Building a Framework to Address Failure of Complex Global Financial Institutions[#]

Douglas W. Arner[*] & *Joseph J. Norton*[**]

I. Introduction

During the week of 15 September 2008, the world faced a global systemic financial crisis as the result of the failure of a series of large complex global financial institutions (LCGFIs),[1] including Lehman Brothers, Merrill Lynch, American International Group (AIG) and Halifax Bank of Scotland (HBOS). These failures occurred in the context of legal and regulatory systems which were unprepared to deal with the consequences of such failures, with the result being the current global financial and economic crisis. However, these were not the first such failures the global financial system and domestic regulatory systems have had to face: almost twenty years ago, the world experienced the first failure of an LCGFI, the insolvency of the Bank

[*] Director, Asian Institute of International Financial Law; Director, LLM (Corporate & Financial Law) Programme; and Associate Professor, Faculty of Law, University of Hong Kong; Co-Director, Duke University-HKU Asia-America Institute in Transnational Law; and Visiting Research Fellow, University of New South Wales.

[**] James L. Walsh Professor of Financial Institutions Law, SMU Dedman School of Law, Southern Methodist University; Sir John Lubbock Professor of Banking Law (1993–2004), University of London; Vice Chancellor's Distinguished University Visiting Professor (1999–2000), University of Hong Kong; and Chairman, Board of Academic Advisors, Asian Institute of International Financial Law, Faculty of Law, University of Hong Kong.

[#] The authors have both been involved over a number of years with the on-going World Bank-International Monetary Fund Global Bank Insolvency Initiative and have benefited enormously from discussions with others around the world involved in the Initiative. The authors would also like to thank Elizabeth G. Chan and Raja Naach for research assistance and participants at seminars in Washington DC, Sydney and Zurich for input and comments. All opinions, errors and omissions are those of the authors, unless otherwise noted.

[1] For purposes of this article, "LCGFI" refers to a large complex banking organisation (LCBO) or a large complex financial institution that has a global presence and / or impact on the financial markets / systems. Specifically these are larger domestic and foreign banking and / or other financial organisations with particularly complex operations and dynamic risk profiles and that require a heightened level of planning, coordination and innovative techniques to implement an effective supervisory program. These organisations typically have significant on and off-balance-sheet risk exposures, offer a broad range of products and services at the domestic and international levels, are subject to multiple supervisors domestically and abroad, and participate extensively in or otherwise can impact large-value payment and settlement systems and the financial system generally. Cf US Federal Reserve Board of Governors, Supervisory Letter SR 99–15 (SUP) on risk-focused supervision of large, complex banking organisations, 23 Jun 1999.

of Credit and Commerce International (BCCI).[2] While previous major international financial regulatory efforts to address issues such as payment systems and capital adequacy were triggered by other crises,[3] the cross-border liquidation of BCCI presented a broad range of significant, previously unaddressed issues respecting the insolvency of a multinational banking organisation. Though the BCCI debacle was not a collapse of systemic significance, it did result in major domestic regulatory reforms respecting cross-border supervision (including in the United Kingdom and Hong Kong) as well as serious international efforts to both prevent the failure of LCGFIs (especially banks) and begin a regulatory and policy conversation that continues today respecting how to develop systems, mechanisms and procedures to address such failures which might occur in an orderly and effective manner.[4]

The insolvency of BCCI also provided major impetus for the work of a rising academic at the University of Hong Kong (HKU), Philip St. John Smart, to publish the first serious book addressing international insolvency. Since its

[2] BCCI was an international private bank founded in Karachi by a leading Pakistani financier in 1972. The institution, which came to operate through a holding company structure, was chartered in Luxembourg, though it maintained its treasury functions in the Cayman Islands and its key operational base in London before consolidating its operations in Abu Dhabi in 1990. At its height in the late 1980s, it had branches and subsidiaries in over 70 countries and held assets exceeding US$20 billion (making it, at the time, the seventh largest private bank in the world). Because of its complex structure, BCCI operated largely on a non-transparent basis, with no single bank regulator or audit firm having a full view and control over the entire enterprise. Due to large-scale fraud and corrupt and criminal practices at the core of the enterprise, the UK and US regulators, in conjunction with the Luxembourg and Cayman Island authorities, closed BCCI in 1991 and forced it into liquidation. For further discussion *see* Lord Justice Bingham, *Inquiry into the supervision of the Bank of Credit and Commerce International* (London: HMSO, Oct 1992); J. Kerry & H. Brown, "The BCCI Affair: A Report to the Committee on Foreign Relations United States Senate (Dec 1992, 102d Congress 2d Session Senate Print 102–140). Also, for implications of the BCCI scandal, *see*, inter alia, Joseph J. Norton, "Projecting Trends in International Bank Supervision: After BCCI," J. Norton (ed), *International Finance in the 1990s: Challenges and Opportunities* (Oxford: Blackwell, 1992), Ch 4.

[3] Eg the failure of Bankhaus Herstatt in the early 1970s and the near failure of a number of large international banks in the wake of the developing country debt crisis of the early 1980s. *See* inter alia, R. Dale, *The Regulation of International Banking* (1984).

[4] According to one of the leading analyses:

> BCCI revealed some of the complications that could arise in the insolvency of a multinational banking organisation. Lack of agreement on an international insolvency regime means that conflicts may arise with regard to the treatment of deposits and assets at branches in different countries, with regard to what entity will act as liquidator and what objectives that liquidator will pursue, and with regard to the right of set-off, if any. Moreover, criminal prosecution in the United States may preempt these normal, if chaotic, bankruptcy procedures. In view of these complications, it is not surprising that the uninsured creditors of BCCI have incurred substantial legal expenses and been obliged to wait a very long time for the settlement of their claims.

R. Herring, "BCCI & Barings: Bank Resolutions Complicated by Fraud and Global Corporate Structure," (2005) Wharton Financial Institution Center Working Paper Series, No. 05-18. *See* also, Basel Committee on Banking Supervision, The Insolvency Liquidation of a Multinational Bank (Dec 1992) for a detailed discussion of the BCCI liquidation and the enormous complexities posed due to a lack of an effective and orderly insolvency framework for the liquidation of just an entity. *See* also the incipient reform efforts of the Basel Committee, Minimum Standards for the supervision of international banking groups and their cross-border establishments (Jul 1992).

publication in 1991, Philip's *Cross-Border Insolvency* has come to be regarded as the single most influential book in this area and has been cited by the highest courts of the Common Law world, including the UK's House of Lords and Hong Kong's Court of Final Appeal.[5] At the time of his sudden and untimely death in 2008, Philip was working on the third edition, and it is certain that the current global financial crisis would have provided a great deal for Philip to deal with – and for us to discuss with him.

We present this article as a memorial tribute to our friend, colleague and counsellor. Before coming to HKU in the late 1990s, we were already familiar with Philip's work: Philip was even then regarded in British academic circles as one of the intellectual "pathfinders" in the international insolvency arena. When we visited HKU in 1998, Philip was among the first people we met and became one of our firmest friends, to our substantial academic and personal betterment. While, for his own reasons, Philip chose to limit his travels, his reputation was truly world-wide: scholars, judges and practitioners from all over the common law world sought him out. Philip was a first-class legal scholar with a wide international reputation: he was highly instrumental in the HKU Faculty of Law establishing its own international institutional reputation. With no fanfare, Philip (as collaborator, adviser and colleague) invariably made his colleagues better scholars and individuals, and his Faculty an intellectually and collegially better environment.

Philip himself was an internationalist; but, at his core, he was a great believer in the vitality, adaptability, robustness and efficacy of the common law. Though Philip initially looked with some legitimate curiosity as to why certain jurisdictions had devised particularised insolvency laws for banking institutions, he also appreciated the enormous legal complexities of the matter – particularly since the Asian financial crisis in the late 1990s.[6] We gained much from Philip's input and insights into our own academic work.

In approaching this tribute article to Philip, we wish to raise further complex insolvency issues arising from the current global financial crisis.[7] In so doing, we feel rather incomplete in not being able to discuss evolving ideas with Philip. We reluctantly understand that all must eventually come to pass. But, Philip's life ended all too soon and abruptly. In the time we

5 *See* P. Smart, *Cross-Border Insolvency* (London: Butterworths, 1991, 2nd edn, 1997).

6 *See* P. Smart, "Insolvency Law Reform: International Financial Insolvencies", in S. Goo, D. Arner & Z. Zhou, *International Financial Sector Reform: Standard Setting and Infrastructure Development* (London: Kluwer, 2002), Ch 8.

7 On the global financial crisis and its regulatory implications, *see*, inter alia, Financial Stability Forum (FSF), Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience (Apr 2008); FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience: Follow-up on Implementation (Oct 2008); FSF, Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience: Update on Implementation (Apr 2009); D. Arner, "The Global Credit Crisis of 2008: Causes, Consequences and Implications for Financial Regulation," (2009) 43 *Int'l Lawyer* (forthcoming).

had Philip with us, Philip gave us much. For this, we feel blessed, and, for which, Philip's memory will remain always with us.

Specifically, this article considers the possible design of frameworks to address failures of LCGFIs, at the domestic, regional and international levels. Following this introduction, in section II, the article considers briefly the problems that have been presented by the recent failures or near failures of such institutions, including institutions which have been judged too large and complex to fail (eg AIG and Citigroup) and others which have been allowed to fail (eg Lehman Brothers).[8] From this basis, in section III, the article discusses possible mechanisms to prevent the failure of LCGFIs and thereby prevent such failures causing systemic financial crises of the sort experienced in September and October 2008.[9] At the same time, in market-based financial systems, failures will occur and one of the most significant lessons to emerge from the global financial crisis so far is that LCGFIs can and do fail; without a framework developed in advance to address such failures in an orderly and effective manner when they occur, systemic risk increases. Section IV thus considers possible mechanisms to address the failure of such institutions. Finally, section V concludes, focusing on recent international discussions of related issues emanating from the Group of Twenty (G20) and the Financial Stability Forum (FSF).

II. The Global Financial Crisis and Failures of Large Complex Global Financial Institutions (LGCFIs)

Weak financial intermediaries and problems with financial regulation and supervision have been significant factors in many financial crises, including the problems surrounding the developing country debt crisis and the US savings and loan crisis in the 1980s,[10] the collapses of BCCI and Barings,[11] the Mexican and Asian financial crises in the 1990s,[12] and the current global financial crisis.[13] Prior to the current financial crisis, these various problems have led to a wide range of international efforts directed towards

8 *See*, eg, B. Bernanke, "Current Economic and Financial Conditions", Speech at the National Association for Business Economics 50th Annual Meeting, Washington, DC, 7 Oct 2008 (wherein he discusses issues surrounding Lehman and AIG).

9 Cf President's Working Group on Financial Markets, Progress Update on March Policy Statement on Financial Market Developments (Oct 2008).

10 *See*, inter alia, G. Olson, *Banks in Distress: Lessons from the American Experience of the 1980s* (London: Kluwer, 2000).

11 *See* Herring, n 4 above.

12 *See* D. Arner, M. Yokoi-Arai & Z. Zhou, *Financial Crises in the 1990s* (London: British Institute of International and Comparative Law, 2001).

13 *See* n 7 above.

supporting financial stability.[14] Unfortunately, as demonstrated by the current financial crisis, these efforts, while important, have not been sufficient to prevent the current global financial turmoil. Nonetheless, the starting point in addressing the failure of global financial conglomerates is the existing arrangements designed to prevent such situations from developing, most particularly prudential regulation and supervision.

This article focuses on two aspects that have been of most significance during the current global financial crisis: the failure (including actual insolvency) of global financial conglomerates such as Lehman Brothers (the first insolvency of a LCGFI since BCCI, this time an investment bank with a global presence), AIG (a global insurance organisation) and Citigroup (a global universal banking group).[15] Such failures have the potential (as evidenced by the insolvency of Lehman Brothers) to trigger systemic financial crises, as occurred in September 2008. In looking to related issues, the first is the question of preventing failures of systemically important financial conglomerates. The second (assuming that such failures will be allowed to occur in future, at least in some jurisdictions) is the question of what would be effective and orderly mechanisms to resolve such failures when they do occur in future.

In the current crisis, recent LCGFI failures have been expressed by insolvency (most dramatically in the case of Lehman Brothers); in others, failing institutions have been taken over by stronger or seemingly stronger institutions (for example, JP Morgan and Bear Stearns, Bank of America and Merrill Lynch, Lloyds and HBOS);[16] in yet others, by government intervention and support (in the cases of AIG, Citigroup, Royal Bank of Scotland and UBS, among others), up to and including partial or complete nationalisation.[17]

The systemic phase of the current global financial crisis was triggered by the insolvency of Lehman Brothers, a major global investment bank, in September 2008. This insolvency is now the world's largest and most

[14] *See* D. Arner, *Financial Stability, Economic Growth and the Role of Law* (Cambridge University Press 2007); R. Weber & D. Arner, "Toward a New Design for International Financial Regulation", 29 *U. Pennsylvania J. Int'l L.* 391 (2008).

[15] In addition to these failures, the current crisis has also included the collapse of the US automobile industry, the insolvencies of a growing number of large and small business firms with cross-border operations around the world, and a growing number of sovereign financial crises (with Iceland likely to be only the first, and with imminent distressed sovereign situations in Central and Eastern Europe and Latin America).

[16] As of March 2009, the financial health of both Bank of America (following its takeover of Merrill Lynch) and Lloyds has come into serious doubt, with the once healthy and conservative Lloyds now majority owned by the UK Government and Bank of America requiring significant financial assistance from the US government.

[17] Cf Financial Times, "In Depth, Global Financial Crisis: Global banking reshaped", available at http://www.ft.com/indepth/global-financial-crisis (visited 15 Apr 2009).

complex.[18] At the same time, however, other major institutions were not allowed to fail, because authorities determined that they were simply too large, complex and globally connected for the global financial system to be able to deal with actual insolvency. The best example of the latter is AIG – prior to the crisis, the world's largest insurance company, with operations in over 100 countries around the world, over US$ one trillion in assets and regulated by literally hundreds of regulars globally.[19]

While AIG was judged as too complex and interconnected to be allowed to fail (ie, systemically significant) and thus has received serial US government support amounting to over US$150 billion to date, Lehman Brothers was judged to be a non-systemically significant institution and therefore subject to insolvency.[20] As noted above, in retrospect, the insolvency of Lehman Brothers was the trigger for the systemic phase of the global financial crisis. As such, the insolvency of Lehman Brothers highlights the very real problems which can arise as the result of the failure of an LCGFI and the failure of international and domestic mechanisms to address such failures.

Preventing and addressing systemic risk is the fundamental aspect of financial regulatory design. Such a design requires the following elements to be addressed: first, a robust financial infrastructure (especially payment and settlement systems); second, well-managed financial institutions with effective corporate governance and risk management systems; third, disclosure requirements sufficient to support market discipline; fourth, regulatory systems designed to reinforce management and market discipline as well as

[18] Lehman Brothers Holdings Inc (LBHI) filed a petition in the US Federal District Court for the Southern District of New York under Chapter 11 of the US bankruptcy code on 18 Sep 2008. The petition listed consolidated bank and bond debt of more than US$600 billion. The filing marked the first failure of a major investment bank since the demise of Drexel Burnham Lambert in Feb 1990. Lehman's problems originated from large-scale losses and write-downs taken on exposures to troubled assets and concerns that future losses would outstrip the company's previous efforts to replenish its capital base. As such, its failure revived questions about investment banks' highly leveraged balance sheets and associated dependence on wholesale funding that had been raised when Bear Stearns had nearly failed in early 2008. Thus, when confidence in the continued viability of the company collapsed, its access to wholesale markets was cut off, forcing Lehman into bankruptcy. *See* Bank for International Settlement (BIS), *BIS Quarterly Review* (Dec 2008). A subsequent insolvency administration proceeding was filed in the United Kingdom. *See* http://www.lehman.com/(visited 15 Apr 2009), which site directs one to the relevant update links on the US and UK proceedings and concerning other global aspects of Lehman unwinding. Related proceedings have been initiated in Hong Kong, Japan, Australia, Germany and Singapore, among others.

[19] On the AIG collapse, which US Senator Richard Shelby has referred to as the "greatest corporate failure in US history," *see* Senate Committee on Banking, Housing and Urban Affairs, Hearing: American International Group: Examining what went wrong, government intervention, and implications for future regulation (5 Mar 2009). The Chairman of the US Federal Reserve in his testimony indicted his biggest disappointment in the global financial crisis to date was having to rescue AIG, which he said operated a "large hedge fund" through a largely unsupervised parent holding company of what was otherwise a solvent and solid group of insurance subsidiaries.

[20] *See* B. Bernanke, "US Financial Markets", Testimony of Federal Reserve Chairman Ben Bernanke before the Senate Committee on Banking, Housing and Urban Affairs, 23 Sept 2008.

limiting and monitoring potential risks across all financial institutions; fifth, a liquidity provider of last resort to provide liquidity to financial institutions on an appropriate basis; sixth, mechanisms for resolving problem financial institutions (and not simply commercial banking institutions); and seventh, mechanisms to protect financial services consumers in the event of financial institution failure.[21]

The following section focuses on the fourth element (which interacts closely with the remaining six), namely prudential regulation and supervision. Section IV discusses the fifth (liquidity provision), sixth (resolution) and seventh (customer protection mechanisms) elements in greater detail.

III. Preventing the Failure of Financial Conglomerates

In addressing the question of building frameworks to address the failure of global financial conglomerates,[22] the first level is clearly the prevention of such failures to the extent possible. In this respect, in addressing the global financial crisis and co-ordinating responses, the G20[23] and the FSF[24] have emerged as the most significant organisations to date.

In November 2008, the G20 highlighted the necessity of addressing the regulation of complex financial institutions both domestically and globally. Specifically, on 15 November 2008, following two days of meetings in Washington DC, the heads of government and finance ministers of the

[21] *See* generally Arner, n 14 above. For an alternate view of systemic risk, *see* S. Schwarcz, "Systemic Risk," (2008) 97 *Georgetown L. J.* 193.

[22] The Tripartite Group (now reconstitute as the Joint Forum on Financial Conglomerates and discussed further below) distinguishes between "financial conglomerates" whose interests are exclusively, or predominantly, in financial activities and "mixed conglomerates", those which are predominantly commercially or industrially oriented, but contain at least one regulated financial entity in some part of their corporate structure. The focus of this article is on the failure of financial conglomerates. There can be significantly diverse views as to what constitutes a financial conglomerate. These views can depend on custom and practice in different countries, and in various jurisdictions can be determined under statutes and regulations. For example, in the United States, the Gramm-Leach-Bliley Act of 2009 and implementing Federal Reserve Board regulations contain complex rules for "financial holding companies". In the European Union, the approach is based on universal banking, *see* Directive 2002/87/EC of the European Parliament and of the Council of 16 Dec 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council. For further consideration, *see* G. Walker, "The Law of Financial Conglomerates – The Next Generation", (1996) 30 *Int'l Lawyer* 57.

[23] *See* www.g20.org (visited 15 Apr 2009).

[24] *See* www.fsforum.org (visited 15 Apr 2009).

G20[25] released their *Declaration of the Summit on Financial Markets and the World Economy*.[26] In this Declaration, the G20 discussed the causes of the crisis and committed to supporting an open global economy and defined a range of actions to be taken (under the supervision of G20 finance ministers) to reform financial regulation to avoid future crises. The G20 heads of government established five main principles to guide reforms: (1) strengthening transparency and accountability; (2) enhancing sound regulation; (3) promoting integrity in financial markets; (4) reinforcing international co-operation; and (5) reforming the financial architecture.[27] For each of these five principles, the leaders established a detailed action plan,[28] incorporating immediate actions (to be taken by 31 March 2009) and medium-term actions, pending a second G20 heads of government summit in London in April 2009. The detailed action plan establishes the core content of the refinements to international financial regulatory standards to take place. In addition, the leaders tasked finance ministers to give highest priority to six areas: (1) mitigating against pro-cyclicality in regulatory policy; (2) reviewing and aligning global accounting standards, particularly for complex securities; (3) strengthening the resilience and transparency of credit derivatives markets and reducing their systemic risks, including by improving the infrastructure of the over-the-counter (OTC) markets; (4) reviewing compensation practices as they relate to incentives for risk taking and innovation; (5) reviewing the international financial architecture; and (6) defining the scope of systemically important financial institutions and determining their appropriate regulation and oversight.[29]

Under the second principle, the G20 committed to: (1) strengthening financial regulatory regimes, prudential oversight and risk management;

[25] The G20, formed in 1999 in the wake of the Asian financial crisis, comprises normally the finance ministers and central bank governors of Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, the United States, and the heads of the European Union, European Central Bank, International Monetary Fund and World Bank. The Nov 2008 meeting was the first time in which the G20 had met as a forum for heads of government. In addition, the United Nations Secretary General and the FSF chairman were invited to attend the Nov 2008 meeting. On discussion of the structure and operation of the G20, *see*, inter alia, P. Hajnal, *The G8 System and the G20: Evolution, Role and Documentation* (Aldershot: Ashgate, 2007).

[26] G20, Declaration: Summit on Financial Markets and the World Economy, 15 Nov 2008, available at http://www.g20.org/Documents/g20_summit_declaration.pdf ("G20 Declaration") (visited 15 Apr 2009). Certain aspects, especially those relating to the global economy and the international financial architecture, build upon the G20 finance ministers and central bank governors communiqué from the previous week: G20, Communiqué: Meeting of Ministers and Governors, Sao Paolo, Brazil, 8-9 Nov 2008, available at http://www.g20.org/Documents/2008_communique_saopaulo_brazil.pdf (visited 15 Apr 2009)

[27] G20 Declaration, p 3.

[28] G20, Action Plan to Implement Principles for Reform, 15 Nov 2008, available at http://www.g20.org/Documents/g20_summit_declaration.pdf (visited 6th May 2009) ("G20 Action Plan").

[29] G20 Declaration, p 4.

and (2) ensuring that "all financial markets, products and participants are regulated or subject to oversight, as appropriate to their circumstances".[30] In particular, the G20 highlighted for attention (1) credit rating agencies, (2) making regulatory regimes more effective over the economic cycle while "ensuring that regulation is efficient, does not stifle innovation, and encourages expanded trade in financial products and services", and (3) a new commitment to transparent assessments of national regulatory systems.[31] The Action Plan addresses three areas: (1) regulatory regimes; (2) prudential oversight; and (3) risk management. We will return to each of these below.

A. *Yes or No?*

In addressing such issues, there are two fundamental questions which any system must address: (1) will there be failures of major financial institutions?; and (2) will financial conglomerates be allowed to exist? These questions need to be addressed at the domestic and international and in some cases regional levels.

In relation to the first, in the context of the global financial crisis following the insolvency of Lehman Brothers, governments around the world have generally taken the decision that, at least during the crisis, other major financial institutions will not be allowed to fail. At the same time, however, the crisis will not last forever, though it could be prolonged (as was that of Japan in the 1990s);[32] and at some point, markets and economies will return to a "new normal".[33] In that emerging environment, governments will need to re-evaluate their policies on whether major financial institutions will be allowed to fail.

Clearly, some jurisdictions will take the decision that certain major financial institutions will not be allowed to fail. In those jurisdictions, the requirements of regulation must of necessity be very high in order to both make sure that failure does not occur and at the same time provide appropriate incentives for major financial institutions to operate as efficiently as possible albeit without the ultimate risk of failure. Moreover, even if technically in these jurisdictions, major financial institutions will

30 G20 Declaration. p 3.

31 *Ibid*.

32 *See* eg M. Shirakawa, "Speech: Coping with financial crisis – Japan's experiences and current global financial crisis", Tokyo, 25 Feb 2009; H. Nakaso, "The financial crisis in Japan during the 1990s: how the Bank of Japan responded and the lessons learnt", (2001) BIS Papers No 6.

33 There undoubtedly will be ongoing discussions and debates over the next several years as to what a "new normal" will comprise for the world economy and international financial system and for individual domestic economies and financial systems (both developed and developing economies). In the context of the United States, for an interesting discussion, *see* R. Florida , "How the Crash Will Reshape America", *Atlantic* (Mar 2009).

not be subject to insolvency, such institutions may still find themselves in financial distress, with their respective governments (and taxpayers) being responsible for their resolution and restructuring.[34] At the same time, it seems likely that many jurisdictions will return to market principles (ie to market discipline and related moral hazard notions) as the basis for their financial systems following the crisis; and, in those jurisdictions, financial institutions (as with any private firm) will be allowed to fail and in fact most likely will do so periodically. In this latter scenario, regulation remains very important in reducing the frequency and severity of such failures and at the same time in providing appropriate incentives to stakeholders to maximise efficiency and minimise systemic risk.[35] However, one needs to keep in mind that over the past two decades, significant efforts have been made internationally and within major jurisdictions (including the United States, the United Kingdom and the European Union) to upgrade prudential standards for financial institutions; yet these were not sufficient to prevent the systemic crisis in autumn 2008.[36]

Related to the issue of quality prudential regulation are the availability of an effective "early warning system" (EWS) and the availability of prompt corrective action (PCA). EWSs are economic variables, financial ratios and accounting measures that predict financial distress, panics or financial crisis situations. They are devised to detect financial distress at an early stage and to assist its resolution in a timely manner in order to prevent a loss of confidence in the financial system. For the regulator to be proactive in respect of financial crises, early detection of a financial crisis is essential. EWS can be divided into those that detect individual bank problems and those that are aimed at problems widely seen in the financial system (financial system wide problems). Because causes of a financial crisis are multiple and diverse, various signals indicate an impending financial crisis. A financial crisis surfaces from various routes, depending on the group of people affected or to whom information on financial distress is available. Regulators need to refer to a broad spectrum of EWSs to detect signs of a nearing financial crisis.[37]

However, the method of using an EWS in policy formulation is difficult. Some EWSs can be applied objectively but do not monitor the overall financial sector. Some EWSs do not provide a clear signal on whether a financial crisis is nearing or not. Some EWSs require historical considerations to

[34] For example, in the case of China during the 1990s, *see* J. Norton, C. Li & Y. Huang (eds), *Financial Law in the Chinese Economic Circle: Risk and Regulation* (London: Kluwer, 2000); B. Hsu, D. Arner & Q. Wan, "Policy Functions as Law: Legislative Forbearance in China's Asset Management Companies", (2007) 23 *UCLA Pacific Basin L. J.* 129.

[35] *See*, inter alia, Arner, n 14 above particularly Parts II & III.

[36] *See* generally *Ibid.*

[37] *See*, inter alia, J. Norton & M. Yokoi-Arai, "Discerning Future Financial Crises: The Institutional Based Dimensions", (2001) 24 *Bank of Valletta Rev* 1.

identify the signals. There is no foolproof EWS, but systematically combining them could effect a timely regulatory action to preserve a safe and sound financial system. Possibly, in addition to global and domestic EWSs, regional EWSs could be beneficial (eg, Europe, Asia and Latin America).

A financial institution-specific (or micro-prudential) EWS is conducted by on-site examination and off-site examination of financial institutions, examining the business and the performance of each individual institution, with the aim of evaluating the financial condition of each individual institution and not the financial system as a whole. When the regulator detects a problem in a financial institution through the institution-specific EWS, it will take regulatory action against that institution. While bank-specific EWSs identify problems of each individual financial institution, the financial system (or macro-prudential) EWS endeavours to detect the fragility of the overall financial system, to which much greater attention is now being directed as a result of the current global financial crisis.

Irrespective of the actual EWS model used, the efficacy of these is surrounded by a number of problems. First, there is the issue of completeness, source and quality of the information and data utilised. Second, there is the question of analysis and interpretation and by whom. Third, there is the policy and implementation response and by whom. Certainly, an effective EWS cannot be implemented in isolation, but should entail a regional and international dimension: at the end of the day, the policy-makers and implementers will be at the domestic level.[38]

Regulatory action against financial crises, nationally and internationally, also should increasingly focus on the use of prompt corrective action (PCA), both at the micro-prudential and macro-prudential levels. If a regulator has an effective PCA mechanism, it will be able to intervene in a preventive, prompt manner when a financial institution or the financial system begins to show signs of fragility and prior to actual insolvency. In addition, if such preventive intervention is not successful, the regulator then needs to be able to act promptly and orderly in closing and liquidating failed institution.[39] Again, while most regulators would agree in principle as to the need for PCA, the actual structuring and implementation of such a programme remains fragmented among domestic regulators.[40]

38 *Ibid*.

39 An example of a comprehensive PCA mechanism is that employed by US bank regulators pursuant to the 1991 FDICIA legislation, *see*, inter alia, R. Carnell et al., *The Law of Banking and Financial Institutions* (Wolters Kluwer, 2009, 4th ed), Ch 5; J. Norton (co-author), "The Foreign Bank Supervision Act of 1991: Expanding the Umbrella of 'Supervisory Reregulation" (1992) 26 *Int'l Lawyer* 4.

40 *See* G. Kaufman (ed), *Prompt Corrective Action in Banking: 10 Years Later* (Research in Financial Services: Private & Public Policy, 2002).

In relation to the second question raised at the beginning of this section, some jurisdictions will continue to allow financial conglomerates or "universal" financial institutions to exist, while others will not. It now seems likely that a range of jurisdictions may return to traditional sectoral regulatory and financial institution structures, thus prohibiting the existence of cross-sectoral activities and affiliations as to commercial banking and securities activities, as was done in the United States as a result of the Great Depression legislation of the 1933 Glass-Steagall Banking Act[41] until its effective repeal in 1999 with the Gramm-Leach-Bliley Act (GLBA) that permitted "financial holding companies" instead of the more limited bank holding companies and that allowed banks to have "financial subsidiaries" in addition to more limited operating subsidiaries.[42] At the same time, the authors are of the view that it does not appear that the United States will repeal the GLBA, but instead will seek to legislatively and/or regulatorily restrict and to provide more extensive oversight.[43] Along similar lines, the European Union appears to remain committed to universal banking (at least in some risk-focussed modified form and as overseen by the European Commission) and thus the existence of financial conglomerates.[44] Yet other jurisdictions most likely will remain cautious about permitting banks to engage in cross-sectoral activities. In sum, domestic (and in some cases regional) decisions regarding limitations on the existence and/or structure of financial conglomerates should guide decisions regarding regulatory structure in individual jurisdictions.

Regardless of individual national and/or regional decisions regarding the potential for failure of major financial institutions and the existence or structure of financial conglomerates, it is unlikely that agreement will be reached at an international level regarding these issues.[45] As such, international financial conglomerates will continue to exist and will be subject to failure, even if the regulatory and oversight framework is enhanced. As a result, there is a clear necessity to build upon existing international pruden-

[41] For discussion the Glass-Steagall barrier, *see*, inter alia, J. Norton, "Up Against 'The Wall': Glass-Steagall and the Dilemma of a Deregulated ('Reregulated') Banking Environment", (1987) 42 *Business Lawyer* 327.

[42] *See*, inter alia, *Ibid*.

[43] For arguments in favour of a return to a sectoral financial system in the United States, *see* Group of 30, *Financial Reform: A Framework for Financial Stability* (Group of 30, Jan. 2009)

[44] The High-Level Group on Financial Supervision in the EU, Report (Feb 2009); Financial Services Authority (UK), "A regulatory response to the global banking crisis", Discussion Paper 09/02 (Mar 2009). Cf R. Smith & I. Walter, "After the Wreckage: What's Next for Universal Banking?", RGE Monitor, 22 Oct 2008.

[45] According to the G20: "Large complex financial institutions will continue to operate in multiple jurisdictions in order to meet the needs of their large global clients, and supervision will need to be better coordinated internationally with a robust global resolution framework." G20 Working Group 1, n 97 below, pp v-vi.

tial arrangements to reduce the frequency and impact of such failures and to allow them to occur without triggering a systemic financial crisis.

In this context, it is interesting to note that Henry Paulson, former US Treasury Secretary, has indicated that in dealing with failing investment banks such as Lehman Brothers, perhaps the greatest difficulty he faced was the lack of an effective resolution framework equivalent to that which exists for commercial banks .[46] Had a similar system existed, it might have been possible to resolve Lehman Brothers in an orderly manner and without the resulting systemic financial crisis which took place as the result of its disorderly failure.

B. Domestic Structures and Systems

As a general matter, countries around the world have adopted four primary structures for addressing cross-sectoral financial intermediary activities and financial conglomerates: (1) universal banking, (2) strict sectoral separation, (3) financial holding companies or (4) parent / subsidiary structure.[47] Under the universal banking structure, financial intermediaries are allowed to conduct any sort of financial activity without any need for separately capitalised and/or regulated subsidiaries. Under the strict sectoral separation model, financial intermediaries are only allowed to undertake financial activities within the sector in which they are authorised: banks and banking, insurance, and so on. Cross-sectoral activities are not permitted. Under a financial holding company model, an umbrella company – a financial holding company – may be established which, in turn, may own as subsidiaries one or more banks and other financial intermediaries which undertake activities within individual financial sectors. The financial holding company is a separate company from the individual subsidiaries and does not normally undertake financial activities directly. Under the parent / subsidiary model, a parent financial intermediary (for example, a bank or an insurance company) may establish separate subsidiaries to undertake financial activities in other sectors.

At this time, there is no general consensus concerning which model is the best. Likewise, there is a direct relationship between the model chosen for financial intermediaries and financial conglomerates and a given country's financial regulatory structure.

[46] *See* "Paulson, Bair Want System for Investment Bank Closure", Bloomberg, 19 Jun 2008, available at http://www.bloomberg.com/apps/news?pid=20601103&sid=aKo5giy3WnlM&refer=news (visited 15 Apr 2009).

[47] *See* Arner, n 14 above; *see* also D. Arner & J. Lin (eds), *Financial Regulation: A Guide to Structural Reform* (Hong Kong: Sweet & Maxwell Asia, 2003).

In addition to cross-sectoral financial activities and intermediary structure, a second question arises as to whether financial intermediaries should be permitted to undertake nonfinancial business.[48] For example:

- Should banks be allowed to undertake nonfinancial business other than banking business? Should universal banks be allowed to undertake nonfinancial business as well as financial business?
- Should financial holding companies be allowed to have nonfinancial subsidiaries as well as financial intermediary subsidiaries?
- Should holding companies be allowed to own financial holding companies as well as other nonfinancial business?

At present, there is no general international consensus concerning whether or not financial intermediaries and financial holding companies should be restricted to financial business. At the same time, there is no general consensus regarding whether nonfinancial companies should be able to own financial intermediaries or financial holding companies. The main considerations that arise in this context are therefore a country's regulatory structure and supervisory capacity, as well as the level of sophistication within its financial sector.

Around the world, in recent years, there has been a growing concern about financial regulatory structure in individual economies and especially about the appropriateness of existing arrangements in the face of globalisation, the development of financial conglomerates and the blurring of lines among traditional financial sectors (banking, insurance and securities) and products.[49]

[48] Under the US GLBA and related Federal Reserve regulations, there is a hybrid concept of permitted activities referred to as activities "complimentary" to permitted financial activities.

[49] *See* Arner, n 14 above; Arner & Lin, n 47 above.

Overall, a number of lessons have emerged.[50] First, countries need to examine carefully the advantages and disadvantages of any possible change, including the risks inherent in the change process itself. Second, a number of basic models or structures are possible: the traditional sectoral model (with separate regulators for each financial sector, namely banking, securities and insurance, often combined with strict separation or holding company structures for financial conglomerates); the functional model (with separate regulators for each regulatory function – for example, financial stability, prudential, market conduct and competition regulation – catering to financial conglomerates and product innovation); the institutional model (with separate regulators for each type of financial institution, with banks being the most common example); and the integrated structure (with one or more sectors and/or functions combined in a single agency, often combined with a universal banking model for financial services provision). It cannot be taken for granted that one model is, *per se*, better than any other; it depends very much on the particular circumstances of the country concerned. The third key lesson is that there is an important relationship among regulatory structure (and attendant financial and human resources), financial structure (the relative importance of banking, insurance and capital markets and the level of financial development or repression) and the structure of financial institutions (eg strict separation of financial sectors versus universal banking).

A number of conclusions may be suggested. First, financial regulatory structure is an important issue. However, the first order of consideration must be to develop the underlying infrastructure (legal and otherwise) necessary to support the development of finance and to develop regulatory and supervisory capacity in line with international standards and within a system of clear objectives, independence and accountability.

[50] For a detailed discussion of major models and their implementation in various jurisdictions, *see* Arner & Lin, n 47 above. This analytical division is generally used outside the United States and by the IMF. For an alternative framework of analysis (adopted in the United States), *see* Group of 30, *The Structure of Financial Supervision: Approaches and Challenges in a Global Marketplace* (Group of 30, Oct 2008). Under the G30 / US framework, there are also four models: (1) functional; (2) institutional; (3) twin peaks; and (4) integrated. Under this framework, the "functional" model is largely equivalent to the more generally used "sectoral" model. The "institutional" model is largely equivalent to the more generally used "institutional" model. The "integrated" and "twin peaks" model (discussed further below) are equivalent in both the US / G30 and international / IMF formulations. The G30 / US framework does not have an equivalent to the international / IMF "functional" approach. To further complicate matters, in its recent review of regulatory reform options, the US Treasury suggested there are four main options: (1) institutionally based functional regulation (the current US model); (2) activities based functional regulation (a model based on regulators assigned specific functions within the financial system); (3) consolidated regulation (the model in the United Kingdom); and (4) objectives based regulation (the model in Australia). US Department of the Treasury, *Blueprint for a Modernised Financial Regulatory Structure* (Mar. 2008) ("US Treasury Blueprint"), pp 138–42. As a result, terminology and understanding the definition of that terminology being used in of significant importance in this context.

With all this in mind, a second conclusion can be drawn that regulatory structure should be designed to coincide with an economy's financial structure. There should be full coverage of the intermediaries (especially financial conglomerates), functions and risks inherent in a given financial system and done in a manner that coincides with the history, culture and legal system of that economy. An additional risk involves financial structure and regulatory design ("financial and regulatory mismatch"). In this respect, the risk is that a jurisdiction's financial regulatory structure will not equate with the structure of its financial sector, that is, financial intermediaries will be organised on a basis which is not appropriately addressed by the regulatory structure. In such circumstances, it is possible that significant risks may develop through financial intermediary operations which are not supervised by the existing structure. For example, in a strict separation financial system, informal financial groups may develop, which in turn are not regulated on a group basis, but only on a sectoral institutional basis, leaving the financial system exposed to the risks of the "group".[51]

Further, coordination and cooperation are essential among all of the various authorities responsible for financial regulation in any economy. The final conclusion is that the restructuring process itself carries risks and should be carefully considered and conducted in order to avoid worsening the existing situation.

Once again, overall, there is no general consensus as to which model is superior at present. The fundamental issue is tailoring a country's financial regulatory structure to its own circumstances and especially its structure for addressing financial intermediary activities and financial conglomerates, but with a view to achieving some level of compatibility as to the need for a satisfactory level of international regulatory linkage to prevent global systemic issues. In looking at financial regulatory structure, the emphasis is therefore on appropriately structured regulators and supervisors – regardless of the overall structure implemented in a given context.[52]

C. *International Structures and Systems*

Prior to the current global financial crisis, the Joint Forum on Financial Conglomerates (Joint Forum), comprising the Basel Committee on Banking Supervision, the International Organisation of Securities Commissions (IOSCO) the International Association of Insurance Supervisors (IAIS), bank, insurance and securities supervisors from thirteen countries[53] and the

[51] *See* Arner, n 14 above; Arner & Lin, n 47 above.

[52] U. Das, M. Quintyn & K. Chenard, "Does Regulatory Governance Matter for Financial System Stability? An Empirical Analysis", (2004) IMF Working Paper WP/04/89, p 1.

[53] Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Spain, Sweden, Switzerland, United Kingdom, United States.

EU Commission participating as an observer, was established in early 1996 to take forward the work of the prior Tripartite Group, whose report was released in July 1995.

Prior to the current global financial crisis, the Joint Forum had developed the following principles, which formed a compendium[54]: Capital Adequacy Principles, Fit and Proper Principles, Framework for Supervisory Information Sharing, Principles for Supervisory Information Sharing, Coordinator Guidance, Risk Concentrations Principles and Intra-group Transactions and Exposures Principles. To date, the FSF framework does not include a key standard addressing regulation and supervision of financial conglomerates; however, the FSF's own *Compendium* does include a number of other standards in this area. These are grouped under two subheadings: (1) general supervision and (2) risk management. General supervision includes one standard,[55] while risk management addresses intra-group transactions and exposures[56] and risk concentration.[57]

As can be seen, this framework has proven insufficient at an international level to address issues arising in the context of the global financial crisis. As noted above, the G20 has now begun to focus on these issues. In relation to regulatory regimes, for immediate action, the IMF, FSF and regulators are directed to "develop recommendations to mitigate procyclicality", including in the context of valuation, leverage, bank capital, executive compensation, and provisioning.[58] In addition, the G20 Action Plan addresses four medium-term actions. The first is a commitment by countries and regions to "review and report on the structure and principles of its regulatory system to ensure it is compatible with a modern and increasingly globalised financial system".[59] In this context, all members of the G20 specifically commit to undertaking a Financial Sector Assessment Programme (FSAP) review.[60]

The second is a direction to regulators and international standard-setters to conduct two reviews, the first of "the differentiated nature of regulation in the banking, securities, and insurance sectors" and the second of "the scope of financial regulation, with a special emphasis on institutions, instruments, markets that are currently unregulated, along with ensuring that all systemically-important institutions are appropriately regulated".[61] This

[54] Joint Forum on Financial Conglomerates ("Joint Forum"), Supervision of Financial Conglomerates (Feb 1999 as updated)
[55] *Ibid*.
[56] Joint Forum, Intra-Group Transactions and Exposure Principles (Dec 1999).
[57] Joint Forum, Risk Concentration Principles (Dec 1999).
[58] G20 Action Plan, p 2.
[59] *Ibid*.
[60] *Ibid*. It is interesting to note that even the United States has agreed to submit to an FSAP.
[61] *Ibid*.

point is key: regulation will be reviewed to address "regulatory arbitrage" and to cover existing gaps between regulators and jurisdictions.

The third is a direction to address resolution and insolvency regimes in order to ensure that they "permit an orderly wind-down of large complex cross-border financial institutions".[62] Once again, this is an issue which has been recognised for some years but which has been too complicated and politically sensitive to address. While in no way simple, this is the starting point for addressing a central weakness in the current legal framework for global finance. We return to this issue in Section IV.

As a related matter, under the fourth principle, the G20 committed to formulate national regulations in a "consistent manner".[63] In this respect, the G20 highlighted two aspects: (1) enhancement of cooperation and coordination "across all segments of financial markets, including ... cross-border capital flows"; and (2) as a matter of priority, the need to strengthen crisis prevention, management and resolution.[64] The two immediate actions are significant. Under the first, supervisors are directed to "establish supervisory colleges for all major cross-border financial institutions... Major global banks should meet regularly with their supervisory college for comprehensive discussions of the firm's activities and assessment of the risks it faces."[65] Under the second, "[r]egulators should take all steps necessary to strengthen cross-border crisis management arrangements, including on cooperation and communication with each other and with appropriate authorities, and develop comprehensive contact lists and conduct simulation exercises as appropriate."[66] We return to this final point in Section IV.

The G20 Action Plan thus provides the launching point and a preliminary context for addressing issues relating to the development of a framework for addressing the failure of LCGFIs. Applying this framework at the international level leads to four conclusions necessary to address prevention of the failure of international financial conglomerates. First, there is a clear need for redesign of key international regulatory criteria addressing capital and liquidity and the related need to develop a simple mechanism to address leverage. Second, transparency of global institutions will need to be enhanced, both domestically and internationally, through a central focus on accounting standards, off-shore jurisdictions and unregulated portions of the financial system. Overall, no portion of a complex global financial conglomerate should be hidden in shadows, from regulators or from market participants. Third, there needs to be arrangements for the

[62] *Ibid*.
[63] G20 Declaration, p 3.
[64] *Ibid*.
[65] G20 Action Plan, p 4.
[66] *Ibid*.

regulators of individual pieces of any complex global financial institution to work together, meeting frequently in order to ensure a complete understanding of the structure, business and risks of the firm. Fourth, as discussed in the preceding section, individual jurisdictions will need to carefully analyse the structure of financial firms and the structures of their regulatory systems in order to ensure that no gaps exist. Fifth, in addition to regulatory arrangements for individual firms, there should be strengthened monitoring mechanisms for financial regulators and regulatory systems themselves, based on a strengthened FSF and/or use of "colleges" of regulators/supervisors – an issue beyond the scope of the present article.

IV. Dealing with the Failure of Financial Conglomerates

Beyond preventing failures, however, it is also necessary to have arrangements to address failures which do occur. In this context, effective insolvency provisions, including for financial institutions, are required to enable the redirection of capital and the closure of inefficient enterprises, hence improving governance and performance.[67] Experiences in the current global financial crisis have underlined the significance of effective resolution and insolvency arrangements for not only banks but also financial conglomerates, especially those with global operations. As noted above, the G20 in November identified issues surrounding financial conglomerates for regulatory attention. At the same time, it also identified the clear need for mechanisms to address failures of such institutions when they occur, including insolvency arrangements.

A. *Failure versus insolvency*

As discussed in the previous section, some jurisdictions will take the policy decision that major financial institutions are not allowed to fail. At the same time, even if such institutions are not to be subject to insolvency, as demonstrated by problems with Credit Lyonnais in France and with the major banks in China in the 1990s, jurisdictions need to have in place arrangements to address issues that may in fact arise despite their best efforts to prevent them from doing so. As a result, such jurisdictions, even if excluding the possibility of insolvency of major financial institutions, should develop adequate systems to address other aspects of failure short of liquidation.

[67] *See* Asian Development Bank, Law and Development at the Asian Development Bank (Apr 1999), pp 7–36.

In jurisdictions in which insolvency and liquidation will remain the ultimate sanction for failure in a market-based financial system, there is a clear necessity to have in place arrangements to deal with such failures in advance in order to avoid systemic financial problems. At the same time, assuming that international financial conglomerates will continue to exist and will continue to fail periodically, then there is also a clear necessity to put in place arrangements in advance to deal with such circumstances when they arise while minimising systemic risk.

B. *Domestic structures and systems*

In looking at domestic systems, banks as the traditional source of systemic risk are the starting point. This is also the area in which the most experience has been accumulated and best practices most well understood, and these are being developed and expressed in the context of the World Bank – IMF Global Bank Insolvency Initiative.[68] At the same time, bank insolvency differs in a number of ways from insolvency of non-banks. In addition, while banks have been viewed as the traditional source of systemic risk, it is now abundantly clear that banks are not the only source of systemic risk and that arrangements must be in place to address insolvencies of all forms of financial institution, whether or not financial conglomerates are allowed to exist.

1. Corporate insolvency

A functioning legal framework for corporate insolvency management is crucial for the operation of a modern market-based economy. There can be no well-functioning corporate sector as a whole without effective mechanisms which govern the exit of insolvent market participants from trading. Likewise, the financial sector will not engage in lending activities on a large scale if lenders do not have certainty regarding their position as secured creditors in the context the liquidation of their borrowers and that sufficient means for the enforcement of security will be available. According to the Group of Ten, the general objectives of a system of corporate insolvency are reduction of uncertainty, promotion of efficiency, and fair and equitable treatment.[69] A functioning insolvency regime thus helps reduce the risk of lending and the cost of debt service, and thereby increases the availability of credit and the making of investments generally.[70]

[68] *See* IMF & World Bank, An Overview of the Legal, Institutional and Regulatory Environment for Bank Insolvency (Apr 2009).

[69] Group of Ten (G10), Report of the Contact Group on the Legal and Institutional Underpinnings of the International Financial System (Dec 2002).

[70] IMF Legal Department, *Orderly & Effective Insolvency Procedures: Key Issues* (Washington DC: International Monetary Fund, 1999), s 2; C. Averch, "Bankruptcy Laws: What is Fair?", (2000) *Law in Transition* 26.

Further, a properly administered insolvency system operates as a valuable instrument for the promotion of market discipline. Overall, an insolvency system serves as a means to ensure "the allocation of risk among participants in a market economy in a predictable, equitable, and transparent manner".[71] A functioning insolvency system, therefore, is at the core of the legal and institutional environment for finance in any market-based economy.

A number of international organisations and associations have become involved with the development of standards for modern insolvency law and related systems. Many of these activities have focused on the development of standards for cross-border insolvency cases in particular, such as the United Nations Commission on International Trade Law (UNCITRAL) Model Law on Cross-Border Insolvency[72] and, in the European Union, the Insolvency Regulation of 2000.[73] More recently, a working group chaired by the Legal Department of the International Monetary Fund (IMF) presented a document containing very detailed principles for the development of workable, modern insolvency legislation.[74]

At present, there is no internationally agreed key standard in the area of insolvency. However, the World Bank is co-ordinating an effort to develop an agreed standard and is working with UNCITRAL to develop a framework for implementation. In this respect, in April 2001, the Board of the World Bank approved a first set of *Principles and Guidelines for Effective Insolvency and Creditor Rights Systems*.[75] A revised set of the Principles, taking into account further feedback and lessons from insolvency assessments conducted under the Reports on the Observance of Standards and Codes (ROSC) initiative, is under development. The Bank is also working on a technical paper containing more detailed implementation guidelines to complement the Principles. In addition, building upon the work done by other international institutions (including the World Bank, IMF and Asian Development Bank (ADB)), UNCITRAL is currently finalising a legislative guide for insolvency – a combination of model provisions, recommendations and explanatory notes, which is currently

[71] IMF Legal Department, n 70 above.
[72] *See Ibid*. Cf G. Johnson, "Towards International Standards on Insolvency: The Catalytic Role of the World Bank", (2000) *Law in Transition* 69.
[73] Council Regulation (EC) No 1346/2000 of 29 May 2000 on Insolvency Proceedings, OJ L 160, 30/06/2000, pp 1–13.
[74] IMF Legal Department, n 70 above.
[75] World Bank, Principles and Guidelines for Effective Insolvency and Creditor Rights Systems (Apr 2001). The Principles were prepared by World Bank staff in collaboration with the African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank, International Finance Corporation, IMF, Organisation of Economic Cooperation and Development, UNCITRAL, INSOL International and International Bar Association.

set for release, along with a revised version of the World Bank Principles, sometime in the future.[76]

Unfortunately, until the revised World Bank Principles and the final UNCITRAL Guide are integrated, approved and released, it is impossible to identify exactly the international consensus in this area. Thus, not only is guidance lacking in the context of financial institutions, to some extent, consensus is lacking in respect of general corporate insolvency.

2. Bank insolvency and the GBII

Current international standards addressing banking supervision do not adequately provide appropriate safety net and exit arrangements, perhaps under the view that these are not strictly covered by "supervision".[77] The high cost to society of a collapse of the banking system is a principal reason why authorities in most developed countries provide some sort of a safety net for depositors, usually in the form of deposit insurance.[78] While the intention is usually to minimise potential losses of public funds, the reality is that in the context of apparent or actual systemic instability, more often than not, governments around the world have supported not only healthy individual banks in the context of circumstances of potential or actual systemic risk but also often unhealthy banks, whether systemically significant or not. Such arrangements (or the general belief in de facto government guarantees) inevitably create moral hazard because they hold open the prospect that stakeholders will be at least partially indemnified from losses from failing intermediaries.

Historically, banking regulation developed as a response to crises resulting from the nature of banking business as a fractional reserve system based upon the management of credit and duration risks – a system that works wonderfully so long as depositors remain confident in the safety of their money with individual banks. The risk, of course, is that the collapse of one bank could lead to contagious loss of confidence, resulting in bank runs, potentially causing the collapse not only of individual banks, but also of the banking system as a whole (systemic risk) and the consequent collapse of economic activity generally.[79] This risk, today, is considerably expanded and exacerbated as bank, capital and other financial markets and intermediaries have become increasingly interconnected to form a much broader financial system than had ever previously existed.

[76] *See* UNCITRAL, "Report of Working Group V (Insolvency Law) on the Work of its Thirtieth Session" (New York, 29 Mar–2 Apr 2004), A/CN.9/551 (United Nations, 30 Apr 2004), pp 3–7.

[77] Thanks to Michael Taylor for this explanation.

[78] *See* Arner, n 14 above.

[79] *See* R. Lastra, *Central Banking and Banking Supervision* (London: Financial Markets Group, 1996).

The response to this classic, and very real, problem was the development of the theory of the need for a "lender of last resort" by Henry Thornton in 1802 and Walter Bagehot in 1873.[80] The lender of last resort would provide liquidity support in order to allow solvent banks with good collateral to meet depositors' demands and avoid closure, thereby supporting confidence and stemming potential systemic collapse. The problem, of course, is the equally classic theory of "moral hazard". Specifically, in this context, moral hazard has two components: first, potential incentives to management to take additional (perhaps excessive) risks due to the promise of a government bailout; and second, the consequent risk to the public purse due to the potential expense. Ideally, the second should not exist, but as noted earlier, more often than not, authorities become over-active in their support measures, shifting from pure liquidity support (which should not entail public expenses) to more general solvency support (which can entail very high public expense).

The response to this problem has been the development of what may be termed the traditional process of bank regulation and supervision. Under this formulation, the goal of the traditional regulatory and supervisory process is simple on its face: the prevention and resolution of financial intermediary crises. Unfortunately, while the goal is simple, its achievement is anything but; and, today, though bank and non-bank financial institutions are increasingly interconnected, the regulatory approach and policies for non-bank financial institutions vary considerably. Nonetheless, it is worth reviewing the contents of the traditional formulation for preventing and resolving bank crises. At its most basic, the formulation involves two sets of processes: one *ex ante*, the other *ex post* crisis.

The *ex ante* measures focus on two related goals: first, supporting sound management and internal controls (a well-managed bank is less likely to be the subject either of a crisis or of contagion); and second, regulation and supervision (bank management, and arguably public authorities, have short memories and need to be given rules to follow; bank management also needs to be monitored to make sure that it, in fact, follows the rules). Stylistic issues, of course, relate to the administrative process and rule versus discretion-based approaches (eg, prompt corrective action). Of course, once again, while both appear relatively simple on their face, only recently have we begun to arrive at agreed formulations of their content.[81]

[80] H. Thornton, *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (London: J. Hatchard, 1802); W. Bagehot, *Lombard Street: A Description of the Money Market* (1873 [New York: John Wiley, 1999]).

[81] *See* generally J. Norton, *Devising International Bank Supervisory Standards* (London: Kluwer, 1995).

The *ex post* measures focus on bolstering confidence, stemming contagion and resolving problem intermediaries. Immediate measures focus on suspension of deposit redemption (never popular), the provision of support through the lender of last resort mechanism (to deal with illiquidity) and various mechanisms for depositor protection, of which deposit insurance is the most significant (to address insolvency). In addition to the immediate measures, other ex post measures are required to deal with the insolvency of individual institutions. In respect to individual institution insolvencies, four main mechanisms exist: (1) organisation of a rescue package, (2) provision of open financial assistance, (3) merger or acquisition (public or private) and (4) liquidation and pay-off. Finally, in some cases, measures will be required to address systemic insolvency (which is a very different sort of problem from "ordinary" bank failures), but these are rarely (if ever) organised in advance of such an actuality.[82]

3. Depositor protection schemes

Turning now to the next mechanism of immediate crisis resolution: the idea is that some sort of depositor protection scheme can be put in place to support confidence in times of crisis and also to assist in the resolution of normal bank failures. Note that while explicit deposit insurance protects mainly depositors, the lender of last resort function protects mainly the financial system (systemic considerations).[83]

As the starting point, any form of depositor protection can either be implicit or explicit. In addition, it is clearly possible for any jurisdiction to have no such system in place at all; while some suggest that no system is, in fact, an implicit government guarantee, it is possible (though certainly not politically easy) not to provide government support at all and on occasion governments have managed to stand aside. In most cases, however, no deposit insurance system does, in fact, imply an implicit government guarantee, at least for depositors of the largest financial institutions.

Explicit systems typically take one of two forms: (1) an explicit blanket guarantee of all deposits or (2) an explicit, limited-coverage system of deposit insurance. Explicit deposit insurance, that is, the creation of a deposit guarantee scheme by law, with rules with regard to the extent of the "insurance" or protection, the rules of the scheme and the type of deposits / depositors protected can be a useful instrument of protective bank regulation. Indeed, explicit deposit insurance has traditionally served two purposes: consumer protection and the prevention of bank runs. A third

[82] For discussion, *see* D. Hoelscher & M. Quintyn, et al, "Managing Systemic Banking Crises", (1993) IMF Occasional Paper No 224.

[83] This point also underlines that deposit insurance should only be triggered when a bank is declared insolvent.

rationale of explicit deposit insurance is that it allows the public authorities to close banks more easily, as it becomes politically acceptable to liquidate insolvent institutions, in the knowledge that unsophisticated depositors are protected.

Under an explicit deposit guarantee scheme, depositors are only paid once the bank is closed and, in many cases, liquidated (though there is, in fact, a strong argument that payment should be made as soon as possible after closure rather than held for liquidation, resolution, etc – a problem that arose directly in the context of the failure of Northern Rock in the United Kingdom in 2007). Thus, there can be no deposit insurance if the bank remains open. Therefore, explicit deposit insurance presupposes that a bank has failed and, hence, it is not compatible with the "too big to fail" doctrine.

Implicit deposit insurance, as opposed to explicit deposit insurance, is potentially a "blanket guarantee" for all sorts of depositors (insured and uninsured), other creditors, shareholders and even managers – as it is implicit, the exact meaning can only be inferred from previous behaviour. Implicit deposit insurance often presupposes that the bank remains in business (either because it is too big to fail or because it is politically difficult to close the bank), thus creating pervasive moral hazard incentives. While explicit deposit insurance is applied ex post (following the closure of a bank), implicit deposit insurance is often applied while a bank is still in operation.

Explicit deposit insurance is intended to inflict only limited, if any, damage upon taxpayers, and, depending on the funding of the scheme, there may be no damage at all, though this is certainly not always achieved in practice. However, implicit deposit insurance has the potential of shifting the burden onto taxpayers (at least indirectly), since rescue packages tend to be financed by the government. The use of rescue packages not only results in moral hazard considerations, but may also affect competition, especially if a too big to fail doctrine is applied.

An explicit blanket guarantee can take either a formal legal form or simply be a government pronouncement or policy. Either will likely be sufficiently clear and robust for purposes of confidence; the difficulty arises if the government decides to eliminate the guarantee and move to an explicit, limited-coverage system of deposit insurance. The central issue is the credibility of the guarantee: Is the government able to mobilise sufficient fiscal resources and political commitment to make good the guarantee?

Explicit deposit insurance is a guarantee limited to one type of "preferred creditors", that is, insured depositors. Under explicit deposit insurance, uninsured depositors, other creditors, shareholders and managers are not protected. Therefore, explicit deposit insurance is more compatible with market discipline, as uninsured depositors and other creditors have an interest in monitoring the solvency of the bank while still in operation.

In September 2001, the FSF endorsed the report of its Working Group on Deposit Insurance as international guidance for jurisdictions considering the adoption of an explicit, limited-coverage deposit insurance system.[84] Recognising that existing guidance was insufficient, in March 2008, the Basel Committee and the International Association of Deposit Insurers (IADI, established in May 2002) released for consultation an extensively revised set of principles for deposit insurance.[85] The document, comprising 18 principles in 10 groups, addresses: setting objectives (principles 1-2), mandates and powers (principles 3-4), governance (principle 5), relationships with other safety-net participants and cross-border issues (principles 6-7), membership and coverage (principles 8-10), funding (principle 11), public awareness (principle 12), selected legal issues (principles 13-14), failure resolution (principles 15-16) and reimbursing depositors and recoveries (principles 17-18).

While this document is a significant development, especially in terms of specificity, it nonetheless does not address in any comprehensive either actual insolvency resolution or cross-border issues.

4. Bank insolvency

Beyond immediate measures to deal with banking crises (such as the lender of last resort function), some system needs to be in place to deal with individual situations of bank insolvency. Clearly, however, no system is necessary in jurisdictions which do not intend to allow any banks to become insolvent.

Generally speaking, the goals of bank insolvency are threefold: (1) fair treatment of all creditors, (2) maximisation of the value of the estate and (3) reduction of systemic risk – with all three goals potentially in conflict.[86] Typically, however, the various functions concerned are often embedded in different institutions.[87] The primary authorities and their functions can be categorised as: (1) insolvency authorities, (2) supervisory authorities, (3) lender of last resort, (4) monetary policy authorities, (5) deposit insurance authorities and (6) criminal authorities.[88]

84 FSF, Guidance for Developing Effective Deposit Insurance Systems (Sept 2001).

85 Basel Committee & IADI, Consultative Document: Core Principles for Effective Deposit Insurance Systems (Mar 2009).

86 "Bank insolvencies entail systemic risks which are absent in the bankruptcy of most commercial concerns." E. Patrikis, "Role and Functions of Authorities: Supervision, Insolvency Prevention and Liquidation", in M. Giovanoli & G. Heinrich (eds), *International Bank Insolvencies: A Central Bank Perspective* (London: Kluwer, 1999), p 283.

87 *Ibid*, p 284.

88 Cf *Ibid*, pp 284–5.

In this context, the World Bank/IMF Global Bank Insolvency Initiative (GBII) has developed a framework addressing five main elements: (1) legal and institutional framework; (2) official administration of banks; (3) bank restructuring; (4) bank liquidation; and (5) application of the principles in systemic crises.[89]

As noted earlier, the availability of the traditional methods very much depends upon the individual legal system. The organisation of a rescue package typically will not require specific authorisation. On the other hand, the ability to provide open assistance may be clearly constrained by law. The availability of merger or acquisition, whether public or private, likewise varies, with some jurisdictions having specific legislation addressing financial intermediary mergers / acquisitions, while in others, (especially common law jurisdictions) such issues are primarily dealt with through the relevant company law. In most cases, however, issues will arise under banking law / regulation concerning licenses / authorisation. Finally, the availability of liquidation and pay-off varies greatly, with some jurisdictions having completely separate stand-alone systems for bank insolvencies (eg United States), while in others, bank insolvencies are largely dealt with through the general system of corporate insolvency, although typically modified in some way by banking law / regulation (eg United Kingdom). The greater concern is typically in the latter sorts of jurisdictions where insolvency law and systems may not always be overly effective. Significantly, an ineffective system of insolvency may also be a barrier to effective out-of-court workouts.

Beyond individual bank insolvencies, measures to address systemic insolvency are typically only developed in the context of an actual situation. Unfortunately, not only can weakness in the overall design of the financial safety net potentially lead to such problems, but weaknesses in supporting legal infrastructure can also make resolution more difficult.

5. Insolvencies of non-bank financial institutions and financial conglomerates

In addressing the failure of a systemically important financial conglomerate, the first order concern is a robust financial infrastructure. In this context, international and domestic efforts under G20 direction are underway in respect of financial infrastructure, especially clearing and settlement arrangements for OTC derivatives. The second concern relates to financial institution safety and soundness. In this context, likewise, arrangements for corporate governance and risk management and related prudential regulatory and supervisory arrangements are also in progress under G20 leadership; however, these are beyond the scope of the present

[89] *See* IMF & World Bank, n 68 above.

article. The third concern relates to contingency arrangements to deal with problem financial institutions, namely liquidity arrangements, mechanisms for resolving problem institutions and related consumer protection mechanisms.

In relation to such arrangements, the first issue relates to financial institution failure: it now seems likely that certain jurisdictions may simply decide that major financial institutions will not be allowed to fail. In such jurisdictions, the focus must of necessity be on the first and second order concerns of infrastructure, management and supervision in order to ensure that no failure does in fact take place. At the same time, perhaps in the majority of jurisdictions, financial institutions including major systemically important financial institutions will face the possibility of failure as the ultimate market sanction. In such jurisdictions, the first order concern will be to minimise the frequency of such events through infrastructure, governance and regulation. At the same time, contingency arrangements must be put in place prior to the emergence of any significant failure in order to prevent a reoccurrence of the events of the current global financial crisis.

In respect to contingency arrangements, assuming due attention to ex ante mechanisms, the concern is ex post concerns. In this context, one can divide circumstances into a variety of contexts: liquidity; insolvency in normal circumstances; and systemic insolvency.

In the case of liquidity, the traditional principles of the lender of last resort should be extended to all systemically significant financial institutions rather than just to banks. At the same time, the traditional rules in light of the global financial crisis require certain modification. Specifically, a liquidity provider of last resort must be available to provide liquidity under the following conditions: (1) to any financial institution which is temporarily illiquid but solvent (a determination which must take place on the basis of adequate supervisory arrangements); (2) freely but with penalty interest (in order to discourage replacement of money markets by the central bank); (3) to any financial institution with good collateral (which must be applied broadly and not just to cash and government securities, requiring advance planning on the part of the liquidity provider); (4) the liquidity provider must make its readiness to lend and its terms and conditions clear *ex ante*; (5) the liquidity provision however remains discretionary; and (6) that discretion should be on the basis of potential systemic risk, such risk however should not be analysed solely on the basis of the individual financial institution but rather on the basis of the financial system as a whole. Such mechanisms should be backed by clear consumer protection arrangements in order to maintain public confidence. These are discussed in more detail below.

In the context of insolvency under normal circumstances, generally speaking this implies the necessity of the following arrangements: (1) insolvency of a single non-systemic financial institution; (2) insolvency of a single systemically significant financial institution; and (3) insolvency of multiple non-systemic financial institutions. In each of these cases, arrangements should include: (1) a liquidity provider along the lines discussed above for solvent financial institutions; (2) intervention mechanisms for insolvency financial institutions; and (3) consumer protection arrangements to maintain confidence in solvent institutions and to enable rapid predictable compensation for customers of insolvent institutions. In addition to liquidity, intervention and consumer protection arrangements, jurisdictions should also have in place arrangements to resolve insolvent institutions, through merger or sale of assets, public assistance where necessary on clear terms and closure / liquidation arrangements.

In the more complex situations – systemic financial crises typically involving multiple systemic and non-systemic financial institutions – the general mechanisms available are clear (and becoming more so as a result of ongoing efforts to resolve the current crisis). At the same time, while contingency planning is necessary, putting in place actual arrangements ex ante is problematic, given that each crisis and context is very different. Nonetheless, the major tools required initially are the same as for normal circumstances, namely: liquidity, merger / sale, public assistance, closure / liquidation, and consumer protection. The existence of a properly designed system covering all systemically significant financial institutions will improve performance in the context of a systemic crisis. At the same time, certain mechanisms will also probably be necessary in a systemic crisis, including: arrangements for regulatory forebearance; mechanisms to guarantee consumers; mechanisms to recapitalise and/or nationalise systemically significant insolvent financial institutions; corporate and economic support and/or restructuring mechanisms in order to resolve underlying problems or maintain the economy while the financial system is addressed; and mechanisms to address problem assets and institutions. In respect of the latter, these may include government support as well as private restructuring / resolution, good bank – bad bank or asset management company arrangements, and central agencies.

C. *International arrangements*

While domestic arrangements, at least for banks, are well understood, international arrangements for banks, non-banks and financial conglomerates at the international level are generally non-existent. Although certain efforts have been made to address cross-border insolvency generally (an area in which Philip was a leading light), these are of much less use in the context of complex cross-border financial institution insolvencies.

With that discussion of the requirements at the domestic level, it becomes possible to consider possible international arrangements. At the first level, there is a clear need for internationally agreed standards outlining the content of domestic systems, as has been done for regulation and as is being modified as a result of the current crisis. In this context, the IMF-World Bank Global Bank Insolvency Initiative could be expanded beyond banks to address financial insolvencies generally, with the objective of developing guidance on resolving financial institution insolvencies. As with the existing initiative, this would provide important detail in the context of the Basel, IOSCO and IAIS principles, especially if these (as a result of G20 initiatives) are brought into closer alignment. At the same time, as is the context of the existing initiative, the focus is probably best placed on domestic arrangements.

In the context of problems in a global financial institution, assuming a move to an arrangement based on supervisory colleges coordinated through the FSF, it would seem appropriate to require members of the organisation to convene and notify other supervisory college members prior to activation of *ex post* measures, to allow coordinated intervention and resolution to the extent possible.

There is one caveat, however, that relates to regulatory arrangements: based on experiences with cross-border financial institution insolvencies and absent any international arrangement or agreement on addressing conflicts between individual jurisdictions, it appears highly advisable for individual jurisdictions to require all foreign financial institutions to operate via separately capitalised subsidiaries in order to minimise domestic damage resulting from any international insolvency. Such a requirement would simply mean that foreign financial institutions are treated exactly as domestic financial institutions.

V. Conclusion

As noted at the outset, preventing and addressing systemic risk is the fundamental aspect of *financial regulatory design*, with such design requiring the following elements to be addressed: (1) financial infrastructure; (2) corporate governance and risk management; (3) disclosure; (4) prudential regulation and supervision; (5) liquidity arrangements; (6) mechanisms for resolving problem institutions; and (7) consumer protection mechanisms.

In relation to LCGFIs, each of these aspects will need to be addressed at the domestic, international and in some cases regional levels. While Philip would have been most interested in the issues arising in the context of actual insolvencies such as that of Lehman Brothers (and there are many, with new conflicts and problems arising on an almost weekly basis), he would also have appreciated the difficulties of applying traditional domestic insolvency mechanisms in the context of complex financial conglomerates such as AIG. In the final analysis, it is a great shame that the legal and academic worlds will suffer from the loss of Philip's sharp analytical mind on the many issues arising from the current crisis. On a more personal level, we have certainly missed being able to discuss points such as those in this article – especially since under other circumstances, we would have preferred this piece to have had three authors rather than just two.

At the same time, international attention has begun to focus to a greater extent on these issues than has ever previously been the case. In their April 2009 meetings, the G20 and FSF have addressed these issues, building upon previous agreements in most cases but in some cases going further, with the G20 leaders stating in their communiqué that "[m]ajor failures in the financial sector and in financial regulation and supervision were fundamental causes of the crisis",[90] and committing "to extend regulation and oversight to all systemically important financial institutions, instruments and markets".[91]

In support of these general principles, in an annex to the April London communiqué, the G20, also established the outline of details of approaches going forward, with the FSF renamed and reconstituted as the Financial Stability Board (FSB)[92] and tasked, *inter alia*, to "set guidelines for, and support the establishment, functioning of, and participation in, supervisory colleges, including through ongoing identification of the most systemically important cross-border firms" and to "support contingency planning for cross-border crisis management, particularly with respect to systemically important firms",[93] including "to support continued efforts by the IMF, FSB, World Bank, and BCBS to develop an international framework for cross-border bank resolution arrangements".[94] At the same time, reflecting that such efforts are in reality in most cases still at an early

[90] G20, London Summit – Leaders' Statement, London, United Kingdom, 2 Apr 2009, para 13, available at http://www.g20.org/Documents/g20_communique_020409.pdf (visited 16 Apr 2009).

[91] *Ibid*, para 15.

[92] FSF, "Financial Stability Forum re-established as the Financial Stability Board", FSF Press Release 14/2009, 2 Apr 2009. As part of the process, the FSB's mandate was reconstituted to include, inter alia, to "set guidelines for and support the establishment of supervisory colleges" and "manage contingency planning for cross-border crisis management, particularly with respect to systemically important firms." *Ibid*, para 9.

[93] G20, London Summit – Leaders' Statement, Annex: Declaration on Strengthening the Financial System – London, United Kingdom, 2 Apr 2009, p 1, available at http://www.g20.org/Documents/Fin_Deps_Fin_Reg_Annex_020409_-_1615_final.pdf (visited 16 Apr 2009).

[94] *Ibid*, p 2.

stage, the G20 recognised "the importance of further work and international cooperation on the subject of exit strategies".[95]

In respect of LCGFIs, the G20 confirmed that "large and complex financial institutions require particularly careful oversight given their systemic importance",[96] reflecting the conclusions of the conclusions of a supporting working group chaired by Canada and India.[97] In this respect, the working group concluded in its Recommendation 7 that "[l]arge complex financial institutions require particularly robust oversight given their systemic importance, which arises in part from their size and interconnectedness (or correlation) with other institutions, and from their influence on markets" with responsibility assigned to the FSB and prudential supervisors.[98]

The working group also identified weaknesses in resolution procedures for financial institutions as a particular weakness in the context of the crisis: "Existing procedures for resolving troubled institutions have been shown to be inadequate when an institution imposes substantial systemic risks. In addition, national resolution mechanisms have not been effective in some cross-border resolutions."[99] However, the working group did not address related issues, leaving such issues to a second G20 working group.[100]

G20 working group 2, inter alia, recognised the problems posed especially in the cross-border context and supported on-going work "to develop an international framework for cross-border bank resolutions, and to address the issue of ring-fencing and financial burden-sharing".[101] In the absence of such arrangements, the working group advocated the development of regional resolution systems in the medium term.

In addition, the FSF released the most significant attempt to date to address issues of failure resolution, the FSF Principles for Cross-border Cooperation on Crisis Management.[102] In this short document (three pages of actual text), the FSF stated "[t]he objective of financial crisis management is to seek to prevent serious domestic or international financial instability that would have an adverse impact on the real economy".[103] At the same

[95] *Ibid*.
[96] *Ibid*.
[97] G20, G20 Working Group 1 – Enhancing Sound Regulation and Strengthening Transparency: Final Report (Mar. 2009), p ii, available at http://www.g20.org/Documents/g20_wg1_010409.pdf (visit 16 Apr 2009).
[98] *Ibid*, p xii.
[99] *Ibid*, p v.
[100] G20, G20 Working Group on Reinforcing International Cooperation and Promoting Integrity in Financial Markets (WG2): Final Report (Mar 2009), available at http://www.g20.org/Documents/g20_wg2_010409.pdf (visited 16 Apr 2009).
[101] *Ibid*, pp 5, 18–20.
[102] FSF, FSF Principles for Cross-border Cooperation on Crisis Management (Apr 2009); see also FSF, "Financial Stability Forum Issues Recommendations and Principles to Strengthen Financial Systems", FSF Press Release 13/2009, 2 Apr 2009.
[103] *Ibid*, para 1.

time, the FSF recognised that such financial crisis management "remains a domestic competence", albeit one requiring cross-border cooperation.[104]

In relation to preparation, authorities will "[d]evelop common support tools for managing a cross-border financial crisis, including: these principles; a key data list; a common language for assessing systemic implications (drawing on those developed by the European Union and by national authorities); a document that authorities can draw on when considering together the specific issues that may arise in handling severe stress at specific firms; and an experience library, which pools key lessons from different crises."[105] In addition, supervisors will meet at least annually through the college framework,[106] share a range of information on LCGFIs,[107] and ensure that firms have internal contingency plans in place.[108]

In managing financial crises, authorities will "[s]trive to find internationally coordinated solutions that take account of the impact of the crisis on the financial systems and real economies of other countries, drawing on information, arrangements and plans developed ex-ante. These coordinated solutions will most likely be mainly driven by groups of authorities of the most directly involved countries."[109]

In conclusion, it is clear that the systemic phase of the current global financial crisis was triggered by the failure of large complex global financial conglomerates. In this context, as recognised by the G20, one of the greatest failures of both international and domestic legal and regulatory systems has been the lack of appropriate arrangements, including adequate insolvency arrangements, to address such failures when they occur. Following a discussion of the difficulties of dealing with the failure of large complex global financial conglomerates such as Lehman Brothers and AIG, the article advocated a framework based upon prevention of failure as the first element and mechanisms to address failure when they occur as the second.

While the recent pronouncements from the G20 and FSF are a very useful start, especially in relation to regulation, supervision and contingency planning for LCGFI failure, the statements, reports and principles to date while recognising the problems raised by LCGFI failure, largely leave actual resolution to domestic authorities, suggesting that in the final analysis individual jurisdictions will have to carefully consider their own arrangements respecting potential failure of any LCGFI operating within their jurisdiction and take appropriate precautionary actions ex ante. We

[104] *Ibid*, para 2.
[105] *Ibid*, para 3.
[106] *Ibid*, para 4.
[107] *Ibid*, paras 5–6.
[108] *Ibid*, paras 7–9.
[109] *Ibid*, para 11.

must therefore conclude, unfortunately, even in the midst of the current global financial crisis, that while it may be possible to develop adequate international arrangements relating to prevention of LCGFI failure, there is still insufficient consensus in respect of actual insolvency arrangements for any international framework to emerge at present. In such context, individual jurisdictions must therefore act proactively in building preventive arrangements based on internationally agreed approaches as they are agreed. At the same time, given that probable continuing lack of arrangements to deal with actual insolvencies of LCGFIs at an international level, individual jurisdictions should mandate separately capitalised subsidiaries subject to domestic insolvency arrangements for global firms appropriate for the activities being engaged in the individual jurisdiction, at present the only arrangement capable to some extent of limiting the damage in individual jurisdictions resulting from the failure of an LCGFI and one that has been adopted with some success in Hong Kong and is now being advocated by the United Kingdom not only for global institutions but even for financial institutions operating in the context of the European Union's single financial market.[110]

[110] See Financial Services Agency, *The Turner Review: A Regulatory Response to the Global Banking Crisis* (Mar 2009).