

Global dimensions of Banking Regulation

by Vítor Constâncio at the Workshop on “The Governance of International Banking: Regulation for crises, past and future” included in the “The Transformation of Global Governance Project”, Milan 12th September 2018.

I thank the Organizers for inviting me to speak at this event, included in the very topical project on the Transformation of Global Governance. There are certainly several drivers behind the idea of this project. The first, is the concern about the potential fragmentation of the multilateral system of international governance that has been built up after 1945. The fears stem from the present disturbing US policies, the emergence of new powers, especially China, and the growing relevance of populist nationalism as the backlash to the crisis and the excesses of globalisation. These tendencies have been historically the harbinger of global disasters.

The deep geo-political change induces a second motivation for our general subject, as it simultaneously increases the need for cooperation but also adds to the complexity of getting consensual decisions on all kinds of domains. Multipolarity increases the heterogeneity of interests, the intricacy of new problems generates institutional inertia, the whole process leading to what David Held and co-authors characterised as gridlock in international cooperation.¹

However, I see gridlock not just as a difficulty to act but rather as an incapacity to provide appropriate responses to the problems that now beset the world, our democracies, and a liberal multilateral system. The system cannot be protected without significant changes, correcting flaws that became more apparent after the Big Recession: extreme inequalities in advanced economies; more intrusive trade agreements intruding too much on national social contracts; financial instability generated by the ever-increasing role of finance; environmental damage.

There were many warnings about the potential socio-political consequences of hyper-globalisation, beyond the benefits of higher economic efficiency. In 1996, Ralf Dahrendorf wrote about the contractor

¹ See Hale, T., Held, D, and K. Young (2013) “*Gridlock: why global cooperation is failing when we need it most*” Cambridge: Polity Press; and Hale, T., Held, D, (ed) (2017) “*Beyond gridlock*” Cambridge: Polity Press.

trinity of competitiveness, social cohesion and freedom and foresaw that “A new authoritarianism may indeed be the main challenge to liberal democracy in decades to come.”² In 1997, Rodrik published his first book expressing concern with “...making globalization compatible with domestic social and political stability”³ and introduced his globalization paradox in 2011, exploring the incompatibility between deep global integration, democracy and national sovereignty”⁴. Already in 1988, on the pages of the magazine *Foreign Affairs*, and later in some scholarly papers, Jagdish Bhagwati, a staunch defender of free trade and globalisation, railed against the excessive instability of free capital movements that did not have the same theoretical justification of free trade and were more an ideology of the “Wall-Street / Treasury complex” as he put it⁵. In 2004, Paul Samuelson published a paper demonstrating with impeccable theory, that a productivity jump by a less developed country, China, could generate trade effects negative to an advanced economy, the US, showing that free trade may lead to some country losses, beyond the well-known losers and winners within each country. In a spirited answer to the critics who worried about his supposed apostasy on free trade, Samuelson concluded that “It may be of interest that none of my chastening pals expressed concern about globalization’s effects on greater inequality in a modern age when transfers from winners to losers do trend politically downward in present-day democracies.”⁶

These and other warnings were not heeded by many ruling establishments, including in our profession, blinded by the gains in economic efficiency and general growth, the spectacular decline of poverty in emerging countries and the illusory hopes on pure trickle-down distribution in advanced economies. The consequences are now being felt in the spreading of populism in an increasing number of democracies and widespread divorce between populations and expert

² In a speech at the British Academy in 1996, included as chapter 7 in the book “*After 1989: morals, revolution and civil society*” MacMillan Press, 1997.

³ Rodrik, Dani (1997) “*Has globalization gone too far?*”

⁴ Rodrik, Dani (2011) “*The globalization paradox: Democracy and the future of the world*”, WW Norton & Co. ; see also Rodrik, Dani (2018) “*Straight talk on trade: ideas for a sane world economy*” Princeton UP

⁵ Bhagwati, J. (1988) “The Capital Myth: the difference between Trade and Widgets and Dollars” in *Foreign Affairs*, Vol 77, no 3; see also Bhagwati, J (2002) “Globalization and appropriate Governance” UNU/Wider Annual Lecture

⁶ Samuelson, P.A. (2005) “Response to Dixit and Grossman” in *Journal of Economic Perspectives*, *Journal of Economic Perspectives* Vol 19, no 3; see the original article in Samuelson, P.A. (2004) “Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization” in *Journal of Economic Perspectives*, vol 18, no 3, Summer of 2004

elites. The global system of governance was not able to address the identified risks and challenges, continues to be unprepared to correct flaws and steer a more intelligent inescapable globalisation.

Fortunately, I don't have to dwell on these big subjects today, as my remit is much narrower, centred on financial regulation, particularly on banking. International standards and governance for finance and banking developed over the years into a complex network of institutions with different degrees of independence, sometimes with some overlapping competences. Some of them are even private, like the IASB in accounting or ISDA in derivatives contracts. What they produce is some form of soft law, made of standards and recommendations, and expect compliance via legislation transposition by different jurisdictions or simply voluntary implementation. The public institutions of the network decide by consensus and are involved in a diplomatic game subject to significant asymmetries of international power and a relevant role played by the big private institutions that are addressees of the regulations and are part of the domestic politics that interacts with the diplomatic negotiations, as theorised by Robert Putman (1988) ⁷.

This multilateral system evolved with the growing internationalisation of finance and the occurrence of disturbances that triggered waves of regulatory initiatives. In Banking, it started modestly in 1972 with the creation of the Groupe de Contact, followed quickly by the Basel Committee in 1974, formed by the G10 on the wake of turbulences in exchange rates and banking markets with the failure of the German bank Herstatt. The Concordat, signed in 1975, focused in matters of supervisory guidelines for subsidiaries and branches of international banks. The Basel I Accord emerged in 1988, following the Latin American debt crisis and the S&L disaster in the US. Both created the need and the domestic pressure for higher capital for American banks and Basel was used by the US to generalise the additional requirements internationally and ensure a level playing field. This logical pattern of the influence by the financial hegemon, usually seconded by the UK, has been repeated in other instances. The outcome was, nevertheless, a compromise, as the US had a preference for a leverage ratio but had to accept a risk weighted capital ratio solution.

⁷ Putman, R. D. (1988) "Diplomacy and domestic politics: the logic of two-level games" in *International Organization*, vol 46(3) 639-64

Basel I was crude and created incentives for banks to go for riskier assets with the same capital charge and to take off assets from the balance-sheet, spurring securitisation in the early 90s. Developments of risk management, particularly the invention of Value-at-Risk (VAR) modeling led to the major victory for the industry of convincing regulators to include it in the 1996 Market Risk Amendment to Basel I. VAR is not even a good measure of risk, as it says little about the amount of losses. Assuming normality and the principle that a reliable estimation requires at least 30 observations per parameter, the introduced rule of a capital charge 3 times the VAR for a horizon of 10 days at the 99% percentile, implies for statistical reliability, the existence of 109 years of data that are obviously not available ⁸.

As capital ratios were decreasing, in 1998, the Basel Committee announced a new Accord to substitute Basel I, to promote “safety and soundness” of banks, stating that the new regime would keep at least the same capital as with Basel I and would ensure “competitive equality” of treatment. In the end, the powerful lobbying by industry through the IIF, ISDA, ICMA, ISLA and other industry bodies, influenced the final outcome in two important ways: first, the introduction of internal models to assess also credit risk, reserved in practice for the big banks that could build them; second, an exceptionally low risk weight for securitizations and the elimination of an initial proposal for an explicit capital charge for credit derivatives risk ⁹. Consequently, the 4th official QIS estimated that the Advanced-IRB banks would have a median reduction of 31% and 5th QIS showed a 26.7% average capital reduction for Advanced-IRB banks and an increase of 1.7% for banks on the Standardised Approach, in stark contrast with the initial announced objectives ¹⁰. Basel II was an egregious example of regulatory capture by the big credit institutions.

⁸ At 1% occurrence probability, one day horizon event occurs 3.65 times a year; so, to have 30 observations, 10.95 years; for a ten days horizon that means 109.5 years, as pointed out in Brown, Aaron (2012) “*Red-blooded Risk: the secret history of Wall-Street*” John Wiley & Sons. Aaron also explains that while since 1980 GDP almost doubled but financial business quadrupled and the additional capital needed for that did not come from more invested savings but from “capital creation” by re-defining it in terms of risk-based assets value (see page 348).

⁹ See Lall, R (2012) “From failure to failure: the political economy of international banking regulation” in *Review of International Political Economy*, 19:4 609-638. See another critical view of Basel II in Tarullo, Daniel (2008) “*Banking on Basel: the future of international financial regulation*” Peterson Institute for International Economics.

¹⁰ Lall, R. (2012) *ibid*

Despite its limitations, concluded in 2005, the new standard had little time to start before the financial crisis came to change everything. Even so, Basel II was not fully applied, in the US by absence of timely legislation and in Europe because subtle interpretations allowed jurisdictions not to apply the output floor of 80% of the Standardised Approach capital calculation, defining a maximum deviation of 20% that could result from using internal models, an issue that would beset the negotiations to finalise Basel III.

I went through this brief historical detour, to illustrate some of the conditions surrounding the production of multilateral standards and regulations. Naturally, the financial crisis, triggered a major new effort to step up financial regulation. The standards already approved and implemented, although positive in general, are below what was initially expected.

The new capital requirements for high quality capital for loss absorption were on the low side and part of them even in the form of a buffer, supposedly to be depleted in stressful situations. Adding the 2.5% conservation buffer, the total common equity requirement was set at 7%. The leverage ratio was finally fixed at just 3% of Tier 1 capital, allowing a multiplier of 33 times that capital. Fortunately, market pressure and the use by supervisors of the SREP and Pillar 2, led to the present situation of a common equity capital ratio on average of 14% in the euro area. Recall that 7% was precisely the average ratio in 2007 for the euro area banks. Significantly, the leverage ratio has also been increasing and the average for euro area banks is now above 4. Before the crisis, the extraordinary expansion of the financial sector was not enabled by savings invested in the capital of financial institutions but mostly by a redefinition of risk capital and its endorsement by regulators. A few significant European banks had a leverage ratio (equity over total assets) of just 1.5% to 2% while capital ratios were well above the regulatory minimum of 8%. The “magic” of internal models to calculate risk weights in regulatory capital explains the difference, although the low leverage ratio meant that a loss of 3% of total assets would wipe out banks’ capital.

Resistance to the new standard was, nevertheless, fierce. The IIF published a study in 2010 with the conclusion that a 2 percentage points increase in the capital ratio would induce a 3.1 loss of GDP in the euro area. A justified level of capital between 15% and 20% has been the conclusion of numerous papers in academia or in central banks: Miles et

al (2011)¹¹, Brooke et al (2015),¹² William Cline (2017)¹³, Morris Goldstein (2017)¹⁴ or Firestone et al (2017) from the FED showing that even considering the protection of TLAC, the optimal range of the capital ratio lies between 13 % and 25%¹⁵.

The same pattern of resistance manifested itself in relation with the two new liquidity ratios. In the end, the LCR was weakened but the NSRF essentially resisted and played already a role in the reduction of the credit/deposits ratio of European banks from 144% in 2007 to 116% today. In the deciding period about the two ratios, what we heard from the industry referred to the impending catastrophes if the standards were approved. Both are nowadays complied with without any upheaval.

Regarding the too-big-to-fail problem, the series of adopted measures were more consensual: the prohibition of public bailouts in Dodd-Frank and the BRRD; the G-SIB surcharge; the TLAC or higher MREL in the EU; the streamlined cross-border bank's resolution. This last point is in a state of flux with details about implementation among major jurisdictions still to be finalised. For instance, the somewhat ambiguous changes introduced by the US in its Orderly Liquidation Authority, created some doubts about the single point of entry regime. The remaining concern is that the framework may not be appropriate to deal with general financial crises like the one we just had, when the problem is the existence of too-many-to-fail banks. Examining the history of crises, it is hard to avoid the conclusion that such situations require public intervention to backstop liabilities and recapitalise the system. Exceptional interventions that were carried out in the crisis are, however, no longer legally possible in several jurisdictions.¹⁶

¹¹ Miles, D., J. Yang and G. Marcheggiano (2011), "Optimal bank capital", *Bank of England, External MPC Unit, D.P.No. 32*.

¹² Brooke, M., O. Bush, R. Edwards, J. Ellis, B. Francis, R. Harimohan, K. Neiss and C. Siebert (2015), "Measuring the macroeconomic costs and benefits of higher UK bank capital requirements" *Bank of England Financial Stability Paper 35*.

¹³ Cline, W. (2017), "The right balance for banks: theory and evidence on optimal capital", *Peterson International Institute of Economics*.

¹⁴ Goldstein, M. (2017), "Banking's final exam: stress testing and bank capital reform", *Peterson International Institute of Economics*.

¹⁵ Firestone, S., A. Lorenc and B. Ranish (2017), "An empirical economic assessment of the costs and benefits of bank capital in the US", *Finance and Economics Discussion Series, Federal Reserve Board, Washington, D.C., No. 2017-034*.

¹⁶ For the U.S. see Geithner, T. (2016), "Are we safer? The case for strengthening the Bagehot arsenal", *Per Jacobson Lecture at the 2016 Annual Meetings of the IMF and WB*. See also Bernanke, Geithner and Paulson in the NYT "What we need to fight the next financial crisis" at <https://www.nytimes.com/2018/09/07/opinion/sunday/bernanke-lehman-anniversary-oped.html?smid=tw-nytopinion&smtyp=cur>

Other reform domains were treated in a much lighter way. For instance, the one related with the so-called shadow banking, whose role was in the crisis greatly depended from the use of securitisation, repos and OTC derivatives. The creation of inside liquidity by repos was important for the funding of the housing bubble¹⁷.

The crisis itself made securitisations and repos shrink significantly. In the U.S., broker-dealers changed into banks, making the shadow banking sector smaller. Post-reform, securitisations became less attractive being now subject to higher capital charges, securities vehicles were consolidated with bank sponsors and repos and some OTC derivatives have moved to central clearing, which leaves the still unresolved issue of CCPs safety and resolution. The overall progress in reducing risk in STFs and derivative markets has been significant but might not be enough. No effective regulations prevent the expansion and misuse of those instruments in any future euphoric episode. The recent recommendations by the FSB regarding the re-hypothecation and re-use of securities in repos are in my view not sufficiently far-reaching.¹⁸ Concerning the use of margins and haircuts, the FSB recommendations to introduce minimum initial levels are also quite narrow: they exclude sovereign paper and transactions between regulated institutions and apply only to non-centrally cleared operations. Going forward, more may have to be done. Setting minimum margins and haircut floors would limit the build-up of leverage and reduce the procyclicality of current margin and haircut setting practices.¹⁹

Furthermore, the policy recommendations by the FSB to address vulnerabilities arising from asset management activities are also too soft. They cover guidelines for the sector and reporting and monitoring but not real new powers for supervisors. They refer to liquidity mismatch between fund investments and redemption terms, operational risk,

¹⁷ See Bayoumi, T. (2017) *ibid*, page 73.

¹⁸ See Financial Stability Board (2017), "Non-cash collateral re-use: Measure and metrics", Policy Report and Financial Stability Board Policy Report (2017), "Re-hypothecation and collateral re-use: Potential financial stability issues, market evolution and regulatory approaches".

¹⁹ See Constâncio, V. (2016), "Margins and haircuts as a macroprudential tool", remarks at the ESRB international conference on the macroprudential use of margins and haircuts, 6 June 2016 available at <https://www.ecb.europa.eu/press/key/date/2016/html/sp160606.en.html>; see also Constâncio, V. (2017), "Macroprudential policy in a changing financial system", remarks at the second ECB Macroprudential Policy and Research Conference, 11 May 2017 available at <https://www.ecb.europa.eu/press/key/date/2017/html/ecb.sp170511.en.html>

securities lending activities and leverage reporting by investment funds, including synthetic leverage built up usually with OTC derivatives. Leverage requirements for investment funds, already partially introduced in Europe, represent an important point.

The final aim should be to extend LR requirements to a broader set of financial institutions as recently proposed by Dirk Schoenmaker and Wierts (2016).²⁰ That should include the risks posed by synthetic leverage from the use of derivatives.

Another aspect to highlight is that the whole set of reforms has taken a long time to be approved and it is still far from implementation. In Europe, the Leverage Ratio, the NSFR, the Fundamental Review of the Trading Book are included in the revisions of the CRD /CRR, expected to be approved until December. The package related to the finalisation of Basel III has yet no proposal for transposition and includes: the treatment of Operational Risk; the new Standardised regime of risk-weights for credit risk; the revision of the Credit Valuation Adjustment (CVA) in derivatives; the important revision of the Internal Models for credit risk and finally, the overall output floor of 72.5% binding the effect of using internal models which is to be gradually introduced until 2027! All the other points I just mentioned are entering into force only in 2022 or 2023. This delay of many years since the crisis to conclude the new regulatory regime resulted from institutional and political gridlock and has created a lot of uncertainty affecting banks' behaviour. It also generated so-called reform fatigue and opened the door to continuing pushback against regulation.

After the change of Administration in the US, the expectation was that some backtracking in regulation would happen. This risk has not disappeared, and international weakening or fragmentation may still develop. However, so far, divergences of regulatory implementation have not been very significant. In assessing the first round of transpositions of Basel III, the Basel Committee considered that the US was largely compliant and the EU not compliant for two reasons: first, for allowing banks that have adopted the IRB (internal models) to use

²⁰ A convincing argument for a wide application of leverage ratios can be found in Schoenmaker, D. and P. Wierts (2016), "Regulating the Financial Cycle: An Integrated Approach with a Leverage Ratio", *Duisenberg School of Finance - Tinbergen Institute Discussion Paper, TI 15- 057 / IV / DSF 93*. The risks from synthetic leverage have been outlined in ECB Financial Stability Review (2015) "Synthetic leverage in the investment fund sector" Box 7, May. See also V. Acharya (2014), "A Transparency Standard for Derivatives," in *Risk Topography: Systemic Risk and Macro Modeling*, M. Brunnermeier and A. Krishnamurthy (eds), Chapter 6.

zero risk weights for credits to the public sector and reduced weights for SMEs; second, for the exemptions of a capital charge resulting from the CVA (Credit Valuation Adjustment) on certain derivative transactions with public entities and non-financial corporations.

This year, two Reports from the US Treasury and some initiatives in the US Congress (The Choice Act), pointed to possible significant changes, regarding the Leverage Ratio (reduction and exemption for Sovereign Bonds and repos), the LCR, the NSFR, the market risk rules (FRTB) and the possible of the OLA (Orderly Liquidation Authority). In the end, the changes approved by the US Congress were much softer, namely, some exemptions for small and community banks as well as the increase from \$50 to \$250 billion the threshold for the enhanced supervisory regime, although the FED was granted the power to make justified exceptions. Later, the Leverage Ratio was reduced to big banks (G-SIBs) by replacing the current 2% leverage buffer add-on with a leverage buffer set at 50% of each firm's G-SIB risk-based G-SIB surcharge; reducing the current 6% threshold for covered insured depository institutions (IDIs) that are subsidiaries of G-SIBs to 3% plus 50% of the G-SIB surcharge. At the same time, the methodology of stress tests was softened. It seems strange to introduce these changes at the peak of the cycle, facilitating expansion even further, but even after these modifications the US is still compliant with the Basel standard of just a 3% LR.

In Europe, the texts under discussion for final approval of the revised CRD IV / CRR contains several differences from the Basel III text, concerning the LR, the NSFR and the FRTB, deviations that were opposed by the ECB in its public opinion ²¹. In the LR case, these refer to the exemptions for inter-group exposures, for pass-through exposures of regulated savings, for export credits and the initial margin for derivative exposures related to client clearing. The NSFR proposals also comprise four signalled deviations whereas the FRTB issues are basically related to the proposed transition regime. Hopefully, not all these deviations will remain in the final text and their material impact on banks' prudential ratios will have to be carefully assessed. I believe that we can conclude that the risks of regulatory fragmentation foreseen since last year have, overall, not materialised.

²¹ See OPINION OF THE EUROPEAN CENTRAL BANK of 8 November 2017 on amendments to the Union framework for capital requirements of credit institutions and investment firms, at https://www.ecb.europa.eu/ecb/legal/pdf/en_con_2017_46_f_sign.pdf

There are several reasons why financial regulation seems less prone to divisions than we see happening in the trade or environment fields. In an interesting paper, Young and Pagliari (2015)²² analysing quantitatively the reactions of the regulated sector to regulatory consultations in energy, pharmaceuticals, agriculture, telecommunications, and finance, find clear evidence that the unity of views and preferences is higher in finance than in all the other sectors. This is related with the wider reaching of finance as an economy infrastructure and the weakness of the intervention of outsiders lobbying about financial regulation with different objectives.

I think we could also add the view that financial products are some sort of club good, where the group of suppliers and owners share mutual benefits, making several characteristics of these goods only collectively excludable. This feature of not being pure private goods, highlighted among others by Selmier (2014) and Cerny (2014)²³ partially elucidates the unity of lobbying positions and explains why there are many examples of self-regulatory associations in the sector. This sometimes facilitates regulatory compliance, as peer pressure and the threat of ostracism exerts some degree of discipline. Nevertheless, as Cerny (2014) puts it "... from a political economy perspective, finance goods, like many other club goods, are provided not according to the logic of market efficiency, but rather that of market control and manipulation". This angle links well with the criticism of the market efficiency hypothesis by Dimitri Vayanos and Paul Wooley (2008)²⁴ and the Wooley (2010) analysis of rent-seeking and principal-agent problems that "... do a good job of explaining how the global finance sector has become so bloated, profitable and prone to crisis"²⁵ Some of his recommendations to mitigate these features are the wider use of GDP-

²² Young, Kevin and S. Pagliari (2015) "Capital United? Business unity in regulatory politics and the special place of Finance" in *Regulation and Governance* and also available at City, University of London Institutional Repository <http://openaccess.city.ac.uk/12093/1/Young%20and%20Pagliari%20-%20Capital%20United%20~%20Forthcoming%20in%20RegGov.pdf>

²³ W.T. Selmier II (2014) "Why club goods proliferated in investment finance"; P.G. Cerny (2014) "Rethinking financial regulation: risk, club goods and regulatory fatigue". Both texts are chapters of the book edited by Thomas Oatley and W. Kindred Winecoff "*Handbook of the International Political Economy of Monetary Relations*" Edward Elgar, 2014.

²⁴ Vayanos, D. and P. Wooley (2008) "An institutional theory of momentum and reversal", The Paul Wooley Centre for the study of capital market dysfunctionality wp n. 1

²⁵ Paul Wooley (2010) "Why are financial markets so inefficient and exploitative – and a suggested remedy" Chapter 3 of the book by Adair Turner and others (2010), *The Future of Finance: The LSE Report*, London School of Economics and Political Science.

linked bonds, the recognition that mark-to-market accounting is inappropriate when pricing is inefficient, and that “ ... regulators should not automatically approve financial products on the grounds that they enhance liquidity or complete markets”. I would add to this list the overhaul of housing finance to further reduce the risks of funding mortgage credit with short-term deposit liabilities. Many ideas have been put forward to change this²⁶ including tilting even more the NSFR to correct that bias; encouraging securitisation with low maturity transformation; creating a new type of financial institutions specialised in mortgages or, introducing a new type of mortgage contract that would have more equity participation by lenders in exchange of sharing the returns of appreciating housing prices, proposed by Mian and Sufi in “House of debt”.²⁷

Housing credit has been growing steeply in importance for banks in most jurisdictions over the past decades, as shown by Jordá, Schularick and Taylor (2016) in their paper “The great mortgaging”.²⁸ . In 17 developed countries, the weight of real estate bank lending in total credit increased from 25% of GDP in 1980 to 69% in 2010. As they highlight: “ ... the core business model of banks in advanced economies today resembles that of real estate funds” They also show how mortgage credit has shaped the business cycles in the last decades, has created financial instability and contributed to slower recoveries associated with high household debt. It is, therefore, odd that the issues of housing finance have not been addressed by regulators and policy makes in different ways. Macroprudential policies, like Loan-to-value or (better) Debt-to-income, help to mitigate the risks but they still confront great resistance in being used and may not be sufficient.

Let me add a brief reference to the institutional framework that organises the governance of production and enforcement of financial regulation. The big changes, after the crisis, were the strengthening of the G20 political role at the top of the process and the transformation of the FSF into a Financial Stability Board that, however, was never given the competences to become the fourth pillar of the global economic architecture in charge of financial regulation announced by the US Treasury Secretary. It has now the coordinating role in preparing G20 decisions, working with several standard setters, and issuing

²⁶ See Goodhart, C. and E. Perotti (2017), “Containing maturity mismatch”, *VoxEU*.

²⁷ Mian, K. and A. Sufi (2014), “House of debt”, *University of Chicago Press*.

²⁸ Jordá, O., M. Schularick and A. Taylor (2016), “The great mortgaging: housing finance, crises and business cycles”, *Economic Policy* Vol 31, n. 85.

recommendations about financial institutions not covered by the Basel Committee. Initial overlaps with the IMF have been streamlined and settled, with the IMF keeping his dominant role in analysing financial stability through country FSAPs and the compliance reports concerning the implementation of Standards and Codes. I do not think that it is worthwhile to consider changes in the international Institutions roles and competences about financial regulation.

Summing up, progress was made in stepping up regulation to make the system safer but, despite the big financial crisis, no deep structural change was introduced to properly tame finance and debt, making the system prone to new crises.