THE G20'S PERFORMANCE IN GLOBAL FINANCIAL REGULATION

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I INTRODUCTION

One of the most important decisions this century was that taken by the Group of Seven ('G7') when it decided, in 2008, that it had neither the right nations at the table, nor the moral authority, to craft a credible response to the global financial crisis ('GFC').[1] The first meeting of the Group of 20 ('G20') leaders took place in Washington DC in November 2008, but it was not until the Pittsburgh Summit in September 2009 that it was formally agreed that the G20 would henceforth be 'the premier forum for our international economic cooperation.'[2]

Before 2008 the G20 was a meeting of finance ministers and central bank governors that had itself been established in 1999 as a response to the Asian financial crisis of 1997 and 1998. The decision to pass directional control of the global economy to the G20 saw the G20 upgraded into a leaders' meeting. While the membership of the G20 is not precisely what one would craft, if starting with a fresh slate, it is nonetheless many times more representative than the G7 and has at the table the essential participants such as Brazil, China, India, Indonesia, South Africa and Turkey. The G20 then promptly created a major problem for itself by doing a rather splendid job of responding to the crisis. Perhaps, most

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1 George W Bush, 'President Bush Meets with G7 Finance Ministers to Discuss World Economy' (Speech delivered at G7/8 Finance Ministers Meeting, Washington DC, 11 October 2008) <http://www.g8.utoronto.ca/finance/fm081011-bush.htm>.

2 G20 Leaders, *G20 Leaders Statement: The Pittsburgh Statement* (24–25 September 2009) G20 Information Centre, [19] <http://www.g20.utoronto.ca/2009/2009communique0925.html>.

essentially, this more representative organisation was able to persuade the world that someone, at least, was somewhat in charge of proceedings and this sense of security went a long way toward preventing what could have been a disastrous collapse in confidence globally. The general applause that the G20 won for its actions in the initial two years in response to the crisis promptly created expectations that have proven, somewhat predictably, virtually impossible to fulfil.

This article seeks to assess how well the G20 has performed over the five years since the crisis. The next section seeks to sketch out an assessment of the G20's performance in improving the global financial regulatory machinery thus far. The third section examines the fundamental changes in the global financial system in the past 40 years, and the fourth explores the reforms the G20 might have introduced had it been seeking to respond fully to these fundamental changes. In the fifth section the paper concludes.

To leap ahead, and make a long story short, assessing the G20's performance inside a conventional framework for thinking about such matters, I would give it an A- for its ideas, and a C- for implementation so far, resulting in an overall grade of a B. To be fair to the G20, the principal implementation agencies for its ideas are national governments, and this explains much of the glacial slowness of implementation of many sound initiatives.

The awarding of such a high grade for the ideas is very much a contextual exercise undertaken with a nuanced appreciation of just how difficult major financial regulatory initiatives are to implement at any time and how the history of international regulation has been dependent almost entirely upon severe crises to provide the trigger and impetus for action. For instance, the United States ('US') needed the Great Depression of the early 1930s to give itself a new regime of securities regulation, and the world needed the Latin American and African debt crisis of 1982 to terrify leaders and banking regulators in North America and Europe into agreeing to the first iteration of the Basel Accord.

Measured by conventional levels of achievement in national and international regulation, the G20 has thus done quite well. However, measured against how the financial system has changed in the past 40 years, the G20's performance is more problematic. You may well ask why I am measuring the G20's reforms as a response to the fundamental, systemic changes in the international financial system of the past 40 years when the G20 was merely responding to the GFC, and not thinking beyond that crisis. The answer is that if we are to avoid future global financial crises, in my view, we need to start to respond to how the international financial system has changed so fundamentally in the past 40 years, and the G20 is the best placed organisation to take up that challenge. If the G20 limits itself to responding merely to the latest crisis, the latest major global crisis will never be the last severe one.

The world of banking has changed profoundly in the past 40 years, but because the changes have been incremental, few people appreciate their scope and scale. If reforms undertaken thinking inside the square prove sufficient to give us stable and efficient banking systems, then the G20 has performed well and deserves at least that B grade. However, the massive changes in what banks do, and who works within them, in the past 40 years are two factors that lie at the heart of the GFC. The world of banking has changed fundamentally. Banking is a different industry than it was, and radically new and different approaches to its regulation are required. If I am right on this, then we need fundamentally different reforms, which the G20 has not delivered and so in this context the G20's efforts earn it a D.

If I am right, the reforms of late will prove insufficient and we will have further massive global financial crises. I hope I am wrong.

II THE G20 RESPONSE AS A CONVENTIONAL RESPONSE TO A CONVENTIONAL CRISIS

The first meeting of the G20 leaders took place in Washington DC in November 2008. The purpose of the meeting was to create an action plan to stabilise the global economy and to prevent future crises. To this effect, the leaders agreed upon three key objectives: restoring global economic growth, strengthening the international financial system and reforming international financial institutions.[3]

The G20 leaders met five times between 2008 and 2010, and have since met on an annual basis. During this period, the G20 has initiated a wide range of financial reforms, all of which are at different stages of implementation. Monitoring the national realisation of the reforms is the Financial Stability Board ('FSB'), which was established as the successor to the Financial Stability Forum in April 2009.

The sheer number of regulatory measures, the interconnectedness of many of the reforms, and the fact they are ultimately implemented at a national level makes assessment of individual measures difficult. Many of the reforms are yet to be fully implemented, or even fully developed, for example, the Global Legal Entity Identifier System. Nevertheless, a number of key reforms have been, or should soon be, successfully adopted into the legislation of a number of jurisdictions.

A Revised Capital Adequacy Rules: Building Resilient Financial Institutions

The severe stress experienced by the banking system during the GFC was due to the failure of many banks to manage themselves prudently.[4] As a result, one of the key aims of the G20 leaders has been to improve banks' resilience to financial and economic shocks through enhanced capital and liquidity

3 G20 Leaders, *Declaration of the Summit on Financial Markets and the World Economy* (15 November 2008) G20 Information Centre <http://www.g20.utoronto.ca/2008/2008declaration1115.html>.

4 FSB, 'Overview of Progress in the Implementation of the G20 Recommendations for Strengthening Financial Stability' (Report of the FSB to G20 Leaders, 19 June 2012) 4 <http://www.financialstabilityboard.org/publications/r_120619a.pdf>.

requirements. The implementation of the Basel II and III requirements has been one of the most significant international policy reforms since the crisis.[5]

The aim of the Basel III regulatory framework is to improve the quality of capital, increase the level of capital, encourage the build-up of capital buffers to mitigate pro-cyclicality, supplement the risk-based capital requirements with a leverage ratio and introduce a set of global liquidity standards.[6] Assessing the impact of the framework is difficult as many of the components of Basel III are not to be implemented until at least 2018. However, Basel III's capital adequacy reforms are more advanced. At the time of writing, 11 countries have fully implemented rules consistent with the Basel III framework, three countries have issued rules that have not yet been implemented, and a further 13 countries are at various stages of finalising their rules.[7]

The increased capital called for by Basel III, and the buffers designed to mitigate pro-cyclicality, are to my mind most useful reforms. The eight per cent capital level of Basel I has been in place for a considerable time and gained credibility as a result. Some people refer to it as if eight per cent is a capital ratio with some intrinsic validity. But while it is a lucky number in parts of China, eight per cent was merely the highest capital ratio that banks in the 1980s could reach. Japanese banks, in particular, operated on capital ratios of four and five per cent when Basel I was being negotiated,[8] and to insist on their reaching anything higher than eight per cent would have seen them not participating in Basel I.

Many economists have predicted that the implementation of Basel III is likely to increase the cost of bank funding and intermediation.[9] In January 2013 the Basel Committee on Banking Supervision bowed to pressure to modify the composition of its liquidity coverage ratio ('LCR').[10] Members of the trade finance industry are also pushing for further changes, as the current reforms are likely to increase the price of providing trade finance.[11]

I support measures to facilitate trade finance, as the finance of trade is central to a flourishing global economy and the GFC resulted in severe trade finance shortfalls, particularly in East Asia when the traditional suppliers of trade finance

5 Ibid 1.

6 Ibid 3.

7 Basel Committee on Banking Supervision, 'Report to G20 Finance Ministers and Central Bank Governors on Monitoring Implementation of Basel III Regulatory Reform' (Progress Report on Basel III Implementation, Bank for International Settlements, April 2013) 5 <http://www.bis.org/publ/bcbs249.pdf>.

8 Heather Montgomery, 'The Effect of the Basel Accord on Bank Portfolios in Japan' (2005) 19 *Journal of the Japanese and International Economies* 24, 25.

9 Kevin Davis, 'Regulatory Reform Post the Global Financial Crisis: An Overview' (Report, Melbourne APEC Finance Centre, RMIT University, March 2011) 22 <http://www.apec.org.au/docs/11_CON_GFC/Regulatory%20Reform%20Post%20GFC-%20Overview%20Paper.pdf>.

10 David Enrich, Geoffrey T Smith and Andrew Morse, 'Rules for Lenders Relaxed', *Wall Street Journal* (online) 7 January 2013 <http://www.efinancialnews.com/story/2013-01-07/rules-for-lenders-relaxed>.

11 Thierry Senechal et al, 'Global Risks – Trade Finance 2011' (Public Release Report, ICC Banking Commission Steering Group on the Trade Finance Register, International Chamber of Commerce, 26 October 2011) 7–8.

to the region, European banks, largely withdrew from the business.[12] More broadly, though, I support the generally higher capital levels required by Basel III. If these higher capital levels increase funding costs that, in my view, is an acceptable price to pay for a more stable system. The lessons of the past 50 years of international financial history are that we have been excellent at achieving ever greater levels of short-term efficiency and poor at avoiding crises. The world enjoys lower costs of capital due to financial innovations and efficient markets and this is important, but the massive costs of crises are consistently downplayed, particularly as these costs fall primarily upon the poor in developed and developing nations alike.

Our system needs to be reweighted far more in favour of stability and if higher funding costs are a cost of this change, so be it.

B Ending 'Too-Big-To-Fail'

The GFC emphasised the need to regulate systemically important financial institutions ('SIFIs'). Governments have generally been unwilling to allow large banks to fail, as their failure tends to be extremely destabilising and have multiple, severe flow-on effects on other institutions.[13] This approach increases moral hazard risks in the financial system as, with an expectation of official support, SIFIs are more likely to engage in high-risk activities.[14] Recognising this, the G20 reforms aim to ensure that taxpayers do not bear the costs of resolution in the event that an institution does fail.[15]

At the Cannes Summit in 2011 the G20 endorsed a comprehensive policy framework proposed by the FSB. The framework focused on three key aims: to improve the standard of resolution regimes, to increase the intensity and effectiveness of SIFI supervision, and to broaden the scope of reforms to include domestic systemically important banks ('D-SIBs') and non-bank global SIFIs.[16]

Implementation of the global systemically important financial institution ('G-SIFI') framework has thus far been slow and still has a long way to go. By mid to late 2013, resolution strategies and plans are scheduled to be in place for all G-

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12 Aki Ito and Shamim Adam, 'European Retreat Squeezes Asia Trade Finance as ADB Sees Loan Demand Climb', *Bloomberg* (online), 6 December 2011 <http://www.bloomberg.com/news/2011-12-05/credit-squeeze-hits-asia-trade-finance-as-adb-loan-demand-soars.html>; Adrian van Rixtel, 'Highlights of the BIS International Statistics' (BIS Quarterly Review, Bank for International Settlements, 10 December 2012) 17–18; Morgan Stanley, 'EU Bank Deleveraging and Asian Trade Finance' (Report, Morgan Stanley Research, 1 May 2012) <http://pg.jrj.com.cn/acc/Res/CN_RES/INVEST/2012/6/1/8fa9fcad-09b7-4dc6-a05a-dcb2d692b442.pdf>; Takehiko Nakao, 'International Regulatory Reform and New Financial Infrastructure in Asia' (Speech delivered at the Asian Financial Forum, Hong Kong, 14 January 2013) <http://www.mof.go.jp/english/international_policy/others/20130114.htm>.

13 Davis, above n 9, 33–4.

14 FSB, 'Reducing the Moral Hazard Posed by Systemically Important Financial Institutions: Interim Report to G20 Leaders' (FSB Recommendations and Timelines, FSB, 18 June 2010) 2 <https://www.financialstabilityboard.org/publications/r_100627b.pdf >.

15 FSB, 'Overview of Progress', above n 4, 7.

16 Ibid 8.

SIFIs designated in November 2011.[17] Progress is being made identifying global systemically important insurers and in developing appropriate policy measures for them.[18] The FSB released an identification methodology for non-bank G-SIFIs for consultation in January 2014,[19] so the process is only beginning for globally systemically important non-bank institutions.

One challenge to the reforms has been identifying which institutions are SIFIs in the context of both their relationship with other financial institutions and within the financial system generally.[20] Further, some SIFIs sit outside the prudentially regulated sector, such as hedge funds.[21] This raises the dilemma of who is responsible for their regulation and how such regulation should be approached.[22] Resolving the challenges posed by G-SIFIs is difficult, and is perhaps the field in which the G20's reform efforts have made the least progress to date.

C Regulating the Shadow Banking System

The global shadow banking system grew rapidly in the years preceding the GFC, rising from USD26 trillion in 2002 to USD62 trillion in 2007.[23] It now plays an important role in supporting the real economy and providing credit to small and medium enterprises that otherwise may not be able to access it. This is particularly the case in our region, East Asia. Nevertheless, shadow banking also poses risks to the stability of the entire financial system. During the financial crisis, the limited regulation of shadow banking allowed the sector to become highly leveraged.[24] These liquidity risks attached to the sector were quickly transferred to the global banking system.[25] This contagion prompted the G20 to review the regulation of shadow banking.

At the Seoul Summit in November 2010 the G20 Leaders recognised that the Basel III standards for banks were inadequate for shadow banking.[26] Consequently, the FSB was tasked with developing recommendations to strengthen the oversight and regulation of the shadow banking system.[27] These recommendations emphasised a two-pronged approach – broad monitoring to

17 Letter from Mark Carney to the G20 Ministers and Central Bank Governors, 12 February 2013, 5 <http://www.financialstabilityboard.org/publications/r_130216.pdf>.

18 Ibid 4.

19 FSB, 'Assessing Methodologies for Identifying Non-bank Non-insurer Global Systemically Important Financial Institutions' (Consultative Document, FSB, 8 January 2014) <http://www.financialstabilityboard.org/publications/r_140108.pdf>.

20 Davis, above n 9, 8.

21 Ibid.

22 Ibid.

23 Anand Sinha, 'Regulation of Shadow Banking – Issues and Challenges' (Speech delivered at the Indian Merchants' Chamber, Mumbai, 7 January 2013) 5 <http://www.bis.org/review/r130204g.pdf>.

24 Ibid 3.

25 Ibid.

26 G20, *Seoul Summit Document* (12 November 2010) G20 Information Centre, [46] <http://www.g20.utoronto.ca/2010/g20seoul-doc.html>.

27 Ibid.

assess global trends and risks within the sector, and increased regulation focused on five key policies:

i. mitigating the spill over effect between the regular banking system and the shadow banking system;
ii. reducing the susceptibility of money market funds ('MMFs') to 'runs';
iii. assessing and mitigating systemic risks posed by other shadow banking entities;
iv. assessing and aligning the incentives associated with securitisation to prevent a repeat of the creation of excessive leverage in the financial system; and
v. to dampen risks and pro-cyclical incentives associated with secured financing contracts such as repos, and securities lending that may exacerbate funding strains in times of 'runs'.[28]

These recommendations were endorsed at the Cannes Summit in November 2011.[29] Further FSB proposals were submitted for review at the G20 Finance Ministers and Central Bank Governors meeting in November 2012.[30] Final recommendations were published by the FSB in August 2013.[31] Again, some five years after the crisis we are only at the stage of resolving how to address these problems, that is, the implementation of reforms is yet to begin.

D Over-the-Counter Derivatives Reforms

Over-the-Counter ('OTC') derivatives were a major contributor to the global financial crisis. The scale of business activity in global OTC derivatives markets now far exceeds global banking and economic activity.[32] The interconnectedness of OTC derivatives markets increases their volatility, as distress in one institution or location is easily transmitted to others.[33]

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28 FSB, 'Strengthening Oversight and Regulation of Shadow Banking: An Integrated Overview of Policy Recommendations' (Consultative Document, 18 November 2012) 1 <http://www.financialstabilityboard.org/publications/r_121118.pdf>.

29 FSB, 'Overview of Progress', above n 4, 13.

30 FSB, 'Strengthening Oversight and Regulation of Shadow Banking', above n 28, 1.

31 FSB, 'Strengthening Oversight and Regulation of Shadow Banking: An Overview of Policy Recommendations' (29 August 2013) <http://www.financialstabilityboard.org/publications/r_130829a.pdf>.

32 The volume of business activity in the OTC Derivatives ('OTC-D') markets – aggregated across all products – stood at almost six times global banking assets and between 9–10 times global economic activity at end-2011. SIBs are dominant in the OTC-D markets. Even after netting, the market value of OTC-D exposures for SIBs in the US constitutes a large proportion of their overall trading assets. The situation is similar for non-US SIBs: see Li Lin and Jay Surti, 'Capital Requirements for Over-the-Counter Derivatives Central Counterparties' (Working Paper 13/3, International Monetary Fund, January 2013) 5–6 <http://www.imf.org/external/pubs/ft/wp/2013/wp1303.pdf>.

33 Council of Financial Regulators, 'Central Clearing of OTC Derivatives in Australia' (Discussion Paper, Council of Financial Regulators, June 2011) 5 <http://www.rba.gov.au/publications/consultations/201106-otc-derivatives/pdf/201106-otc-derivatives.pdf>.

At the Pittsburgh Summit in 2009 the G20 leaders agreed to a number of reforms concerning OTC derivatives. In the words of the Leaders' Declaration:

> All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements. We ask the FSB and its relevant members to assess regularly implementation and whether it is sufficient to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse.[34]

In October 2010 the FSB published a report, 'Implementing OTC Derivatives Markets Reforms', which set out 21 recommendations addressing practical issues related to implementing the G20's commitments.[35] Since then, significant progress has been made by jurisdictions with the largest markets in OTC derivatives – the European Union ('EU'), Japan and the United States – imposing regulatory frameworks.[36] Practical implementation of reforms to market infrastructures in these jurisdictions is well underway.[37] However, in most cases, national regulators are still at a very preliminary stage of developing OTC reform policies.[38]

One challenge recognised by regulators is that not all OTC derivatives products suit central clearing, such as complex or illiquid products.[39] This is because central clearing actually concentrates risk in the clearing house.[40] Central clearing works to reduce systemic risk if the structure of the clearing house is so strong that it can in effect never fail.[41] This can be sought by a series of unlimited guarantees from all principal participants in the clearing system or by other methods. As clearing houses concentrate risk, it is important that they are well capitalised and managed appropriately. In some cases, central clearing may not result in a material reduction in systemic risk.[42]

E Strengthening and Converging Accounting Standards

There are a number of accounting issues that have contributed to problems in the financial sector.[43] One issue has been the role of mark to market accounting and the measurement of fair value, which some critics have argued increased the

34 G20 Leaders, *The Pittsburgh Statement*, above n 2, [13].

35 FSB, 'Implementing OTC Derivatives Markets Reforms' (Report, 25 October 2010) <https://www.financialstabilityboard.org/publications/r_101025.pdf>.

36 FSB, 'Overview of Progress', above n 4, 2.

37 Ibid 18.

38 Council of Financial Regulators, above n 33, 6.

39 Ibid.

40 Nout Wellink, 'Mitigating Systemic Risk in OTC Derivative Markets' (2010) 14 *Financial Stability Review* 131, 131.

41 Jeremy C Kress, 'Credit Default Swaps, Clearinghouses, and Systemic Risk: Why Centralized Counterparties Must Have Access to Central Bank Liquidity' (2011) 48 *Harvard Journal on Legislation* 49, 72.

42 Ibid.

43 Davis, above n 9, 16.

impact of the GFC.[44] Another issue has been the ability of accounting methods to deal with complex financial transactions.[45] Prior to its collapse, Lehmann Brothers used alternative accounting techniques for many repurchase transactions as a way of reducing the firm's apparent leverage and creating a misleading balance sheet.[46] A third issue has been the use of different approaches to the offsetting of derivative contracts and other financial assets and liabilities, which can result in significant differences when measuring the balance sheets of large financial institutions.[47] Lastly, the approach to impairment of financial assets has been another issue – whether provisioning should be done on an 'incurred loss' basis or an 'expected loss' basis has been a contentious subject.[48]

Strengthening global accounting standards is of fundamental importance. At the summits in Pittsburgh (2009), Toronto (2010), Seoul (2010) and Cannes (2011) the G20 leaders restated their aim to achieve a single, universal set of high quality accounting standards.[49] In pursuit of this objective, the leaders emphasised the need for the complete convergence of international and US accounting standards.[50] At the Cannes Summit the G20 also reaffirmed their desire to improve standards for the valuation of financial instruments, an objective set at the London Summit in 2009.[51]

To date, most FSB member jurisdictions have either adopted the International Financial Reporting Standards ('IFRS') developed by the International Accounting Standards Board ('IASB') or are in the process of converging with or adopting IFRS.[52] Progress has been made towards converging the standards of the IASB and the US Financial Accounting Standards Board ('FASB'), including a joint expected loss impairment approach.[53] However, disagreement remains between the two boards on some key issues, such as how banks should disclose their derivatives holdings.[54] The G20 Finance Ministers and Central Bank

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44 Knowledge@Australian School of Business, *Accounting Practices: Did Fair-Value Cause the Crisis?* (24 March 2011) Australian School of Business <http://knowledge.asb.unsw.edu.au/article.cfm?articleid=1366>.

45 Davis, above n 9, 17.

46 Ibid.

47 Ibid; FSB, 'Overview of Progress', above n 4, 21.

48 Davis, above n 9, 17.

49 G20, *Cannes Summit Final Declaration – Building Our Common Future: Renewed Collective Action for the Benefit of All* (4 November 2011) [34] <http://www.g20.utoronto.ca/2011/2011-cannes-declaration-111104-en.html>.

50 International Financial Reporting Standards Foundation and International Accounting Standards Board, 'Response to G20 Conclusions' (November 2011) 1 <http://www.ifrs.org/Alerts/Governance/Documents/Response-to-G20-conclusions-October-2011.pdf>.

51 G20, *Cannes Summit Final Declaration*, above n 49, [34].

52 FSB, 'Overview of Progress', above n 4, 20.

53 Ibid 21.

54 Ibid; Huw Jones, 'G20 Hopes for Fourth Time Lucky on Global Accounting', *Reuters* (online), 5 November 2012 <http://www.reuters.com/article/2012/11/05/g20-accounting-idUSL5E8M5CC820121105>.

Governors have requested that both boards issue a set of final converged standards by mid-2013.[55]

F Building a Common Legal Entity Identifier

The GFC highlighted the need for a uniform global system for legal entity identification. While many other industries have introduced consistent global frameworks for entity identification, the finance sector has lagged behind.[56] A global legal entity identifier ('LEI') system will reduce the risks of a future major financial crisis because it will allow industry participants to more accurately assess their exposures to different counterparties, and allow regulators to more accurately monitor the systemic stability of the system.[57] At the Cannes Summit in 2011, the G20 Leaders gave the FSB a mandate to deliver recommendations on an LEI system by June 2012.[58]

The recommendations put forward by the FSB were for a global LEI system with three tiers: a Regulatory Oversight Committee ('ROC'), a Central Operating Unit ('COU') and federated Local Operating Units ('LOUs').[59] These recommendations were endorsed by the G20 in June 2012 and the FSB was directed to coordinate the implementation of the Global LEI System.[60] The ROC has now been established and has assumed responsibility for governing the Global LEI System.[61] Nonetheless there is still a long way to go and much time and effort required to harmonise the presently fragmented system and establish a fully functional global system.[62]

G Reducing Reliance on Credit Ratings and Improving Oversight of Credit Rating Agencies

The impact of credit rating agencies ('CRAs') on today's financial markets is huge, with rating actions directly affecting the actions of investors, borrowers, issuers and governments.[63] The use of credit ratings in regulatory regimes (such as Basel II), and the increase in complexity of financial products, has led to a mechanical reliance on ratings by firms and an unfortunate reduction in firms'

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55 G20, 'Communiqué' (Meeting of Finance Ministers and Central Bank Governors, Washington DC, 19 April 2013) [7] < http://www.g20.utoronto.ca/2013/2013-0419-finance.html>.

56 FSB, 'A Global Legal Entity Identifier for Financial Markets' (Report, 8 June 2012) 1 <http://www.financialstabilityboard.org/publications/r_120608.pdf>.

57 James Armstrong and Gregory Bresiger, 'Saving the World; Global IDs for Counterparties Might Be the Way to Prevent the Next Market Meltdown' [2011] (September) *Clearing Quarterly and Directory* 10.

58 G20, *Cannes Summit Final Declaration*, above n 49, [31].

59 FSB, 'Overview of Progress', above n 4, 23.

60 FSB Legal Entity Identifier Implementation Group, *Fifth progress note on the Global LEI Initiative* (11 January 2013) FSB <http://www.financialstabilityboard.org/publications/r_130111a.pdf>.

61 Ibid.

62 Michael Shashoua (ed), 'Inside Reference Data: Legal Entity Identifiers' (Special Report, April 2012) <http://www.insightforenterprise.com/images/IRD%20LEI%20Report.pdf>.

63 European Commission, 'New Rules on Credit Rating Agencies (CRAs) – Frequently Asked Questions' (Press Release, MEMO/13/13, 16 January 2013) <http://europa.eu/rapid/press-release_MEMO-13-13_en.htm>.

own capacity for credit risk assessment and due diligence.[64] Such behaviour is concerning given that the business model of CRAs involves a powerful conflict of interest – entities pay for themselves to be rated, and issuers of securities pay for the securities to be rated.[65] CRAs know that if they give an entity or security a poor rating, that entity or issuer is highly unlikely to use them next time. Over-reliance on ratings can increase pro-cyclicality and contribute to cliff effects when ratings are suddenly downgraded.[66] This was highlighted during the GFC when CRAs failed to fully appreciate the inherent risks in complicated financial instruments and consequently issued incorrect ratings that were far too high.[67]

The G20 reforms seek to reduce reliance on credit ratings and improve the oversight of credit rating agencies. At the Seoul Summit, the G20 Leaders endorsed the FSB's 'principles on reducing reliance on external credit ratings'.[68] To date, international standard setters have examined references to CRA ratings in their standards and have taken some steps to discourage undue reliance on such ratings.[69] While some jurisdictions have passed legislation or regulatory measures to reduce reliance on CRA ratings, implementation has been problematic. A real impediment to progress has been the difficulty of developing alternative risk assessment capabilities and processes.[70]

The EU regulations on CRAs have been in force since December 2010, and were part of its response to the G20 summit in 2008.[71] The EU regulation focuses on conditions for registration of CRAs, 'conduct of business' requirements, and supervision. The 'conduct of business' requirements relate to measures to avoid conflicts of interest, to ensure the quality of ratings, to achieve consistency in ratings methodologies, and to mandate transparency in CRAs.[72]

The *EU CRA Regulation* granted the European Securities and Markets Authority ('ESMA') exclusive supervisory jurisdiction over CRAs registered in the EU. The ESMA produced regulatory technical standards for CRAs in May 2012. These standards set out the information required for registration as a CRA by the ESMA,[73] the information to be disclosed in the central repository ('CEREP') to enable investors to compare CRAs,[74] how the ESMA will assess

64 FSB, 'Overview of Progress', above n 4, 24.
65 Davis, above n 9, 17–18.
66 FSB, 'Overview of Progress', above n 4, 24.
67 European Commission, above n 63.
68 G20, *Seoul Summit Document*, above n 26, [37].
69 FSB, 'Overview of Progress', above n 4, 24.
70 Ibid.
71 *Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on Credit Rating Agencies* [2009] OJ L 302/1 ('*EU CRA Regulation*'); European Commission, above n 63.
72 European Commission, above n 63.
73 *Commission Delegated Regulation (EU) No 449/2012 of 21 March 2012 supplementing Regulation (EC) No 1060/2009 of the European Parliament and of the Council with Regard to Regulatory Technical Standards on Information for Registration and Certification of Credit Rating Agencies* [2012] OJ L 140/32.
74 Ibid art 17.

rating methodologies,[75] and information needed to conform with compliance requirements.[76]

The most recent amendments to the *EU CRA Regulation*, enacted in January 2013, go further to reduce over-reliance on ratings, in line with G20 commitments.[77] These amendments are also aimed at improving the quality of ratings of EU sovereign debt by restricting unsolicited ratings to three per year to avoid market disruption, as well as requiring the publishing of all ratings centrally on a European Rating Platform.[78] The new rules seek to ensure that a CRA is held liable for its actions if either intentionally or by gross negligence the CRA breaches the regulation and causes damage to an investor. Transparency is also increased by mandating that CRAs disclose if shareholders who hold five per cent or more of the capital or voting rights in the CRA also hold five per cent or more of the capital or voting rights in the rated entity.[79] The new regulations further prevent CRAs from issuing a rating if a shareholder holding 10 per cent or more of the capital or voting rights of the CRA also owns 10 per cent or more of the capital or voting rights of the rated entity. If the rating has already been issued, the CRA is required to disclose that the shareholder possesses 10 per cent or more in each entity.[80] The new amendments introduce a mandatory rotation rule under which issuers of structured finance products with underlying re-securitised assets who pay a CRA for their ratings must switch to a different agency every four years. Issuers are also required to engage two different CRAs to rate structured finance instruments.[81]

The EU reforms are far more extensive than the minimum required by the G20, and it is difficult to see how the proposed G20 CRA reforms will be adequate. The FSB principles focus heavily on reducing the role of CRAs, without there presently being a real alternative to CRA ratings,[82] so the FSB's current approach is unlikely to succeed. Reducing reliance on CRAs would not be so necessary if CRAs were more accountable for their actions and the quality of ratings were improved.

The proposed G20 reforms to CRAs in my view do not go far enough. The core problem with CRAs is that the issuer pays for the rating. This introduces a powerful conflict of interest that distorts the entire process. If one believes in markets and their efficiency, one has to work to remove conflicts that undermine those markets. This was a key element in the so-called Franken Amendment to

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75 Ibid art 14.

76 Ibid art 2.

77 Michel Barnier, 'Statement by Commissioner Michel Barnier Following the Vote in the European Parliament on New European Rules to Regulate Credit Rating Agencies' (Press Release, MEMO/13/14, 16 January 2013) <http://europa.eu/rapid/press-release_MEMO-13-14_en.htm?locale=en>.

78 Ibid.

79 *Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013 amending Regulation (EC) No 1060/2009 on Credit Rating Agencies* [2013] OJ L 146/1, Annex I art 3a(a).

80 *Regulation (EU) No 462/2013 of the European Parliament and of the Council of 21 May 2013 amending Regulation (EC) No 1060/2009 on Credit Rating Agencies* [2013] OJ L 146/1, Annex I art 3a(a).

81 Barnier, above n 77.

82 Davis, above n 9, 18.

the *Dodd-Frank Wall Street Reform and Consumer Protection Act* in the US.[83] Under this amendment, the SEC would establish an independent panel that would assign the ratings of structured products (not of companies or sovereigns) to the CRA that the panel believed was best equipped to provide the rating. The incentive to provide a favourable rating to continue to get this issuer's business would thereby be removed. At the time of writing, the SEC is undertaking a further study into how conflicts of interest can be avoided, short of instituting the Franken Amendment.[84] If the G20 were serious about reforming CRAs, it would have mandated a global requirement along these lines and would have extended it to all ratings, ie, not just structured products, but the ratings of bonds, companies, sovereigns and other entities would all be allocated to a CRA by an independent commission. The Franken Amendment also has the advantage that Senator Franken spent most of his career writing comedy for Saturday Night Live, or performing as a comic,[85] and in medieval times, it was often only the court jester who could risk telling the truth to the King.[86] We have allowed financial firms to become too large, profitable and powerful and there is a delightful historical resonance in a jester telling them the truth.

H Enhancing Compensation Practices

Excessive and poorly structured remuneration in financial institutions has received significant public and political attention since the GFC.[87] Prior to 2008, remuneration policies in many institutions rewarded excessive risk taking which contributed to the GFC.[88] As a result, one of the objectives of the G20 leaders has been to change compensation practices to support financial stability. At the Pittsburgh Summit in 2009 the leaders endorsed implementation standards

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83 Pub L No 111–203, § 2, 124 Stat 1376 (2010) ('*Dodd-Frank Act*'). The Franken Amendment was named after Al Franken, a Democratic senator who, along with Republican senator Roger Wicker, has pushed for an alternative to the current credit rating agency compensation model: Sarah N Lynch, 'Bipartisan Senators Ask SEC for Action on Credit Rating Agency Pay', *Insurance Journal Online* (online), 14 May 2013 <http://www.insurancejournal.com/news/national/2013/05/14/291912.htm>. The Amendment is encapsulated in s 939F of the *Dodd-Frank Act*, which requires the US Securities and Exchange Commission ('SEC') to carry out a study into the conflicts of interest problem. If the SEC is unable to develop an alternative mechanism to address the problem, the proposed Franken Amendment will go into effect: American Securitization Forum, *Franken Amendment* <http://www.americansecuritization.com/Issues.aspx?taxid=1810>; *Credit Rating Agency Reform*, Al Franken <http://www.franken.senate.gov/?p=issue&id=280>.

84 Lynch, above n 83. Senator Franken and others urged the SEC to move forward with reform in a letter issued in January 2014, but at the time of writing there have been no further developments: 'Sen Franken Continued Bipartisan Push to Finally Reform Credit Rating Agencies' (Press Release, 8 January 2014) <http://www.franken.senate.gov/?p=press_release&id=2656>.

85 *Meet Al*, Al Franken <http://www.alfranken.com/meet-al/>.

86 See, eg, Desiderius Erasmus, *The Praise of Folly* (John Wilson trans, Arc Manor, 2008) 40 [trans of: *Stultitiae Laus* (first published 1511)]; Beatrice K Otto, *Fools Are Everywhere* (University of Chicago Press, 2001) 103.

87 Davis, above n 9, 14.

88 Ibid.

recommended by the FSB, aimed at aligning compensation with long-term value creation, not excessive risk-taking.[89] The reforms included:

i. avoiding multi-year guaranteed bonuses;
ii. requiring a significant portion of variable compensation to be deferred, tied to performance and subject to appropriate claw back;
iii. ensuring that compensation for senior executives and other employees having a material impact on the firm's risk exposure align with performance and risk;
iv. making firms' compensation policies and structures transparent;
v. limiting variable compensation as a percentage of total net revenues when it is inconsistent with the maintenance of a sound capital base; and
vi. ensuring that compensation committees overseeing compensation policies are able to act independently.[90]

To date, almost all FSB member jurisdictions have completed implementation of the FSB's recommendations in their national regulation or supervisory guidance.[91] However, some jurisdictions have chosen not to implement certain standards, either because they are deemed inapplicable or because of domestic restraints such as labour laws.[92] This gives rise to concerns of an uneven playing field for firms that are fully constrained by legislation in line with the FSB's recommendations,[93] such as the US *Dodd-Frank Act*.

The G20's reforms to banker compensation were advocated in the G20 most strongly by the Europeans, and it is in the EU that the reforms are most advanced, in terms of scope, scale and stage of implementation.

The European regulators announced new regulations in December 2010 that require banks to defer 40–60 per cent of bonuses for three to five years, pay at least 50 per cent of bonuses in shares (rather than cash) and publish pay details for 'senior management and risk-takers'.[94]

The European Union agreed in early 2013 to limit bankers' bonuses to a year's salary, with the proviso that the bonus can be doubled subject to approval

89 G20 Leaders, *The Pittsburgh Statement*, above n 2, [13].
90 Ibid.
91 FSB, 'Overview of Progress', above n 4, 26.
92 Ibid.
93 Ibid.
94 'Q&A: EU Banker Bonus Cap Plan', *BBC News* (online), 28 February 2013, <http://www.bbc.co.uk/news/business-21615513>; Committee of European Banking Supervisors, *Guidelines on Remuneration Policies and Practices* (10 December 2010) 60, 65 <https://www.eba.europa.eu/documents/10180/106961/Guidelines.pdf>; Kevin J Murphy, 'Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences' (Centre in Law, Economics and Organization Research Paper Series No C13-8, University of Southern California, 4 April 2013) 12 <http://ssrn.com/abstract=2235395 or http://dx.doi.org/10.2139/ssrn.2235395>.

by at least 66 per cent of shareholders holding at least 50 per cent of the shares.[95] To encourage bankers to take a long-term view, a minimum of 25 per cent of any bonus exceeding one year's salary must be deferred for at least five years. Bonuses may include long-term deferred instruments that can be appropriately discounted. The actual discount rates are yet to be set, but the long-term instruments have to be fully 'claw-back-able' and 'bail-in-able' should an individual's performance be later not deemed worthy of the bonus or if the assets acquired or created prove less valuable than expected.[96] Given the culture of banks, refusing to pay part or all of a deferred bonus because the assets the banker created or acquired prove to be of less value than was anticipated, would be a major cultural change. But it is a change, and if the regulators are sufficiently vigilant and insistent to bring it about, it could do much to change risk-taking behaviour.

EU countries needed to implement the rules nationally by 1 January 2014, the targeted effective date for the cap.[97] The UK opposed this agreement but was defeated by a majority vote.[98] The British government is now under attack for allowing its banks to circumvent the rules after several banks increased the annual salaries of their chief executives to prevent their overall pay falling as a result of the cap.[99]

These rules are designed to curb the culture of excessive bonus payments that encouraged risk-taking for short-term gains that contributed to the GFC. The deal forms part of the Capital Requirements Directive ('CRD IV'), which is the EU's implementation of the Basel III rules, to ensure that banks have enough future capital to withstand financial shocks. The bonus cap was not a requirement of the Basel III rules, but was demanded by the EU parliament in return for agreement to the rest of the CRD IV legislation.[100]

These are far reaching changes. Bonuses often represent 80 per cent or more of total remuneration for many bankers. If shareholders approve bonuses of up to two years' salary this will water down the effect of these changes, but if they hold the line, this is a major change. Banks will no longer be able to pay employees relatively small fixed salaries and then divide up the profits pool at year-end. Bankers will derive more of their income in fixed salary form, and less in bonus, which should encourage less risk taking.

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95 'Q&A: EU Banker Bonus Cap Plan', above n 94; European Parliament, 'Parliament Votes Reform Package to Strengthen EU Banks' (Press Release, 20130416IPR07333, 16 April 2013) <http://www.europarl.europa.eu/news/en/pressroom/content/20130416IPR07333/html/Parliament-votes-reform-package-to-strengthen-EU-banks>.

96 'Q&A: EU Banker Bonus Cap Plan', above n 94.

97 Ibid; European Parliament, above n 95.

98 Ibid.

99 Jennifer Rankin and Jill Treanor, 'Bankers' Bonus Cap Architect Says EU Must Sue UK Government', *The Guardian* (online), 5 March 2014 <http://www.theguardian.com/business/2014/mar/04/bankers-bonus-cap-architect-says-sue-uk-government>.

100 Council of the European Union, 'Bank Capital Rules: Council endorses agreement with EP' (Press Release, 7088/13, Presse 88, 5 March 2013) <http://register.consilium.europa.eu/pdf/en/13/st07/st07088.en13.pdf>.

The 2010 restrictions requiring at least one-half of bonuses be paid in shares and requiring deferral of the payment of a major portion of bonuses for three to five years may prove to be of as much, or even more, significance as the 2013 cap on bonuses. What is clear, is that with the two sets of bonus reforms in place and operating together, in five years' time we may well see different banker behaviour in the EU than we have become accustomed to in the recent past.

I Conclusion on the G20's Reforms as a Conventional Response to a Conventional Crisis

The breadth and scope of the regulatory changes initiated by the G20 makes it difficult to assess their likely consequences. As many of the reforms have lengthy implementation time frames, the opportunity still exists for private lobbying for further changes that may be socially warranted or that, far more likely, represent special interest pleading.[101] While there have been some clear achievements by the G20, there is much more that is still in progress. The take up of the Basel reforms remains slow. The G20's call for the IASB and FASB to complete convergence of accounting standards is yet to be responded to fully. Some initiatives that have been endorsed by the G20 would almost certainly have gone ahead anyway.[102]

As Rottier and Véron suggest, the success of the G20 financial reforms is highly dependent on which body is entrusted to implement the initiatives.[103] While the reforms are internationally driven, they are locally implemented – leaving their ultimate success in the hands of national governments.

At the Seoul Summit in 2010 the G20 leaders identified a number of areas requiring further reform, and these still require attention: macro-prudential frameworks (including dealing with volatile capital flows); regulatory issues for emerging market and developing economies; commodity derivative markets; market integrity and efficiency; and consumer finance protection so, even by the G20's own calculus, there remains much to be done.[104]

III THE PROFOUND CHANGES IN GLOBAL FINANCE SINCE 1970

The full scope of changes in the global financial system since 1970 could fill a multi-volume treatise. This article will focus on four principal ones. These are:

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101 Davis, above n 9, 39.

102 Nicolas Véron, 'Financial Reform after the Crisis: An Early Assessment' (Bruegel Working Paper 2012/01, Bruegel, 27 January 2012) 5 <http://www.bruegel.org/publications/publication-detail/view/680/>.

103 Stéphane Rottier and Nicholas Véron, 'Not All Financial Regulation Is Global' (Bruegel Policy Brief No 2010/07, August 2010), cited in Véron, above n 102, 2.

104 G20, *Seoul Summit Document*, above n 26; G20, *Cannes Summit Final Declaration*, above n 49, [30]–[34]; G20 Leaders*, G20 Leaders' Declaration Los Cabos, Mexico* (19 June 2012) G20 Information Centre, [45], [50], [52], [61] <http://www.g20.utoronto.ca/2012/2012-0619-loscabos.html>.

(i) the legalisation of financial gambling, (ii) the globalisation of the international financial system, (iii) the rise in algorithmic and high frequency trading, and (iv) the fundamental changes in banks and bankers.

A The Legalisation of Financial Gambling

The *Gaming Act 1845*[105] in the United Kingdom ('UK') made gaming houses illegal and gaming or wagering agreements unenforceable. It was enacted on the recommendation of a House of Commons Select Committee Report on Gaming in 1844.[106] Australia followed suit with gaming and wagering legislation in each state and territory.[107] In the US, The General Obligations Law of the State of New York provided under section 5-401 that '[a]ll wagers, bets or stakes, made to depend upon any … unknown or contingent event whatever shall be unlawful.' Further, section 5-411 provided that '[a]ll contracts for or on account of any money or property, wagered, bet or staked, as provided in Section 5-401, shall be void.'

For over a century, courts in all these countries took the view that derivatives contracts (as they came later to be known) entered into by at least one party for hedging purposes were valid under these enactments, but derivatives entered merely to place a bet on the price of something were invalid and unenforceable.[108] Accordingly, a contract by which a farmer locks in a price for their wheat crop when it is harvested, or by which an airline guarantees a future price for jet fuel, are both valid, but a contract by which a speculator places a bet on future wheat or fuel prices is not.[109]

Over time, legislatures began to exempt derivatives contracts from the application of these laws. In the words of Philip Wood, 'many states have introduced exceptions to gaming laws in order to facilitate markets … and to remove the threat of nullity. The rationale is either there is a satisfactory alternative system of protection or the contracts are entered into between sophisticated institutions who do not need the protection of gaming legislation.'[110]

In the UK, section 63 of the *Financial Services Act 1986* (UK) exempted 'investments', broadly defined, from the application of the *Gaming Act 1845,* an exemption which was maintained by section 412 of the *Financial Services and*

105 8 & 9 Vict, c 109.

106 Western Australia, Royal Commission on Betting, *Report of Royal Commission on Betting* (1948) 5.

107 *Gaming and Betting Ordinance 1945* (ACT); *Gaming and Betting Act 1912* (NSW); *Gaming Act 1972* (Qld); *Lottery and Gaming Act 1936* (SA); *Gaming Act 1983* (Tas)*; Lotteries, Gaming and Betting Act 1966* (Vic); *Gaming and Betting (Contracts and Securities) Act 1985* (WA).

108 Lynn A Stout, 'Derivatives and the Legal Origin of the 2008 Credit Crisis' (2011) 1 *Harvard Business Law Review* 1, 4. See also *Ellesmere (Earl) v Wallace* [1929] 2 Ch 1; *Lipkin Gorman v Karpnale Ltd* [1992] 4 All ER 331.

109 See *See v Cohen* (1923) 33 CLR 174 and note the opposite result by the time of *Morgan Grenfell and Co Ltd v Welwyn Hatfield DC* [1995] 1 All ER 1, 2.

110 Philip R Wood, *Set-Off and Netting, Derivatives, Clearing Systems* (Sweet & Maxwell, 2nd ed, 2007) [13–009].

Markets Act 2000, and section 334 of *The Gaming Act 2005*. In Australia, New South Wales first enacted a carve out to facilitate the establishment of the Sydney Futures Exchange in 1979.[111] This was followed by a general upholding of the validity of exchange-traded futures contracts by the Commonwealth in 1989.[112] In 2001, section 1101I of the *Corporations Act 2001* excluded all financial products, broadly defined, including derivative products, from gaming and wagering laws.

New York courts carved out a 'commercial purpose' exception to the State gambling laws. But the remaining, and restraining, uncertainty in the US was removed by the *Commodity Futures Modernization Act of 2000* ('*CFMA*'),[113] which excluded the application of any state or local laws in respect of gaming, with the aim of giving legal certainty to derivatives trading.

The Financial Crisis Inquiry Commission of the US concluded in its Final Report that OTC derivatives contributed significantly to the crisis, and that the enactment of the *CFMA* legislation in 2000 'to ban the regulation by both the federal and state governments of OTC derivatives was a key turning point in the march toward the financial crisis.'[114] A wide variety of parties had used derivatives, but 'without any oversight, OTC derivatives rapidly spiraled [sic] out of control and out of sight'.[115] In the words of Lynn Stout, the enactment of the *CFMA* was a 'sudden and wholesale removal of centuries-old restraints on off-exchange derivatives speculation,'[116] that played a large role in the 2008 crisis.[117]

Gambling was strictly regulated for centuries because it was perceived to be a social ill. The removal of derivatives from the purview of gaming laws was a major step that went largely unnoticed at the time, but was to contribute to the GFC, and to the reshaping of international financial markets.

B The Globalisation of the International Financial System

In 1970, capital controls blocked most movement of capital between nations, and savings in each country funded investment in that country, supplemented in some countries by relatively small inflows of funds from abroad. Progressively over the next two decades, as the fixed exchange rate Bretton Woods system was dismantled, so were the capital controls, to the point today that capital moves freely in and out of most countries (with the principal exceptions of China and Taiwan).

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111 *Futures Markets Act 1979* (NSW) s 7, as repealed by the *Futures Industry (Application of Laws) Act 1986* (NSW).

112 *Corporations Act 1989* (Cth) s 1141.

113 7 USC §§ 1–27f (2013).

114 Financial Crisis Inquiry Commission, 'The Financial Crisis Inquiry Report' (Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States, January 2011) xxiv.

115 Ibid.

116 Stout, above n 108, 21.

117 For a full history of the CFMA, its origins and recent attempts to restore regulatory limits on speculative derivatives via the *Dodd-Frank Act*, see Stout, above n 108.

This regulatory liberalisation has been accompanied by the rise of computers and telecommunications so that, today, capital moves by way of keystrokes on a computer keyboard, in response to information that has come in over the same system. An investor in Chicago can be as up to date on developments in Brazil as one in Sao Paulo.

These trends have resulted in global financial markets being amongst the most globalised markets we have. Perhaps only the markets for commodities such as oil, soybeans, cotton, and the like are as globalised as the markets for money. This is a profound change. Without globalised markets, the US sub-prime crisis would have remained a US crisis – it was globalised markets that allowed pension funds in Norway and local government authorities in Australia to lose hundreds of millions of dollars investing in repackaged US home loans.[118]

The truly globalised market we have today for money also exposes the inadequacies of the Bretton Woods system of international financial institutions established by Keynes and White in 1945. Keynes and White's system was designed to promote international trade and keep finance national. If they had designed a globalised financial system, they would almost certainly have created a global financial regulator, a global lender of last resort, and a global sovereign bankruptcy scheme, for no national financial system is able to operate without these institutions.[119]

The system of financial regulation that has developed ad hoc in recent decades involving the Basel Committee, the Bank for International Settlements, the FSB, and many other institutions, is a response to the absence of a global central bank and global financial regulator. The system that has developed is primarily one of 'soft law' as the rules are made at the international level and implemented nationally.[120]

C The Rise in Algorithmic and High Frequency Trading

Algorithmic,[121] or computer-driven trading, accounts for about 70 per cent of US equity trading and 30–40 per cent of European and Japanese equity trading.[122] Algorithms drive much of the high frequency trading so common in markets

118 See, eg, *Wingecarribee Shire Council v Lehman Brothers Australia Ltd (in liq)* (2012) 301 ALR 1; *Bathurst Regional Council v Local Government Financial Services Pty Ltd [No 5]* [2012] FCA 1200.

119 Ross P Buckley, 'How the International Financial System, to its Detriment, Differs from National Systems, and What We Can Do About It' (2004) 34 *Hong Kong Law Journal* 321.

120 Chris Brummer, *Soft Law and the Global Financial System: Rule Making in the 21st Century* (Cambridge University Press, 2012).

121 Algorithmic trading uses high-speed computer programs to generate, route and execute orders. The Australian Securities and Investments Commission define algorithmic trading as 'computer-generated trading activity where trading parameters are determined by strict adherence to a predetermined set of rules, aimed at delivering specific execution outcomes': Australian Securities and Investments Commission, 'Market Assessment Report: ASX Group' (Report No 222, November 2010).

122 Jennifer Hewett, 'No Rush into Dark Pools', *Financial Review* (online), 21 November 2012 <http://www.afr.com/p/national/no_rush_into_dark_pools_guYshWNEQcSHOyT8b9aHzJ>; Thornton Matheson, 'Taxing Financial Transactions: Issues and Evidence' (Working Paper No 11/54, International Monetary Fund, 1 March 2011) 19.

today. Schulmeister's research has established that the ever faster trading of recent years tends to make exchange rates and stock and commodity prices less accurate, ie, less close to that which would be dictated by economic fundamentals.[123] This is because short-term price runs, fuelled by very rapid trading and strengthened by the impact of algorithmic trading programs, accumulate to baseless long-term trends and distortions in prices. The resulting over-shooting of prices favours speculators over longer-term investors and thereby feeds into the ever-higher levels of trading we are seeing.[124]

D The Change in Banks and Bankers

If a lawyer from 1970 was brought forward in time and put in a modern day courtroom, most things would be familiar: the solemnity, the architecture of the courtroom, the mode of dress (at least in the Supreme Court of New South Wales), the procedure, the objections being made by counsel. Since 1970 the manner of lawyers, the way they carry themselves, the way they are trained, the way they think and look backwards to find authority for what they propose doing, has all changed very little. Indeed, a lawyer transported forward in time from 16th century England would likewise see much in a courtroom today that they might recognise.

Yet if a banker from 1970 was brought forward in time to 2013 and placed in a modern investment bank, or in the investment banking arm of a commercial bank, much would seem profoundly different.

The first and major difference would be in the people. The manner of bankers, the way they carry themselves, the way they are trained, the way they see the world, all this has changed profoundly. Bankers in 1970 had basic arithmetic. You needed some maths to run a bank, but it was mostly primary school maths, not the calculus and trigonometry of high school. Today most young bankers are highly trained in maths and quantitative skills. Their degrees are in highly quantitative and mathematical finance and economics, or in maths or physics.

Bankers in 1970 were as prudent, cautious and dull as lawyers, perhaps more so. If we consider a sophisticated market like London, the traditional degree to have taken to go into a bank was Classics (the study of Greek and Latin language and history). This remained the case until well into the 1980s. Having studied classics or been an officer in a good regiment were considered the best trainings possible for banking,[125] for banking was perceived to be about prudence and

123 Stephan Schulmeister, 'Boom-Bust Cycles and Trading Practices in Asset Markets, the Real Economy and the Effects of a Financial Transaction Tax' (WIFO Working Paper No 364/2010, Austrian Institute of Economic Research, March 2010) 1.

124 Stephan Schulmeister, 'A General Financial Transactions Tax: Motives, Effects and Implementation' (Summary of Presentation, Brussels Tax Forum, 29 March 2011); Schulmeister, 'Boom-Bust Cycles and Trading Practices', above n 123, 1.

125 These thoughts are not new. Susan Strange was prescient in the extreme. In 1986, she described how

judgment, and the study of history or military officer training were seen to promote careful deliberation and judgment.

Today an investment bank or the investment banking arm of a commercial bank is typically filled with ultra-numerate people with little knowledge of history or the humanities. In their world view markets and corporations exist to produce profits. An earlier view was that corporations existed to provide important products to their customers and provide jobs for their workers; and profits were essential to enable the fulfilment of these more important functions. Most bankers before 1970 had similar views. Today most bankers are focused on profit to the bank. The majority of their remuneration is by way of an annual bonus and they see the world through a quantitative/analytical lens, not a humanities one.

Furthermore, what a bank does has changed profoundly. Banks in 1970 essentially intermediated money. They received deposits and made loans. Banks today, at least the investment banks and investment banking arms of major commercial banks, derive little of their income from financial intermediation and far more from speculating on markets, underwriting stock and bond issuances, giving sophisticated advice on mergers and acquisitions, selling financial products to customers, etc.

A banker travelling forward in time even 40 years would not recognise most of what a bank today does, as being banking business. Indeed, as we have seen, much of the business of a contemporary bank would have been illegal in 1973. A banker travelling forward in time would look with horror upon speculative financial derivatives contracts as transactions that could bring a bank undone.

IV OTHER REFORMS THE G20 COULD HAVE PURSUED AS A RESPONSE TO THE PROFOUND CHANGES IN THE SYSTEM

To my mind, there are four other reforms the G20 could have mandated, had it really wished to address the fundamental changes in the global financial system considered above. These reforms would address the need for a rule prohibiting proprietary trading by commercial banks, bank levies, a financial transactions tax, and sovereign bankruptcy.

I am suggesting four reforms, and have identified four fundamental changes to the financial system in the past 40 years; however, this is not to suggest that each reform responds to one fundamental change. Neither this article, nor the international financial system, is that intellectually elegant. We now have a truly

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> [b]ankers used to be thought of as staid and sober men, grave-faced and dressed in conservative black pinstripe suits, jealous of their reputation for caution and for the careful guardianship of their customers' money,' but warned that the international financial system had already become a 'gambling hall' and would soon resemble 'nothing as much as a vast casino.

Susan Strange, *Casino Capitalism* (Cromwell Press, 1997) 1–2.

globalised financial system, in which financial gambling is legal and in which trades are often initiated by computer programs, and the resultant positions are held for merely seconds or minutes. The bankers who work in this system are motivated differently than their counterparts were 40 years ago, and the core business of many banks is quite different also from what it was 40 years ago. So if we are to properly respond to such fundamental changes, we need to limit the gambling undertaken by banks that accept deposits from the public, we need to make banking less profitable, we need to dissuade a proportion of the hyper short-term trades, and, finally, we need to provide a system to respond in a timely and fair fashion to sovereign insolvencies.

A Global Volcker Rule

Section 619 of the *Dodd-Frank Act* prohibits depository institutions and their affiliates from engaging in proprietary trading, or acquiring or retaining an interest in a hedge fund or a private equity fund or sponsoring a hedge fund or a private equity fund.[126] These provisions (commonly referred to as the Volcker Rule, after former Chairman of the Federal Reserve, Paul Volcker) apply to proprietary trading and fund activities by US banks anywhere. 'Proprietary trading' is broadly defined in the *Act* as engaging as a principal for the trading account of a bank.[127]

In other words, the Volcker Rule generally prohibits the buying and selling of securities as principal for the bank's trading account. However, some trading activity is specifically permitted, including:

- trading in government securities;
- trading in connection with underwriting or market making;
- risk-mitigating hedging;
- trading on behalf of customers;
- investments in small business investment companies;
- trading by a regulated insurance business for the general account of the insurance company; and
- the organising and offering of a private equity or hedge fund.[128]

The Volcker Rule in the US has been needlessly watered down and made extraordinarily complex due to the legislature responding to the extensive lobbying of the financial services industry.[129] Globally the G20 could have required a simple rule that states 'banks that accept deposits from the public

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126 *Dodd-Frank Act*, Pub L No 111–203, § 619, 124 Stat 1376, 1620 (2010) ('the Volcker Rule').

127 Ibid.

128 Ibid.

129 Robert Schmidt and Phil Mattingly, 'Bank Lobby's Onslaught Shifts Debate on Volcker Rule', *Bloomberg* (online), 26 March 2012 <http://www.bloomberg.com/news/2012-03-26/bank-lobby-s-onslaught-shifts-debate-on-volcker-rule.html>. See also Haylee Sweetland Edwards, 'He Who Makes the Rules', *Washington Monthly* (online), March–April 2013 <http://www.washingtonmonthly.com/magazine/march_april_2013/features/he_who_makes_the_rules043315.php?page=1>.

cannot engage in proprietary trading'. This simple concept would go some way to stabilising the global financial system. Of course, this would require the US to agree to implement a simple, clear-cut rule domestically in furtherance of the G20 directive, which is unlikely given the way that special interest groups in the financial services industry have worked so hard to hollow out the US rule.[130]

B Bank Levies

The International Monetary Fund ('IMF') has recommended that governments impose a levy on the assets of their financial institutions. In its words, '[e]xpecting taxpayers to support the [financial] sector during bad times while allowing owners, managers, and/or creditors of financial institutions to enjoy the gains of good times misallocates resources and undermines long-term growth.'[131]

France, Germany, and the UK imposed levies in early 2011 for four reasons: (i) to recoup some of the costs of bailing out their financial sectors in the wake of the GFC; (ii) to accumulate funds so that future bailouts are funded by banks rather than taxpayers; (iii) to shrink the size of financial sectors that have grown too large in part due to being undertaxed; and (iv) to discourage risky behaviour in banks.

There is a strong argument that financial sectors in some countries are too large and profitable and consume a disproportionate amount of the financial and human capital in those countries. Joseph Stiglitz believes 'in many countries, the financial system had grown too large; it had ceased to be a means to an end and had become an end in itself.'[132] Lord Turner said, 'the whole financial system has grown bigger than is socially optimal … [f]rom the point of view of Britain as a whole we have over-relied on the City and we need other dynamic sectors'.[133] Paul Krugman believes that 'an oversized financial industry is hurting the broader economy',[134] and even 30 years ago, James Tobin wrote that

> we are throwing more and more of our resources, including the cream of our youth, into financial activities remote from the production of goods and services, into activities that generate high private rewards disproportionate to their social productivity.[135]

Bank levies are an attempt to redress these issues, a financial transactions tax is another means of achieving the same end.

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130 Ben Protess and Peter Eavis, 'At Volcker Rule Deadline, A Strong Pushback from Wall St', *New York Times* (online), 13 February 2013 <http://dealbook.nytimes.com/2012/02/13/at-volcker-rule-deadline-a-strong-pushback-from-wall-st/>.

131 IMF, 'A Fair and Substantial Contribution by the Financial Sector' (Final Report for the G20, IMF, June 2010) 9 [15] <http://www.imf.org/external/np/g20/pdf/062710b.pdf>.

132 Joseph Stiglitz, *The Stiglitz Report: Reforming the International Monetary and Financial Systems in the Wake of the Global Crisis* (New Press, 2010) 52.

133 Lord Adair Turner, 'How to Tame Global Finance', *Prospect* (online), 27 August 2009 <http://www.prospectmagazine.co.uk/magazine/how-to-tame-global-finance/#.UbKsNmQpYbY>.

134 Paul Krugman, 'Don't Cry for Wall Street', *New York Times* (New York), 23 April 2010, A27.

135 James Tobin, 'On the Efficiency of the Financial System' (1984) 153 *Lloyds Bank Review* 1, 14.

C Financial Transaction Tax

A Financial Transaction Tax ('FTT') is a tiny impost of perhaps between 0.01–0.1 per cent on all wholesale capital market secondary transactions. It was first proposed by John Maynard Keynes,[136] and resurrected in the context of foreign currency transactions by the Nobel Laureate, James Tobin.[137] Their thinking is that the essential function of capital markets is to intermediate capital effectively. In their view, an FTT would dissuade purely speculative, short-term transactions while doing little to nothing to dissuade longer-term investments. Markets would thus be encouraged to trade more on economic fundamentals and less on what speculators believe the price for an asset will be in the next few minutes or hours. On this reasoning, an FTT is needed today more than ever, given that some 70 per cent of trading on US financial markets is algorithmically driven and the assets acquired are typically held for very short periods of time, often measurable in minutes, if not seconds.

In 2011 the European Commission ('EC') voted to implement an FTT in the EU by early 2018.[138] In January 2013, the EU voted to allow 11 countries to implement an FTT much sooner, possibly in early 2014 depending upon the pace of implementation. These countries are Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain.[139] This tax in Europe will apply to shares and bonds, and derivatives on shares and bonds. The proposed rates are 0.1 per cent on shares and bonds, and 0.01 per cent on the derivatives of shares and bonds.[140] The tax base applying to derivatives is the nominal value of the underlying assets.[141] The proposed tax will be levied according to the fiscal residence of the seller of an asset.[142]

An FTT today is eminently feasible. When James Tobin suggested his tax on foreign currency transactions 40 years ago, its implementation was highly problematic because most trading was conducted on proprietary systems. However, in the interim, trading has migrated to centralised exchanges and clearing houses that undertake the function exceptionally efficiently. Moving

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136 John Maynard Keynes, *The General Theory of Employment, Interest and Money* (Macmillan, 1936) 156.

137 James Tobin, 'A Proposal for International Monetary Reform' (1978) 4 *Eastern Economic Journal* 153. Tobin won his Nobel Prize for other work.

138 European Commission, *Proposal for a Council Decision on the System of Own Resources of the European Union* (29 June 2011) 4.

139 Phillip Inman, 'EU Approves Financial Transaction Tax for 11 Eurozone Countries', *Guardian* (online), 23 January 2013 <http://www.guardian.co.uk/business/2013/jan/22/eu-approves-financial-transaction-tax-eurozone?INTCMP=SRCH>; John Dizard, 'Trouble Brews Over EU Transactions Tax', *Financial Times* (online), 12 April 2013 <http://www.ft.com/intl/cms/s/0/817af53a-9b7c-11e2-8485-00144feabdc0.html#axzz2QslZc1oN>; Julie Miecamp, 'Europe's Financial Transaction Tax Could Be Boost to Loan Market', *Bloomberg* (online), 15 February 2013 <http://www.bloomberg.com/news/2013-02-14/europe-s-financial-transaction-tax-could-be-boost-to-loan-market.html> .

140 European Commission, *Proposal for a Council Directive on a Common System of Financial Transaction Tax and Amending Directive 2008/7/EC* (28 September 2011) art 8(2) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52011PC0594:EN:NOT>.

141 Ibid art 6.

142 Ibid art 3.3.1. See also 'Financial Transaction Tax Tabled by European Commission', *BBC News* (online), 14 February 2013 <http://www.bbc.co.uk/news/business-21457562>.

trades away from these exchanges and clearing houses would cost far more than the amount of the tax, so today the collection of the tax would be relatively simple. Indeed, when the IMF considered the administrative feasibility of levying an FTT in 2011 it concluded it 'is no more difficult and, in some respects easier, to administer than other taxes.'[143]

An FTT will also encourage simpler transactions and thereby enhance the effectiveness of securities regulations. The complexity of many collateralised debt obligations ('CDOs') in the lead-up to the GFC defeated disclosure as an organising market principle. The cascading effect of an FTT – applying to multiple transfers which together comprise one transaction – offends some economists' sense of propriety, but has the benefit of incentivising simplicity in transactional design which should in turn increase the efficacy of securities regulation.

If the G20 really wants to address the move in our financial markets towards ever-higher frequencies of trading, and wants to encourage accuracy in pricing, and thus promote the most important form of market efficiency, allocative efficiency, an FTT is the way to go.

The debate on an FTT in Asia has been far less extensive and vigorous than in Europe, in part perhaps because civil society is less well-developed in the region, and the civil society that is active and vocal understandably tends to focus on issues that are more domestic and central to a rights agenda.[144] Nonetheless, in the past few years the idea has gained some traction.

In early 2013 the South Korean government discussed imposing a Spahn tax, a modified Tobin tax, on foreign currency transactions to limit speculative inflows of foreign capital.[145] Named after Professor Paul Bernd Spahn, such a tax is at very low rates in normal times but rises to high rates at times of extreme fluctuations in the value of the currency. At the time of writing, it seemed that there was some sort of general consensus in Korea that (i) such a tax should perhaps be implemented if speculation in the won intensified, and (ii) the threat

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143 John D Brondolo, 'Taxing Financial Transactions: An Assessment of Administrative Feasibility' (Working Paper 11/185, IMF, August 2011) 5.

144 Young-Chul Kim, 'Understanding the Silence Amid Turmoil: The Tobin Tax and East Asia' in James Weaver, Randall Dodd and Jamie Baker (eds), *Debating The Tobin Tax: New Rules for Global Finance* (New Rules for Global Finance Coalition, 2003) 135 <http://www.new-rules.org/storage/documents/other/debatingthetobintax.pdf>.

145 Zhu Ningzhu, 'Tobin Tax Estimated to Add 740 mln USD to S Korea's Tax Revenue', *Xinhua News Agency* (online), 21 February 2013 <http://news.xinhuanet.com/english/business/2013-02/21/c_132183076.htm>; 'Curbing Currency Volatility', *Korea Times* (online), 3 February 2013 <http://www.koreatimes.co.kr/www/news/opinon/2013/02/202_129932.html>; 'S Korea's New Finance Minister Cautious on Adopting Tobin Tax', *Korea Times* (online), 24 March 2013 <http://www.koreatimes.co.kr/www/news/nation/2013/03/116_132622.html>; Yoo Seungki, 'S Korean President-Elect Park Stresses Currency Stabilization', *Xinhua News Agency* (online), 20 February 2013 <http://news.xinhuanet.com/english/world/2013-02/20/c_132181100.htm>.

alone of such a tax was itself having a salutary effect in dampening speculation in, and appreciation of, the won.[146]

In China, Xia Bin, a member of the Monetary Policy Committee of the People's Bank of China, has written that 'China should continue to strengthen its regulations on capital inflows to fend off the risks produced by hot money.'[147] He suggested 'the government impose a "Tobin tax", a levy on all spot conversions of one currency to another, to penalize short-term financial "round-trip" excursions into other currencies.'[148]

In Japan in 2010, Foreign Minister Katsuya Okada said politicians internationally should consider a tax on international finance in order to help support developing nations.[149] Further, Deputy Finance Minister Naoki Minezaki said Japan should consider implementing an FTT to dampen speculative capital flows and market volatility.[150]

So the idea of an FTT, in its various guises, is now part of the debate in the region, although it will take decisive leadership in more than one nation to see its implementation.

D A System to Deal with Sovereign Bankruptcy

Adam Smith identified the clear need for a sovereign bankruptcy regime over 200 years ago, in these terms:

> When it becomes necessary for a state to declare itself bankrupt, in the same manner as when it becomes necessary for an individual to do so, a fair, open, and avowed bankruptcy is always the measure which is both least dishonourable to the debtor and least hurtful to the creditor.[151]

Horst Kohler, when Managing Director of the IMF in 2002, spoke to the same need when he said, 'the present arrangements for resolving sovereign debt

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146 Carla Main, 'Swaps Exemption, Libor "Delay," Brazil Swaps: Compliance', *Bloomberg* (online), 3 April 2013 <http://www.bloomberg.com/news/2013-04-03/swaps-exemption-libor-delay-brazil-swaps-compliance.html>.

147 Wang Xiaotian, 'Safe Promises Crackdown on "Hot Money"', *China Daily* (online), 5 August 2011 <http://www.chinadaily.com.cn/cndy/2011-08/05/content_13054240.htm>. See also Joy C Shaw and Rose Yu, 'PBOC Adviser Mulls Tobin Tax', *Market Beat, Wall Street Journal* (online), 25 November 2010 <http://blogs.wsj.com/marketbeat/2010/11/25/pboc-adviser-mulls-tobin-tax/>; Sophie Leung and Nerys Avery, 'China's PBOC Plans to Strengthen Liquidity Management', *Bloomberg* (online), 25 November 2010 <http://www.bloomberg.com/news/2010-11-24/china-s-central-bank-to-strengthen-liquidity-management-tighten-lending.html>.

148 Xiaotian, above n 147.

149 Edmund Conway, '"Robin Hood" Bank Tax Wins Backing of Japanese Foreign Minister', *The Telegraph* (online), 2 March 2010 <http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/7352791/Robin-hood-bank-tax-wins-backing-of-Japanese-foreign-minister.html>.

150 Toru Fujioka, 'Japan Should Impose Taxes on Financial Trading, Minezaki Says', *Bloomberg* (online), 17 February 2010 <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aOYvwYcuJD5I>.

151 Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (Methuen & Co Ltd, first published 1776, 1904 ed) Book V, Chapter III [V.3.61] <http://www.econlib.org/library/Smith/smWN22.html#B.V, Ch.3, Of Public Debts>.

crises are not sufficiently transparent or predictable, and … they impose unnecessary costs on debtors, creditors, and the system as a whole.'[152]

Faced with a nation in crisis, the IMF simply has too few policy options at its disposal. The IMF can continue lending or stop lending to the debtor. If the nation's problems include an unsustainable debt burden, more debt will only make matters worse. Yet if the IMF stops lending, the debtor will usually be forced to default, and lose access to capital, and capital markets more generally may be destabilised.[153]

Traditionally these crises were the preserve of developing countries, but of late, of course, we have seen Iceland, Ireland, Greece, and Cyprus, suffer similar crises. Yet today there are still no machinery or rules in place to facilitate or regulate sovereign bankruptcy. The IMF proposed a Sovereign Debt Restructuring Mechanism in 2002. This idea did not win widespread support at the time, but the Fund is revisiting it at the time of writing.[154]

In writing about sovereign bankruptcy, Adam Smith meant something quite different from corporate or personal bankruptcy. A sovereign nation cannot go out of business, and its assets cannot be liquidated and distributed among creditors. Sovereign bankruptcy would involve a stay of execution by creditors while the procedure was in process, and would result in the determination of an amount of debt relief that would, after it had been effected, leave the debtor able to continue to service its remaining debts and afford to its people their basic human rights.

The term sovereign bankruptcy is therefore used, in the literature, as a short-hand for a formal procedure conducted according to rules that would result in a degree of mandated debt relief. Sovereign bankruptcy would thus lead to much the same type of result as the long, protracted rescheduling negotiations which are currently the norm, viz. the debt would be cancelled in part and the balance rescheduled. The differences are that the level of cancellation might be higher, as the debtors have little power in the current negotiations, and the outcome would be determined by an independent forum, not by the parties, and according to prescribed rules. In short the process should be fairer, swifter and more certain than that which prevails today.

The principal purposes of a personal bankruptcy system are generally seen to be to divide the assets of an insolvent debtor fairly and rateably between its creditors and allow an insolvent debtor the opportunity to make a fresh start free. The four objectives of *corporate* insolvency law are generally seen as restoring the company to profitable trading if possible, maximising returns to creditors,

152 Horst Köhler, 'Reform of the International Financial Architecture: A Work in Progress' (Speech delivered at the Central Bank Governors' Symposium, Washington DC, 5 July 2002) <http://www.imf.org/external/np/speeches/2002/070502.htm>.

153 See Ross P Buckley, 'The Bankruptcy of Nations: An Idea Whose Time Has Come' (2009) 43 *The International Lawyer* 1189.

154 IMF, 'IMF Executive Board Discusses Sovereign Debt Restructuring – Recent Developments and Implications for the Fund's Legal and Policy Framework' (Public Information Notice No 13/61, 23 May 2013) <http://www.imf.org/external/np/sec/pn/2013/pn1361.htm>.

providing a fair and equitable system for the ranking of claims and identifying the causes of company failures and imposing sanctions for culpable management.[155]

What is missing from the general insolvency literature is the notion that an effective insolvency regime will improve dramatically the allocation of credit within an economy, and thus make the economy more stable. This effect I have termed the 'systemic' aspect of a bankruptcy regime – for without a bankruptcy regime, any economy will, as a system, be unstable.[156]

The fairness aspects of bankruptcy are important. Internationally their absence has cost millions of lives in developing countries. However, the systemic advantages of a bankruptcy system are arguably more important at the international level. This is because the more immediate risk of loss for creditors with a sovereign bankruptcy regime in place would tend to moderate capital flows to developing countries. The real prospect of massive loan losses always sharpens bankers' minds. These systemic advantages would help ensure that the capital flows are more appropriate to the needs and capacities to repay of debtors. Financial crises would thus be less frequent and less severe because crises are so often the result of excessive inflows in preceding years.[157]

Furthermore, in the event of a crisis, the workout would proceed more rapidly and efficiently and thus the workout costs to creditors and debtors would be reduced.

We take this systemic effect of bankruptcy for granted in domestic systems. If a bank makes a poor credit decision domestically and lends to a borrower who subsequently becomes insolvent, absent security, most of the money will be lost. Without the prospect of sovereign bankruptcy, lenders have not borne the full implication of poor lending decisions internationally and thus excessive extensions of credit have been the result.[158] As default is so destabilising, nations tend to service their debts through higher taxes and lower social services that translate into malnutrition, inadequate housing and health care, etc.[159] The debts of effectively bankrupt nations are repaid at the expense of the most basic human rights of their own citizens. Latin American nations still service debt incurred in the 1970s. That debt has been restructured, reduced, and transformed into Brady bonds, which are still some 15 years away from being fully repaid. Debt is a lifetime sentence for poor countries. We still have something very like debtors' prisons for highly indebted nations, as Greece and Spain are now beginning to learn.

155 Roy Goode, *Principles of Corporate Insolvency Law* (Sweet & Maxwell, 2nd ed, 1997) 25 ff.

156 Ross P Buckley, 'The Systemic Benefit of Insolvency Law: A Lacuna in the Australian Literature' (2003) 11 *Insolvency Law Journal* 38.

157 Excessive capital inflows played a major role in the debt crisis of 1982, the Mexican crisis of 1995, the East Asian crisis of 1997 and Russia's meltdown in 1998: see Ross P Buckley, 'A Tale of Two Crises: The Search for the Enduring Reforms of the International Financial System' (2001) 6 *UCLA Journal of International Law and Foreign Affairs* 1.

158 Ross Buckley, 'Sovereign Bankruptcy' (2003) 15(2) *Bond Law Review* 95, 101.

159 Ibid 101–2.

The comprehensive approach would be to establish a standing sovereign bankruptcy court by treaty. A more achievable approach, in the near term, would be to establish an ad hoc tribunal for each case. In either case, the body would need to apply an agreed set of rules and procedure. An ad hoc arbitral tribunal could be established quickly if implemented by agreement between the creditors and a nation in difficulty.[160]

The two principal models generally considered as the basis for any sovereign bankruptcy regime are Chapters 9 and 11 of the US Bankruptcy Code.[161]

Chapter 11 is better known than Chapter 9 and perhaps for this reason, commentators often consider Chapter 11 when looking for a precedent for a sovereign bankruptcy regime. However, the issues that arise in the bankruptcy of a nation are closer to those of a local government than a corporation. For these reasons, Chapter 9 is the best place to start, as it governs the bankruptcy of local government and municipal authorities. While Chapter 9 is not well known, there have, nonetheless, been about 640 proceedings brought under Chapter 9 in its history, and studies have suggested the proceedings have worked very well.[162]

The major proposal by civil society to address the problem of sovereign bankruptcy is the idea of a Fair and Transparent Arbitration Process – basically a Chapter 9 style proceeding facilitated by an arbitral tribunal rather than a court. The difference is largely inconsequential. What matters is the fairness and efficacy of the rules and the independence of the tribunal, not the tribunal's form as a court or arbitral tribunal, and not the form of proceedings as a court case or an arbitration.[163]

In current sovereign debt negotiations, the IMF tends to severely limit the budgetary expenditures of debtor nations,[164] despite considerable evidence that overly restrictive fiscal settings are not conducive to economic growth in developing countries.[165]

160 Kunibert Raffer, *Solving Sovereign Debt Overhang by Internationalising Chapter 9 Procedures* (2002) Studien von Zeitfragen <http://www.jahrbuch2002.studien-von-zeitfragen.net/Weltfinanz/RAFFER_1/raffer_1.HTM>.

161 *United States Bankruptcy Code*, 11 USC §§ 101–1532 (2013).

162 Robin Jeweller, 'Municipal Reorganization: Chapter 9 of the US Bankruptcy Code' (Report for Congress, Congressional Research Service, 8 March 2007) CRS-1 <http://assets.opencrs.com/rpts/RL33924_20070308.pdf>. See also Gosia Wozniacka, 'Stockton is Largest US City to Seek Bankruptcy', *Associated Press* (online), 28 June 2012 <http://bigstory.ap.org/article/stockton-largest-us-city-seek-bankruptcy>.

163 See European Network on Debt and Development ('Eurodad'), 'A Fair and Transparent Debt Work-Out Procedure: 10 Core Civil Society Principles' (Report, December 2009) <http://eurodad.org/uploadedfiles/whats_new/reports/eurodad%20debt%20workout%20principles_final.pdf>.

164 Michele Wucker, 'Passing the Buck: No Chapter 11 for Bankrupt Nations' (2001) 18(2) *World Policy Journal* 10. See also Carmen M Reinhart and Kenneth S Rogoff, 'Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten' (Working Paper No 13/266, IMF, December 2013) <http://www.imf.org/external/pubs/ft/wp/2013/wp13266.pdf>.

165 David Goldsbrough, 'Does the IMF Constrain Health Spending in Poor Countries? Evidence and an Agenda for Action' (Report, Center for Global Development, June 2007) <http://www.cgdev.org/content/publications/detail/14103>.

In short, what works for municipal governments in the US should work far better than our current arrangements for the poorer nations of the world. This should not be surprising, as adjudication under a predetermined set of rules by an independent forum should produce a fairer and more certain and predictable outcome than the utterly unregulated negotiations that resolve these issues today. Developed and developing nations, and the international financial system, would all be best served by a carefully crafted set of bankruptcy rules, modelled on Chapter 9 of the US Bankruptcy Law, and applied and enforced by independent tribunals.

V CONCLUSION

In the immediate aftermath of the GFC, the UN asked Joseph Stiglitz to head a Commission into the international financial system.[166] Its report was informed by a 'new' type of thinking. The first of Stiglitz's 'Principles for a New Financial Architecture' is:

> Financial markets are not an end in themselves, but a means: they are supposed to perform certain vital functions which enable the *real economy* to be more productive:
>
> (a) mobilising savings,
>
> (b) allocating capital, and
>
> (c) managing risk, transferring it from those less able to bear it to those more able.
>
> It is hard to have a well-performing modern economy without a good financial system.[167]

The GFC was a direct result of treating the creation of financial products as an end in itself – as a valuable driver of economic growth independent of the products' effects. The reforms initiated by the G20 to date are worthwhile, necessary and helpful. Most have a long way to go to be fully implemented, and after five years that is disappointing, but the principal reason is that implementation is by national governments. Some of the so-called G20 reforms, such as Basel III, were in train anyway; most were not, and all will assist the global financial system. One test is whether they are useful, helpful reforms. Another more significant test is whether the reforms address the fundamental changes in the system. G20 mandated reforms perform much better on the first test than the second. One reason for this is that none of the reforms initiated by the G20 have challenged the way of thinking that sees financial markets as an end in themselves and not merely a means to support the real economy.

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166 United Nations, 'Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System' (Report, 21 September 2009) <http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf>.

167 Joseph E Stiglitz, 'Principles for a New Financial Architecture' (The Commission of Experts of the President of the UN General Assembly on Reforms of the International Monetary and Financial System) <http://www.un.org/ga/president/63/commission/newfinancialarchitecture.pdf>.

The G20's reforms are unlikely to be sufficient to avert another global financial crisis. Levies on banks, far reaching reforms of bankers' compensation, the removal of the conflict of interest that compromises all credit ratings today, and a financial transactions tax, taken together, would do far more than all the G20's reforms, proposed and mooted, to avert another crisis, and a formal regime for the resolution of sovereign insolvencies would make such events less damaging than they are today. Taken together these reforms would see banking as less profitable, less crisis-prone and far more stable than it is today, and the individual incentives of bankers far better aligned to those of the real economies in which the banks operate.