime should be drawn up in recognition of the fact that conceptually the dividing line between monetary and fiscal is blurred. It won't do to pretend that it's not blurred. But the absence of sharp natural boundaries --- its not being a dichotomy --- does not mean that a line cannot be drawn. Any such lines represent a convention that a society has decided to adopt, but that seems to me to be both acceptable and, indeed, unavoidable because, at root, central bank independence (CBI) is itself a convention about the distribution of the state's powers.

CBI is about giving an institution insulated from day-to-day politics delegated powers to change the liability structure and, possibly, the asset structure of *the state's consolidated balance sheet*. Precisely how far those discretionary powers go is what these debates about LOLR, MMLR and credit easing are about. The key things are that the line has to be drawn somewhere, and that everybody should know in advance where the lines are drawn and what happens when they are reached. For central bankers to find themselves in a position where they themselves have to determine what happens at the boundary is, I think, absolutely to threaten the bedrock acceptance of their authority even in normal conditions.

In democracies, those boundaries have to be drawn by the representatives of the people --- of course, with the advice of central bankers and others. This is, in a deeper sense, about society's deciding what counts as Political with a capital P, and delegating to central banks things that they have determined are not Political.

<u>How international spillovers creates a need for regimes</u>

I have been arguing that central banks need carefully framed regimes for all of their functions, and not only for their monetary policy function. My case has been that that is necessary to underpin the position of central banks within the state. In case that doesn’t persuade the assembled company, let me mention one quite different reason, before concluding with what I see as the even bigger challenge.

When it comes to the LOLR function, there is a coordination problem amongst countries/jurisdictions. Imagine that financial firms are domiciled in one of two jurisdictions but operate in both, and in both currencies. Now imagine that the central bank of one of the jurisdictions says that it is prepared to lend to non-bank financial institutions, and that the other central bank is virtually barred, by legislation, from lending to non-banks. Does that mean that the first central bank would or should lend to the non-banks of the second country through their local operations? I have no idea, but it illustrates why, since the Governors issued their joint statement on LOLR during the Herstatt crisis in the mid-1970s, central bankers have needed some kind of consensus around what their policy is going to be in this area.

The point is that not only does central banking in each jurisdiction need regimes, but that given the internationalization of finance, those regimes --- whether for

LOLR, MMLR or, something I have not discussed here, macro-prudential policy --- need to be grounded, as far as possible, in common principles so that mutual comprehension, cooperation and even coordination are practically feasible.

<u>A troubling strategic interaction between central banks and fiscal authorities</u>

What I have been discussing is putting a framework around the functions that have fallen, once again, to central banks now that their role in preserving financial stability has been remembered and renewed. Designing those regimes is no small task. It took the best part of a quarter of a century to build decent monetary regimes for a post-Bretton Woods world. But I think that there is a deeper challenge.

A couple of years ago when my fellow panelist Raghu Rajan gave the first speech in remembrance of former BIS leader Andrew Crockett, he talked about central banks being 'the only game in town'. As he did so, there was an almost audible (and visible) groan of horror from the room. Mervyn King responded in more or less these words, “Well, if we’re the only game in town, I’m getting out of town”, which, since he was retiring shortly afterwards, was a credible commitment.

The big issue is: why might central banks be the only game in town? I think that things have developed in a way that leaves central banks in a difficult, one-sided strategic interaction with the fiscal authorities. Today’s monetary authorities typically not only have fairly wide powers, but obligations too: mandates with objectives. By contrast, fiscal authorities have almost unlimited capabilities (even in countries with a written constitution), but they have no obligations to do anything at all. Now imagine that something really bad happens and there’s a question of who is going to act. In effect, there is a sequence where the fiscal authority decides first and the monetary authority decides second. Now, the fiscal authority says, “We could perhaps make things better as the public finances are in good order, but there’s going to be a hell of a squabble in the party/legislative assembly and/or with the public. Best to sit on our hands. That will see us ok over the next few years, because we can be sure that the central bank will act.”

Without framing it in exactly that way, the BIS has expressed concerns about this dynamic, effectively saying that the world would be a better place if the central banks didn’t act (as much), since that would incentivize governments to pursue needed structural reforms or, some would add, provide fiscal stimulus (or both). But the difficulty with that argument is that given central banks' statutory mandates, it would be contrary to the rule of law and against the deepest principles of democracy for the central banks to sit on their hands and let a deficiency in total spending (excess capacity) drag inflation down to persistently below its target.

I think Raghu's concerns about international spillovers from advanced-economy monetary policy, and likewise Jeremy Stein's concerns about persistently easy monetary policy fueling a stability-threatening search for yield within the domestic financial system, can be seen in this light. Although, so far as I know, neither of them has put it this way themselves, these arguments can be seen as suggesting that there should have been a different macroeconomic policy mix: more fiscal stimulus and less monetary stimulus, which would plausibly have resulted in steeper yield curves and different exchange rates, dampening both the internal search for yield and the cross-border carry trade. But the strategic interaction I have described makes that hard to achieve if politicians foresee short-term political costs to their acting and central banks have obligations flowing from statutory objectives.

So here is the *grand dilemma of central banking*. On the one hand, in the interests of efficiency and of democratic legitimacy or, more prosaically, in order to avoid accusations that they have overreached themselves, central banks need clear regimes, with objectives for all of their functions. On the other hand, the articulation of regimes with objectives exacerbates the strategic interaction with the fiscal authorities, leaving them as the only game in town.

This problem is not going to get solved in short order. The underlying driver is not society setting central banks an objective. It is the absence of objectives for the fiscal authority. There should be no retreat from articulating objectives for central banks' re-vitalized financial-stability functions. Those objectives need to be combined with constraints. And it needs to be clear what happens when the normal boundaries are reached, and where the absolute *in-crisis* limits lie. A compelling candidate for an absolute constraint is "no lending to fundamentally insolvent firms", which would fit alongside "no monetary financing of government".

That project cannot be enough. Work towards refined and more complete regimes for central banking should be accompanied with renewed interest, amongst researchers and central banks themselves, in what a workable fiscal constitution would look like.

A final thought

I will conclude by drawing a comparison with other vital parts of the state delegated to technocratic experts.

It might be suggested that, like the military, central banks can live with under-determined mandates; that it should be understood that they must occasionally exercise discretion on a grand scale for the public good.

But this line of argument, which was aired in our exchanges today, overlooks a few things. While there is the deepest possible consensus that the military must be subordinate not independent, in order to protect society from their power, that has not been accompanied by equal clarity on who does what. In the post-WW2 world, there has in fact been an active debate --- amongst scholars going back to Samuel Huntington and recently amongst soldier-scholars such as Emile Simpson--- on where the dividing line should be drawn between civilian (political) control and military discretion. For example, was it okay, and sensible, for the President to choose which sites to bomb during the Vietnam War? Or, more recently, where as in Afghanistan mission success might depend on the hearts and minds of the local populations, should military commanders be involved in essentially political activities and will they be sufficiently sensitive to how that will play back home? And those questions arise when the military is meant *not* to be independent.

Or take the other part of the state long delegated to technocratic experts: the high judiciary, who are surely the epitome of truly independent power. The response of some, including prominent politicians, to recent (split) judgments by the US Supreme Court has been how important it will be to get the right appointments made in the coming years and, thereby, shift the balance of the Court.

Now, my concluding point is simply this: if the military and the judiciary, the canonical delegated powers established, tested and debated over hundreds of years, face these challenges and uncertainties, you can bet that the central banks --- recent kids on the block, in comparison --- will do so, too.

Regimes matter. Inevitably, the crisis revealed holes. As much work and thought is now needed as went in to monetary-policy regimes a generation ago.