The Warwick Commission on International Financial Reform: In Praise of Unlevel Playing Fields

Executive Summary

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This is not the first international financial crisis the world has seen. This tells us two things. First, in trying to prevent or dampen future crises, we must not focus too heavily on the specific character of the present crisis. We must focus on those factors that are common across financial crises. There will be a different financial innovation or product at the centre of the next crisis. Second, it is unhelpful to think in terms of increasing or decreasing the quantity of regulation. There is good and bad regulation. If elements of the current approach to regulation incentivised systemically dangerous behaviour, doubling up on existing regulation or spreading it more widely may make matters worse. While we doubt that financial crises can be prevented, we do believe strongly that policymakers, regulators and supervisors have the power to make them less frequent, shallower and with less spill over onto the welfare of ordinary households. The purpose of this report is to set out the regulatory approach that will help them do so across a variety of countries.

Micro and Macro-Prudential Regulation

Our primary objective is not more regulation but more effective regulation, more focused on the market failures it is there to address. The points of regulation must press against the points of market failure. One conclusion from this is that today's micro-prudential regulation, focused on individual institutions and instruments, must be strengthened and supplemented by macro-prudential regulation of the financial system. Such an integrated system is more than the sum of its parts. Macro-prudential regulation recognises the risks to the entire financial system posed by, amongst other things, the collective behaviour of financial institutions across the credit cycle and otherwise; the mismatch between risk-taking and risk capacity within the financial system and the failure of highly interconnected firms.

Micro-prudential regulation concerns itself with the stability of individual institutions and the appropriateness of individual instruments. Macro-prudential regulation concerns itself with the stability of the financial system as a whole. The prevailing approach to regulation in the run up to the crisis assumed that we can make the financial system as a whole safe simply by making individual financial firms and instruments safe. This sounds like a truism, but in practice it represents a fallacy of composition. In trying to make themselves safer, banks, and other highly leveraged financial intermediaries, can behave in a way that collectively undermines the system.

Where risks are endogenous to the financial system – where, for example, risks relate to the interdependence of institutions and their behaviour and perceptions – micro-prudential regulation will prove inadequate. Indeed, in certain circumstances, what seems to be sensible micro-prudential regulation can create endogenous risks.

An example of a simple micro-prudential regulation is a requirement that financial firms put aside substantially more capital if an asset they hold is rated as non-investment grade by an external credit rating agency. This sounds reasonable enough. But imagine an environment where an economic recession triggers a rating downgrade, which leads all holders of the asset to try and sell the same credit at the same time to avoid the higher capital requirement, which causes the credit price to collapse after the downgrade. This makes it harder for the issuer of the credit to borrow, which threatens its liquidity and then solvency, which in turn leads to a further credit downgrade and more selling. This turmoil triggers risk management systems to recommend that more capital be set aside against all credit risks, leading firms to sell other instruments at the same time to raise capital, leading to a general decline in prices, and increases in price volatility and correlation, which raises measured risk, twisting this vicious cycle further. This dynamic can turn a little local difficulty into a systemic crisis. In practice there can be a trade-off between micro-prudence and macro-prudence.

The Credit Cycle

A critical driver of endogenous risks is the credit cycle. If financial crises were driven by acts of mischief they would appear random in time, but they are not random; crashes always follow booms. The degree to which the credit cycle is a source of endogenous risk relates to the degree to which valuation, risk assessment and behaviour are driven by market prices. In the up-phase of the economic cycle, price-based measures of asset values rise, price-based measures of risk fall and competition to grow bank profits increases. Banks appear to be stronger, safer but facing threats to their profitability. Bank shareholders conclude that the bank is under-leveraged or over-capitalised. In such an environment financial institutions rationally respond by (i) expanding their balance sheets, taking advantage of the fixed costs of banking franchises and regulation; (ii) trying to lower the cost of funding by using short-term funding from the money markets; (iii) increasing leverage, and often all three. Those that do not do so are seen as being over-capitalised and are punished by the stock markets. Increasing leverage and expanding balance sheets puts a bid on asset prices pushing them up further, amplifying the boom.

When the boom ends, asset prices fall and short-term funding to institutions with impaired and uncertain assets or high leverage dries up. Forced sales of assets drives up their measured risk. Boom turns to bust. Banks look weak, risky and even less profitable than before.

Through a number of avenues, often in the name of prudence and sophistication, the role of market prices in valuation, risk assessment and behaviour has increased, intensifying the endogeneity of risk along the credit cycle. These avenues include mark-to-market valuation of assets. Regulators have taken to blaming the accountants for 'pro-cyclicality', but the blame can be shared more widely. Regulators themselves encouraged market-based measures of risk for capital requirements, such as credit default swap spreads in internal credit models or price volatility in market risk models; or external credit ratings, which tend to be correlated, directionally at least, with market prices.

Counter-Cyclical Regulation

Banking supervisors have always had the discretion to tighten regulatory requirements if they felt a firm's behaviour or all firms' behaviour posed additional risks. However, in reality their ability to utilise this discretion to get tough with the financial sector during a boom is limited by politics. Politicians are more likely to be re-elected if they prolong a boom rather than burst a bubble. Booms often lead to greater access to goods such as housing and the financing of large infrastructure, something politicians do not want to stop. In the early to middle part of a boom, the monetary authorities appear to have found the holy grail of non-inflationary growth, which boosts their credibility and they are reluctant to undermine that. And almost all booms have an element of real change afoot that makes it hard to discern accurately between what is sustainable and what is not. This is a point the financial sector will be quick to assert at the time. There is therefore little upside and much downside for the supervisor to announce that we are in an unsustainable credit binge that needs reversing. Consequently, it is our firm belief that in the area of macro-regulation, supervisory discretion has to be constrained by a rules-based framework so that supervisors can blame the rules as they try to take the punch bowl away when the party gets going.

We believe regulators should tighten capital adequacy requirements, leverage ratios and minimum liquidity requirements whenever they observe above-average growth of credit expansion as measured by a set of variables such as credit growth and output gaps. We recognise that the devil is in the detail. As a baseline, we find attractive an approach where Central Bankers and regulators agree beforehand on the degree of credit growth that is consistent with the long-run target, say inflation or nominal GDP, and then regulators tighten capital, leverage and liquidity requirements the more credit expansion exceeds this target, or else explain publicly why they are not doing so, providing constrained discretion. The purpose of this regulatory action is not to eliminate the economic cycle – and we do not have finely calibrated measures and instruments to do that even if we wanted to. Rather the aim is to ensure that financial firms are putting aside an increasing amount of capital and liquidity in a boom, when micro-prudential risk measures are suggesting that they can safely leverage or lend more. Capital and liquidity can then be released when the boom ends and asset prices fall back.

Risk Allocation

An equally problematic assumption at the heart of modern regulation is the erroneous view that there is a single thing called risk, and that it is inherent in the characteristics of an asset or financial instrument. Risk comes in more than one form. There are credit, liquidity, and market risks, for instance, and different parts of the financial system have different capacities to hedge each type of risk. Today, risk has as much to do with who is holding an asset as with what that asset is. The notion that there are 'safe' instruments to be promoted and 'risky' ones to be banned creates a false sense of security. You can do a lot of risky things with apparently safe instruments, like a mortgage. What matters is the risk inherent in behaviour.

To this end capital requirements need to be sensitive to an institution's capacity to hedge the kinds of risks it holds. Consider liquidity risk. Banks traditionally borrow from depositors who can withdraw their money tomorrow. Banks therefore have a limited capacity to hold assets that cannot be sold quickly without heavy discounting. Liquidity risk is more safely held by the likes of pension funds and insurance companies, which have long-term liabilities and often long-term funding that typically cannot evaporate overnight-retirement savings accounts, for instance, or insurance premiums.

The maturity mismatch can be thought of as the difference between the time it would take to sell an asset in a stressed environment and the remaining period before the holder of the asset has to find new funds to refinance the purchase of the asset if they cannot sell it beforehand. If we require firms to set aside capital for the degree of maturity mismatches it would incentivise those with the capacity to hold illiquid assets because, of their long-term funding, to do so. It would also incentivise banks to find more long-term funding and disincentivise them from increasing maturity mismatches in a boom when liquidity is under-priced. This requirement would have to

be formulated so as not to act pro-cyclically as liquidity conditions change across the cycle.

When it comes to credit risks, on the other hand, banks are in a better position to hedge effectively than pension funds. The process of making loans means they have much better information and understanding of credit and a greater access to different types of credit to diversify credit exposure.

To make the financial system safer is to encourage each type of risk to flow to where there is a capacity to hold it. Previously, regulation incentivised the opposite behaviour. By requiring banks to set aside more capital for credit risks, regulators encouraged banks to lay-off credit risks to non-banks who wanted the extra yield but had limited ability to hedge the credit risk. By not requiring banks to put aside capital for maturity mismatches, regulators incentivised banks to earn the liquidity premium by buying liquidity risks from insurers and pension funds and funding it in the short-term, even though they could not offset the resulting liquidity risk. By supporting mark-to-market valuations and short-term solvency and risk rules, regulators discouraged insurers and pension funds from holding the very liquidity risks they are best suited to hold. The result was a system that apparently had high levels of capital – in 2006, banks generally recorded far more capital than their minimum requirements – but was systemically extremely fragile.

To promote future systemic resilience we need to focus more on behaviour in the financial system and less on instruments and institutions. Instruments are not born with original sin, and if we ban one instrument without modifying the underlying behaviour, new instruments or new combinations of old instruments will quickly replace them. The objective of financial regulation should not be to hunt down risk and destroy it. Nor should it be to pile up sandbags of capital, leaving us only with behemoth banks that are too big to fail. At the very least, it should be to ensure that we are not getting in the way of different risks flowing to those parts of the financial system with a capacity for those risks. We could be more ambitious. Capital requirements that encourage risks to flow to those who have a capacity for it would allow the risk taking that is vital for economic growth while making the system safer. It will bring in new players with untapped risk capacities, lessening our dangerous dependence on a few banks that may appear well capitalised in a boom, but which hold risks they have little capacity to bear.

Systemically Important Institutions and Instruments

Apart from the credit cycle and the allocation of risk, another source of endogenous risk comes from the failure or fear of failure, of systemically important institutions, markets and instruments. Using system-wide stress tests, regulators can identify what is systemic and impose tougher capital and disclosure requirements on them. Conceptually this can be done by adjusting the micro-prudential capital requirements ratio by a coefficient corresponding to their macro-prudential risk. Systemically important institutions will balk at this special treatment, and regulators will likely end up using crude but transparent criteria of what is systemically important, such as size of balance sheets. This would still be better than making no distinction between the systemically important and the rest. There is need for a countervailing force against institutions becoming too big to be bailed out, or simply too politically influential.

Institutional Structure and Locus of Regulation

Macro and micro-prudential regulation require different skills and institutional structures. Where possible, micro-prudential regulation should be carried out by a specialised agency and macro-prudential regulation should be carried out by this agency in conjunction with the monetary authorities, as they are already heavily involved in monitoring the macro economy.

We believe that there should be a stronger connection between national social and economic interest and the financial sector. But while we believe that financing development, housing, education and health are legitimate goals of financial policy, we do not believe they should be advanced as part of prudential regulation. Mandatory reporting requirements can reasonably be used to acquire the information required for responsible credit creation as well as to monitor social implications

and to enforce non-discrimination rules. However, we recommend that governments assume those risks that are important to underwrite for social and economic reasons, or provide explicit subsidies, rather than use the banks to pursue social policy through the manipulation of regulatory definitions of risk.

Banks that operate in several countries present a distinct regulatory challenge. Currently, unless local banks are set up as independent subsidiaries, regulation and supervision are carried out in the 'home' country. Yet macro-economic conditions, capital market development and financial sector structures can differ substantially from country to country. Capital requirements designed to help iron out the credit cycle or to address mismatches in liquidity, credit or currency risk are not easily imposed by the home country regulator of international banks. Both cycle phase and risk capacities will typically differ between countries. For example, regulators in Latvia or Hungary may be far more concerned about the currency mismatch of local borrowing than their United States counterparts might be.

Consequently, while there must be greater information exchange at the international level, the locus of much banking regulation needs to be national. This does not preclude efforts to converge on common principles between countries or the regulation of global markets through central clearing, settlement and reporting rules. We suggest that national regulatory autonomy goes hand-in-hand with legitimate international cooperation on a wide range of issues.

Under the current 'home' country approach, international banks move capital around between branches. In quiet times this may be an efficient use of capital, but in stressed environments, capital may move for more dubious reasons, and with detrimental effects, including arbitraging government support. Within our proposed approach, each country would have the right to require foreign branches to become subsidiaries or whatever legal structure is necessary for them to impose local capital and other regulatory requirements, so that foreign-owned entities are able to withstand the failure of their foreign parent. We recognise that this creates opportunities for financial protectionism. International cooperation of national regulators should seek to avoid this. Foreign-owned subsidiaries should be subject to the same capital requirements as domestic banks.

We note that host country regulation will give developing countries greater policy space, allowing them to address the macro-prudential problems of volatile capital flows and currency mismatches of lending and borrowing. We are also conscious that in many countries, increased responsibilities of host country regulation will need to be supported by capacity building – a role that could be played by the multilateral institutions and/or new regional arrangements for peer review or coordination of regulation. Some regions with strong similarities may decide to act as the common host, which would deliver greater regulatory influence and capacity.

Regulatory Capture

This report puts a special emphasis on the underlying political economy factors that contribute to financial crises and frame the regulatory responses. Political economy issues are seldom discussed alongside the legal and technical 'nuts and bolts' of financial regulation, but in practice they cannot be separated. This is one of our main messages. Issues of, for example, the appropriate size of financial institutions or indeed of the financial sector, the trade-offs between macro-prudential and micro-prudential regulation, financial sector fragmentation, global or local regulation, counter-cyclical capital charges and loan-to-value limits are all important technical issues, but they also have distributional and power consequences and so they are deeply political.

We also suggest that one way to understand the current approach to banking regulation is to consider regulatory capture by large banks. Crises are generally macro; but regulation was primarily micro. And it was this micro focus that created regulatory costs that hit small banks the heaviest. Micro-prudential regulation acts as a barrier to entry into the financial sector, and so big banks are keener on it than many imagine. Instead of rewarding financial institutions for managing their risks well (results-oriented regulation) the current

system has rewarded those who have the largest databases of information and computer models of past default (process-driven regulation). Big banks can outspend small banks on process.

Instead of requiring systemically important institutions to hold more capital than others because their failure would have more acute systemic consequences, regulators were contemplating giving capital discounts to large institutions for the sophistication of their internal credit models. Instead of seeking to limit risk-taking to institutions that have a capacity for those risks, a key mantra of regulation, with little grounding in the economics of regulation, was the argument for a 'level playing field': that banks, despite their short term funding and national tax payer guarantee, should have equal access across all financial sectors and countries.

These and other features of the current approach to regulation disproportionately benefited large banks at the expense of the resilience of the financial system. Regulatory capture provides one possible explanation for such regulatory failure. The capture was intellectual. Many (though by no means all) regulators, central bankers and academics, genuinely thought that a financial system operating in what they viewed as efficient financial markets with a few institutions that were well capitalised against their individual risks, which transparently priced their risks against market prices and that used external credit ratings to transfer risks to a large number of non-banks, ensured financial stability. They were not unlucky; they were wrong. They were wrong in a way that could have been, and in some quarters was, predicted. We do not dwell on why these predictions were ignored, but recognise that policymakers and citizens need to consider how to address problems associated with regulatory capture.

Right-Sizing Finance: Too Big to Bail

One way to contain regulatory capture would be to limit the size of the financial sector. It makes little sense for large or mid-sized economies like the U.K., Switzerland, and the U.S. to be deriving 20 percent or so of their GNP from financial sector activities, when finance, like law and accounting, should be about facilitating economic investment, not being the investment itself. In a process similar to the 'Dutch disease', a bloated financial sector draws talent away from and prices-out productive sectors. A large financial sector is fed by short-term activity like the high turnover of leveraged funds and can draw interest away from the long-term savings and investment that is vital for the prosperity of households and economies. In crashes the negative externalities from a large financial sector are even worse and can destabilise the economy. A large financial sector may exert too much political influence on the bail-out. And the bail-outs of a bloated financial sector may be so large so as to force governments to slash discretionary spending that disproportionately impacts the more vulnerable.

Right-sizing finance also means right-sizing institutions. By focusing regulation on process, regulation has favoured larger institutions. Refocusing regulation on capacity will encourage smaller balance sheets and more specialised institutions. Taxes on financial transactions and additional capital requirements for large institutions are legitimate ways of trying to internalise social externalities onto bank behaviour.

Governance and Other Issues

The governance of financial firms, international financial institutions and the international financial architecture – like the world's currency arrangements – are critically important and we touch on them throughout this report. However, our views on these issues are well articulated elsewhere and we are comforted by the direction in which these discussions are heading. Consequently, we feel that little benefit would be gained and some distraction from our main messages would be risked by focusing on them here. Instead we focus on how we can regulate the financial system, locally and globally, to help avoid the kind of crisis we observe today. We feel that in this vital area there is a consensus that *something* must be done, but not on *what* must be done. This is where we can make our biggest impact.

Our Recommendations

Large international banks have promoted the idea of a level playing field in regulation between countries (home country regulation) and within countries (unitary regulators and

an end to 'Glass-Steagall' type segmentation of financial sectors). It seems heretical to argue against 'level playing fields', but in certain areas of finance, an unlevel playing field has merit. We need an unlevel playing field between countries as a result of the policy responses to economic cycles that are often less synchronised than they appear. We need to tilt the playing field within countries to reflect the unlevel capacity of financial institutions for different types of risk and to help risks flow to where they are best matched by risk capacity. We need a financial system that is robust to shocks, and that requires diversity, not homogenous behaviour derived from the blanket application of the same rules and standards on valuation, risk and trading. An unlevel playing field between countries is also desirable so as to best take into account different national political priorities, financial structures and institutional capacities.

The Commission recommends the following five key policy reforms in the Report:

1. Regulation needs to be formally more counter-cyclical, to offset the endogeneity of risk that arises from the credit cycle. Capital requirements, leverage ratios, maximum loan-to-value ratios must be tightened in the boom and loosened in the crash within a rule-based framework.

2. Risk-taking must be matched to risk capacity for the financial system to be resilient. One way to achieve this is through capital requirements for maturity mismatches (administered in a manner to avoid pro-cyclicality).

3. Regulators must have the flexibility to apply tighter regulatory requirements on systemic institutions, instruments and markets. Regular system-wide stress tests should help to identify what is systemic.

4. Greater emphasis must be placed on host country regulation within a more legitimate system of international cooperation. Host country regulators must be able to require foreign and domestic banks alike to keep local capital against local risks. Accountable global institutions should coordinate host country regulations, share information and lessons in order to improve regulatory effectiveness and limit regulatory arbitrage, and regulate market infrastructure for global markets such as single clearing and settlement houses. They should also be engaged in capacity building for countries with less developed financial systems.

5. Incentives for the financial sector and for financial firms to grow in size and influence, and to concentrate on short-term activity, must be offset, perhaps through additional capital requirements for large institutions and financial transaction taxes.